```
Arg Ala Asp Ser Ser Gln Ala Ile Ala Ser Thr Val Gly Pro Leu Asp
        35                  40                  45
Glu Met Pro Val Leu Leu Gly Phe Val Ser Ala Val Lys Ala Val Pro
    50                  55                  60
Asn Arg Leu Ser Trp Lys Gly Ser Ile Cys
65                  70
```

<210> 33346
<211> 112
<212> PRT
<213> A.fumigatus

<400> 33346

```
Gln Ser Ser Val Leu Lys Ser Phe Thr Met Ala Glu Asn Thr Tyr Gln
1               5                   10                  15
His Val Arg Ser Arg Tyr Gly Asp Ile Ala Lys Arg Thr Gly Thr Thr
            20                  25                  30
Ile His Asp Lys Glu Asp Asp Ile Ala Leu Ala Phe Gly Tyr Ser Ala
        35                  40                  45
Gln Asp Leu His Ala Leu Pro Asp Lys Ala Asn Leu Gly Leu Ser Cys
    50                  55                  60
Gly Asn Pro Val Ala His Ala Asn Ile Lys Glu Val Pro Gly Thr Leu
65                  70                  75                  80
Tyr Ala Val Val Asp Ser Gln Arg Leu Thr Leu Asn Asn Cys Ile Arg
                85                  90                  95
Gly Arg Gln Leu Ser Ile Ser Glu Val Glu Ala Ala Ser Met Ser Phe
            100                 105                 110
```

<210> 33347
<211> 133
<212> PRT
<213> A.fumigatus

<400> 33347

```
Leu Asn Gln Asp Met Ile Asn Leu Ala Lys Lys Asn Ala Glu Ala Ala
1               5                   10                  15
Gly Leu Ser Asn Thr Arg Phe Ile Glu Ala Thr Ile Thr Ser Ile Pro
            20                  25                  30
Leu Pro Asp Ala Ser Val Asp Cys Ile Ile Ser Asn Cys Val Ile Asn
        35                  40                  45
Leu Val Pro Ser Lys Asp Lys Pro Thr Val Phe Gln Glu Ile Ala Arg
    50                  55                  60
Leu Leu Lys Pro Gly Gly Arg Val Ala Ile Ser Asp Ile Leu Ala Arg
65                  70                  75                  80
Lys Glu Leu Pro Ala Lys Ile Val Asn Asp Ile Trp Leu Ser Met Leu
                85                  90                  95
Gly Ala Leu Arg Gly Pro Val Arg Ser Gln Ser Met Lys Asn Ile Ser
            100                 105                 110
Asn Ala Arg Asp Leu Arg Val Arg Thr Ser Ile Pro Arg Arg Tyr Cys
        115                 120                 125
Ser Ser Leu Leu Ile
    130
```

<210> 33348
<211> 312
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (221)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33348
Gly Phe Gly Leu Phe Gly Arg Arg Gly Asn Glu Pro Val Gly Phe Asn
1 5 10 15
Ile Arg Tyr Asn His Ala Asp Ser Pro Ser Leu Ser Gly Asp His Arg
20 25 30
Ile His Gln Leu Ile Ile Asn Ala Asp Ala Glu Trp Arg Ser Leu Leu
35 40 45
Gly Lys Glu Val Lys Thr Phe Asp Ala Ala Thr Glu Gln Tyr Arg Arg
50 55 60
Arg Arg Asp Arg His Pro Pro Pro Gly Phe Lys Glu Trp Phe Glu Phe
65 70 75 80
Ala Arg Ser Lys Asp Ala Leu Ile Ile Glu Asp Phe Phe Asp Gln Ile
85 90 95
Tyr Asp Asp Leu Asn Pro Phe Trp Gly Leu Gln Pro Lys Glu Ile Arg
100 105 110
Arg Gln Ala Gln Ser Leu Lys Pro Arg Ile Ala Val Arg Asn His Lys
115 120 125
Ala Thr Ala Ile Thr Asp His Gly Ala Leu Trp Leu Asp Ser Trp Leu
130 135 140
Ser Leu Val Gly Ser Ile Glu Gln Tyr Leu Pro Asp Leu Asp Met Pro
145 150 155 160
Phe Asn Pro Met Asp Glu Ser Arg Ile Val Val Pro Ser Glu Thr Ile
165 170 175
Ala Glu Tyr Met Val Lys Glu Arg Val Ser Arg Gln Trp Met Arg Asp
180 185 190
Lys Ser Pro Ala Glu Phe Ile Thr Glu Tyr Thr Ala Val Lys Asn Glu
195 200 205
Ser Glu Ser Gly Lys Phe Glu Pro Arg Phe Leu Gly Xaa Asp Asp Gly
210 215 220
Gln Phe Trp Asp Met Ala Arg Val Cys Cys Pro Pro Asn Asn Pro Ser
225 230 235 240
Arg Lys Asn Leu Ser Leu Asn Pro Ala Thr Val Leu His Val Ala Met
245 250 255
Glu Lys Phe Leu Pro His Ser Gln Asn Gly Tyr Val Arg Asn Trp Thr
260 265 270
Gln Ser Gln Asp Ile Cys Trp Ala Ser Gly Asp Ala Thr Ser Pro Trp
275 280 285
Lys Leu Leu Ser Asn Pro Leu Ser Tyr Ser Thr Ala Pro Arg Phe Ile
290 295 300
Pro Leu Phe Ser Glu Gly Ser Gln
305 310

<210> 33349
<211> 64
<212> PRT
<213> A.fumigatus

<400> 33349
Ser Trp Ser Arg Ile Ser Ser Ile Asn Ile Ser Asp Asp Val Ser Thr

```
1               5                   10                  15
Glu Phe Lys Ser Leu Gln Asp Met Leu Pro Ile Val Leu Ser Thr Leu
            20                  25                  30
Tyr Asp Glu Phe Asp Gly Glu Trp Gly Asp Cys Ser Arg Leu Ile Gln
        35                  40                  45
Pro Asp Thr Lys Gly Thr Asn Cys Glu His Asn Leu Asn Leu Leu Tyr
    50                  55                  60
```

<210> 33350
<211> 187
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (131),(168),(173)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33350

```
Pro Cys Ser Ile Gln Leu His Ser Thr Leu Ser Phe Arg Cys Glu Ser
1               5                   10                  15
Lys Phe Tyr Gly Tyr Arg Leu Leu Leu Thr Leu Ser Ala Val Val Asn
            20                  25                  30
Asn Gln Thr Leu Phe Ile Asp Gly Gly Glu Met His Thr Leu Leu Pro
        35                  40                  45
Asn Gly Thr Ile Ile Thr Phe Ala Ser Pro Phe His Ser Phe Gly Leu
    50                  55                  60
Ser Ser Ser Ala Asn Phe Ala Val Thr Asp Leu Glu Thr Ile Asp Leu
65                  70                  75                  80
Ser Lys Ser Trp Gln Asn Ser Asp Pro Gly Leu Phe Asn Tyr Ile Ala
                85                  90                  95
Lys Pro Trp Asn Ala Ser Asp Pro Ala Asp Tyr Pro Pro Tyr Leu Asn
            100                 105                 110
Glu Gly Ala Ser Phe Ser Asn Gly Glu Ser Leu Phe Phe Tyr Gly Gly
        115                 120                 125
Tyr Ser Xaa Gly Trp Gly Gly Pro Pro Ile Pro Pro Leu Ala Thr Trp
    130                 135                 140
Lys Tyr Asp Ile Ala Asn Asn Asn Trp Thr Arg Asp Gly Phe Trp Gly
145                 150                 155                 160
Val Pro Leu Val Arg Leu Thr Xaa Gly Ser Ala Val Xaa Ser Ser Val
                165                 170                 175
His Lys Lys Ala Tyr Tyr Leu Ser Gly Thr Leu
            180                 185
```

<210> 33351
<211> 1029
<212> PRT
<213> A.fumigatus

<400> 33351

```
Lys Pro Ala Arg His Arg Pro Ser Pro Ser Glu Glu Leu Ser Asp Cys
1               5                   10                  15
Gln Pro Thr Ile Phe Arg Val Asp Thr Gly Val Val Glu Glu Thr Thr
            20                  25                  30
Phe Ile Asn Arg Lys Leu His Ala Gly Leu Ala Lys Leu Glu Arg His
        35                  40                  45
```

```
Ser Ala Asp Leu His Thr Thr Val Pro Ser Leu Met Gln Ala Leu Phe
    50                  55                  60
Ala Leu Leu Leu Ala Asp Arg Val Asn Ser Ser Asp Val Thr Tyr Gly
65                  70                  75                  80
Leu Val Leu Ser Gly Arg Ala Val Ala Val Pro Asp Ala Glu Ser Val
                85                  90                  95
Leu Leu Pro Cys Ile Thr Thr Ile Pro Ala Arg Leu Asn Thr Ser Gly
            100                 105                 110
Leu Lys Thr Val Ser Asp Val Val Arg Ser Val His Gln Ser Thr Ala
        115                 120                 125
Arg Ser Leu Glu Tyr Gln His Thr Ser Leu Arg His Ile Gln Arg Trp
    130                 135                 140
Leu Lys Ser Glu Lys Pro Leu Phe Asp Cys Leu Phe Ser Tyr Ile Arg
145                 150                 155                 160
Ser Thr Pro Ala Pro Lys Asn Thr Leu Trp Gly Gln Leu Glu Ser Thr
                165                 170                 175
Met Pro Ser Glu Tyr Pro Leu Ala Val Glu Ile Glu Ala Asn Ser Glu
            180                 185                 190
Lys Asp Glu Met Tyr Val His Cys Gly Phe Ser Pro Ser Phe Gly Ser
        195                 200                 205
Ala Asp Arg Gly Gln Glu Phe Leu Glu Lys Leu Asp Ala Leu Leu Ser
    210                 215                 220
Ala Phe Leu Phe Glu Asp Asp Ile Ala Leu Asp Ser Phe Ser Leu Ala
225                 230                 235                 240
Asn Ser Gly Asn Pro Gly Ser Arg Ala Thr Glu Val Lys Trp Asp Ala
                245                 250                 255
Thr Thr Trp Ser Ala Thr Glu Thr Lys Ile Arg Asp Leu Thr Ala Thr
            260                 265                 270
Phe Cys Gly Leu Asp Val Val Asn Val Ser Lys Gly Thr Ser Phe Ile
        275                 280                 285
Ser Leu Gly Ile Asp Ser Val Thr Ala Ile Gln Phe Ala Arg Lys Leu
    290                 295                 300
Arg Glu Leu Gln Phe Glu Ile Val Pro Ser Asp Ile Met Arg Phe Pro
305                 310                 315                 320
Cys Val Gly Ala Leu Ala Glu His Val Asp Glu Arg Ser Ser Glu Gly
                325                 330                 335
Arg Gln Ser Ala Arg Val Gly Asp Lys Lys Pro Arg Val Ser Leu Ala
            340                 345                 350
Ala His Arg Asp Asn Val Pro Leu Leu Asp Asp Gly Asp Ser Val Ala
        355                 360                 365
Ala Ile Phe Glu Ser Thr Pro Leu Gln Ala Gly Met Ile Thr Arg Thr
    370                 375                 380
Leu Gly Ser Asp Ala Gln Val Tyr Val His Pro His Ile Val Arg Leu
385                 390                 395                 400
Thr Glu Gly Val Asp Ile Asp Arg Leu Ser Lys Ala Ile Ser Glu Val
                405                 410                 415
Val Ala Lys Asn Asp Ile Leu Arg Thr Ser Phe His Pro Ile Ala Glu
            420                 425                 430
Asn Gly Val Thr Trp Val Gly Ala Val His Thr Asn Pro Pro Leu Gln
        435                 440                 445
Trp Lys Glu Ile Thr Leu Pro Ser Asn Ala Asp Val Ile Ala Glu Leu
    450                 455                 460
Thr Ser Leu Tyr Ser Phe Arg Glu Val Ala Asp Phe Glu Thr Pro Pro
465                 470                 475                 480
Val Arg Phe Val Leu Val His Arg Lys Asn Glu Lys Leu Phe Val Val
                485                 490                 495
```

```
Ile Met His His Ala Leu Tyr Asp Gly Val Ser Leu Pro Leu Leu Phe
            500                 505                 510
Glu Glu Leu Ala Ala Thr Tyr His Gly Gln Thr Thr Val Gly Arg Pro
        515                 520                 525
Gln Phe Ser Glu Ile Ala His Tyr Ile Val Glu Gly Gln Asn Asp Ser
    530                 535                 540
Cys Asp Phe Trp Thr Lys Lys Leu Ala Gly Tyr Glu Pro Val Glu Ile
545                 550                 555                 560
Pro Ala Leu Ser Ser Ser Glu Ala Thr Glu Arg Met Leu Leu Ser Glu
                565                 570                 575
Arg Lys Ile Gly Leu Asp Val Glu Lys Val Val Glu Ser Cys Lys Ala
            580                 585                 590
Met Glu Val Thr Val Gln Ser Val Ala Leu Leu Ala Tyr Ala Lys Val
        595                 600                 605
Leu Ala Cys Leu Gly Gly Lys Arg Asp Val Val Phe Gly Gln Val Leu
    610                 615                 620
Ala Gly Arg Ser Leu Pro Val Pro Gly Ala Asp Gln Thr Ile Gly Pro
625                 630                 635                 640
Leu Phe Asn Thr Val Ala Gln Arg Val Leu Phe Glu Pro Lys Phe Leu
                645                 650                 655
Ser Asn Arg Glu Met Ala Gln Arg Val Gln Gln Leu Thr Ser Glu Ser
            660                 665                 670
Gln Ala Phe Gln His Ala Pro Leu Lys Asp Val Gln Arg Ala Leu Arg
        675                 680                 685
Gln Glu His Gly Met Asn Ala Ala Ser Leu Phe Asp Thr Leu Phe Val
    690                 695                 700
Phe Gln Lys Ser Ala Asp Leu Thr Thr Asp Thr Pro His Glu Gln Gln
705                 710                 715                 720
Ile Trp Thr Pro Phe Glu Thr Glu Gly Tyr Ala Ala Gln Ala Glu His
                725                 730                 735
Lys Leu Asn Val Glu Ile Asp His Gly Arg Glu Ala Ile Ile Val Ser
            740                 745                 750
Gly Ser Gly Asp Gly Arg Tyr Ile Cys Gln Gln Ala Leu Asp Glu Phe
        755                 760                 765
Met Ala Asp Phe Cys Thr Ala Phe Gln Asp Ile Ile Glu His Pro Ser
    770                 775                 780
Arg Cys Ala Thr Ala Ala Pro Glu Arg Leu Gly Gly Leu Pro Leu Arg
785                 790                 795                 800
Leu Ser Asn Ala Glu Glu Pro Glu Arg Gly His Ser Glu Ser Asp Ala
                805                 810                 815
Pro Ala His Glu Ser Ile Ile Arg Asp Val Leu Ala Glu Val Ser Gly
            820                 825                 830
Val Ser Val Asp Ser Ile Thr Pro Ser Thr Ser Ile Tyr Asn Ile Gly
        835                 840                 845
Leu Asp Ser Leu Ser Ala Ile Arg Ile Ala Ser Ile Cys Arg Ser Arg
    850                 855                 860
Gly Leu Asn Ala Gly Val Ala Asp Val Leu Ala Gly Asn Thr Leu Arg
865                 870                 875                 880
Gly Ile Ser Ala Arg Ile Ile Ser Pro Val Glu Ala Pro Ile Gln Ala
                885                 890                 895
Arg Glu Pro Leu Ile Lys Asp His Glu Ala Ile Glu Lys Ala Val Leu
            900                 905                 910
Gln Arg Leu Gly Leu Asn Lys Asp Glu Val Glu Thr Ile Leu Pro Cys
        915                 920                 925
Leu Ser Gly Gln Leu Tyr His Leu Val Ser Trp Leu Lys Ser Gly Arg
    930                 935                 940
```

```
Thr Leu Phe Glu Pro Ala Trp Ser Tyr Tyr Ser Ile Glu Arg Ile Asp
945                 950                 955                 960
Ser Gly Lys Leu Glu Glu Ala Trp Asn Gln Leu Arg Gln Arg His His
                965                 970                 975
Ile Leu Arg Thr Cys Phe Val Ala Thr Ser Pro Ser Met Ala Val Gln
            980                 985                 990
Ala Val Leu Lys Asp Ala Pro Gln Asn Ala Glu Ile Phe Lys Val Ile
        995                 1000                1005
Glu Ser Pro Ala Cys Ile Glu Glu Ala Ala Lys Ala Gln Ala Arg Glu
    1010                1015                1020
Glu Gly Leu Asn Pro
1025
```

<210> 33352
<211> 277
<212> PRT
<213> A.fumigatus

<400> 33352

```
Glu Asp Ile Ile Ala Gln Trp Glu Gly Asp Leu Gln Pro Ile Gln Gln
1               5                   10                  15
Glu Ile Glu Ser Phe Gly Cys Leu Ala Asn Gly Lys Val Val Arg Met
            20                  25                  30
Ser His Ala Pro Asp Asp His Gly Asn Ala Asn Ala Leu Ser Ser Arg
        35                  40                  45
Leu Thr Asn Gly Leu Asn Phe Arg Arg Arg Ser Asn Gly Gln Gly Ala
    50                  55                  60
Gly Ala Gly Ala Ser His Pro Val Pro Pro Leu Gln Pro Ala Ala Pro
65                  70                  75                  80
Ser Ile Cys Arg Asp His Asp Arg Glu Arg Glu Arg Gly Leu Glu Arg
                85                  90                  95
Thr Ser Asn Gly Arg Val Pro Ser Ala Pro Arg Pro Asn Tyr Glu Thr
            100                 105                 110
Lys Pro Leu Pro Val Tyr Glu Thr Lys Pro Arg Leu Asn Asn Leu Thr
        115                 120                 125
Pro Ser Ser Leu Ser Pro Asn Leu Ala Val Pro Asn Ala His Leu Ser
    130                 135                 140
Pro Ser Ala Thr Pro His Ser Asp Ser His Leu Pro Val Pro Gly Ser
145                 150                 155                 160
Asp Tyr Ala Gln Thr Pro Leu Ser Gly Pro Ser Pro Asn Ser Ser Arg
                165                 170                 175
Ser Asp Tyr Phe Ser Leu Asn Leu Arg Lys Pro Ser Ser Gly Ser Thr
            180                 185                 190
Val Thr Ser Pro Gly Phe Ala Ala Ala Ala Ala Ala Lys Lys Lys Pro
        195                 200                 205
Pro Pro Pro Pro Pro Pro Arg Ala Gly Ser Ser Asn Gly Ala Leu Tyr
    210                 215                 220
Val Thr Ala Leu Tyr Asp Phe Ala Gly Gln Ser Ala Gly Asp Leu Ala
225                 230                 235                 240
Phe Arg Glu Gly Asp Arg Ile Arg Val Leu Gln Lys Thr Asp Ser Thr
                245                 250                 255
Asp Asp Trp Trp Glu Gly Glu Leu Arg Gly Val Lys Gly Ser Phe Pro
            260                 265                 270
Ala Asn Tyr Val Gln
        275
```

<210> 33353
<211> 91
<212> PRT
<213> A.fumigatus

<400> 33353
Ser Pro Ser Thr Met Pro Ser Tyr Leu Tyr His Ser Gln Val Ser Gly
1 5 10 15
Ser Val Ile Ala Asn Ala His Phe Pro Thr Thr Asn Leu Val Ala Ser
20 25 30
Pro Val Gln Leu Tyr Ser Ile His Phe Ile Leu Arg Leu Cys Ile Leu
35 40 45
Ser Leu Thr Phe Phe Tyr Cys Asp Leu Gln Leu Ile His Leu Ser Lys
50 55 60
Arg Ile Gly Ser Leu Ile Ser Arg Ile Gly Pro Ser Arg Ser Cys Arg
65 70 75 80
Phe Phe Ser Thr Ala Tyr Leu Gln Ala Glu Ile
85 90

<210> 33354
<211> 154
<212> PRT
<213> A.fumigatus

<400> 33354
Ala Pro Tyr Ile His Ser His Ile Met Ala Ala Arg His Ser Arg Lys
1 5 10 15
Phe Leu Arg Pro Leu Leu Tyr Thr Ser Ala Ala Ala Ala Thr Gly Ala
20 25 30
Gly Val Leu Tyr Ile Ser Tyr Arg Pro Arg Asn Ile Pro Gly Ser Glu
35 40 45
Ala Pro Ala Val Pro Pro Pro Gly Tyr His Glu Gly Lys Leu Val Pro
50 55 60
Pro Ser Phe Pro Ala Ile Lys Ser Arg Leu Glu Gln Ile Glu Asp Leu
65 70 75 80
Lys Arg Ser Ser Ser Gly Asn Asp Asp Glu Tyr Asp Leu Leu Val Ile
85 90 95
Gly Gly Gly Ala Thr Gly Ser Gly Ile Ala Leu Asp Ala Ala Thr Arg
100 105 110
Gly Leu Lys Val Ala Val Val Glu Arg Asp Asp Phe Ser Ala Gly Thr
115 120 125
Ser Ser Lys Ser Thr Lys Leu Val His Gly Gly Val Arg Tyr Leu Glu
130 135 140
Lys Ala Val Trp Glu Leu Asp Tyr Asn Gln
145 150

<210> 33355
<211> 395
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (389),(390),(392)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33355

```
Cys Pro Ala Asp Gly Ala His Asn Asp Ser Arg Met Asn Val Ser Leu
1               5                  10                  15
Ala Met Thr Ala Ala Leu Tyr Gly Ser Thr Val Val Asn His Met Gln
            20                  25                  30
Val Thr Gly Leu Thr Lys Asp Glu Ser Gly Lys Leu Ile Gly Ala Arg
        35                  40                  45
Val Lys Asp Leu Ile Pro Gly Lys Asn Gly Gln Glu Ala Glu Glu Phe
    50                  55                  60
Thr Val Arg Ala Lys Gly Ile Ile Asn Ala Thr Gly Pro Phe Thr Asp
65                  70                  75                  80
Ser Ile Arg Lys Met Asp Glu Pro Asp Val Lys Glu Ile Val Ala Pro
                85                  90                  95
Ser Ala Gly Val His Val Ile Leu Pro Gly Tyr Tyr Ser Pro Ser Lys
            100                 105                 110
Met Gly Leu Ile Asp Pro Ser Thr Ser Asp Gly Arg Val Ile Phe Phe
        115                 120                 125
Leu Pro Trp Gln Gly Asn Thr Ile Ala Gly Thr Thr Asp Gln Pro Thr
    130                 135                 140
Glu Ile Thr Thr Gln Pro Glu Pro Ser Glu Lys Asp Ile Asn Trp Ile
145                 150                 155                 160
Leu Ser Glu Val Arg Gly Tyr Leu Ala Pro Asp Ile Asn Val Glu Arg
                165                 170                 175
Ser Asp Val Leu Ala Ala Trp Ser Gly Ile Arg Pro Leu Val Arg Asp
            180                 185                 190
Pro Lys Val Lys Ser Ser Glu Ala Leu Val Arg Asn His Leu Ile Ser
        195                 200                 205
Val Ser Pro Ser Gly Leu Leu Thr Cys Ala Gly Gly Lys Trp Thr Thr
    210                 215                 220
Tyr Arg Gln Met Ala Glu Glu Ala Val Asp Glu Ala Ile Lys Val Phe
225                 230                 235                 240
Gly Leu Lys Pro Arg Ala Val Ser Gln Val Pro Asp Ile Ser Gly Val
                245                 250                 255
Gly Gly Ser Gly Leu Val Ser Asp Gly Ala Val Leu Asp Gly Ser Cys
            260                 265                 270
Gln Thr His Gln Val Arg Leu Ile Gly Ala His Gly Tyr Ser Lys Thr
        275                 280                 285
Leu Phe Ile Asn Leu Ile Gln His Phe Gly Leu Glu Thr Asp Val Ala
    290                 295                 300
Lys His Leu Thr Glu Ser Tyr Gly Asp Arg Ala Trp Gln Val Ala Ala
305                 310                 315                 320
Leu Ser Ala Pro Thr Asp Ala Arg Phe Pro Leu Arg Gly Arg Arg Ile
                325                 330                 335
Ser Ala Leu Tyr Pro Phe Ile Asp Gly Glu Val Arg Tyr Ala Val Arg
            340                 345                 350
His Glu Tyr Ala Gln Thr Ala Val Asp Val Ile Ala Arg Arg Thr Arg
        355                 360                 365
Leu Ala Phe Leu Asn Ala Ala Ala Ala Leu Val Phe Thr Thr Pro Trp
    370                 375                 380
Lys Asp Thr Gly Xaa Xaa His Xaa Lys Gly Gly
385                 390                 395
```

<210> 33356
<211> 137
<212> PRT
<213> A.fumigatus

<400> 33356
Asn Asp Gln Gln Arg Ser Ala Thr Trp Leu Phe Gln Pro Leu Thr Ser
1 5 10 15
Trp Leu Asp Cys Arg Tyr Lys Leu Val Lys Glu Ala Leu Arg Glu Arg
20 25 30
Lys Tyr Phe Leu Asn Thr Ala Pro His Leu Ser Ser Trp Leu Pro Ile
35 40 45
Met Val Pro Val Gln Lys Trp Trp Gln Ala Pro Tyr Phe Trp Ala Gly
50 55 60
Thr Lys Ala Tyr Asp Trp Leu Ala Gly Ser Glu Gly Ile Glu Ser Ser
65 70 75 80
Tyr Phe Leu Thr Lys Ser Lys Ala Ile Asp Ala Phe Pro Met Leu Arg
85 90 95
Arg Asp Asn Leu Ile Gly Ala Met Val Tyr Tyr Gly Met Cys Gln Pro
100 105 110
Thr Pro His Leu Met Leu Ala Phe Gly Glu Leu His Ala Asn Val Leu
115 120 125
Gln Met Glu Arg Thr Met Ile Leu Gly
130 135

<210> 33357
<211> 135
<212> PRT
<213> A.fumigatus

<400> 33357
Glu Ala Asn Trp Arg Asp Gly Ala Leu Tyr Leu Gly Ser Ile Cys Ala
1 5 10 15
Leu Ser Met Pro Leu Ser Gln Val Tyr Ile Cys Asn Gln Ala Arg Thr
20 25 30
Leu Val Ala Glu Arg Ala Lys Leu Arg Ile Ser Ala Gly His Phe Met
35 40 45
Gly Ala Leu Arg Ala Ser Leu Leu Ile Ile Ile Gln Leu Pro His Gly
50 55 60
Leu Phe Lys Ile Ser Asn Pro Ala Val Tyr Lys Phe Cys Thr Leu Ala
65 70 75 80
Ala Ser Ala Ser Ala Lys Val Ile Ser Phe His Asn Ser Tyr Phe Gln
85 90 95
Thr Ser Ser Cys Gly Val Lys Arg Tyr Ser Arg Ala Ser Ser Ala Thr
100 105 110
Ala Asp Asn Glu Lys Val Val Phe Ile Ile Val Thr Arg Gly Thr Pro
115 120 125
Phe Glu Val Phe Asn Leu Leu
130 135

<210> 33358
<211> 60
<212> PRT
<213> A.fumigatus

<400> 33358
Asn Thr Leu Ser Met Thr Phe Ser Ser Asp Ala Gly Gln Ser Met Ala
1 5 10 15
Lys Gln Thr Asn Lys Arg Ser Val Ser Gly Tyr Glu Ser Gly Arg Ser
20 25 30

```
Leu Ser Tyr Ser Ser Cys Pro Ala Val Ser Gln Arg Ala Ser Ser Thr
        35                  40                  45
Val Phe Pro Glu Ala Arg Trp Val Val Cys Val Ile
    50                  55                  60

<210> 33359
<211> 202
<212> PRT
<213> A.fumigatus

<400> 33359
Ile Ser Pro Phe Leu Asp Pro Pro Gly Thr Ser Trp Gln Ile Tyr Ser
1               5                   10                  15
Pro Arg Phe Met Asp Met Ser Gly His Met Tyr Glu Asp Ser Gly Tyr
            20                  25                  30
Ala Ala Ser Arg Arg Arg Ser Ile Ala Thr Pro Pro Pro Ser Met Thr
        35                  40                  45
Pro Arg His Asn Arg Thr Arg Ser Gln Ser Val Arg Val Ser Asn Gly
    50                  55                  60
Thr Val Ser Thr Asn Thr Ser Val Ser Ser Gly Arg Met Ser Glu Ala
65                  70                  75                  80
Thr Asn Ile Thr Gln Pro Pro Ala Tyr Ser Lys Lys Phe Val Val Val
                85                  90                  95
Gly Asp Gly Gly Cys Gly Lys Thr Cys Leu Leu Ile Ser Tyr Ser Gln
            100                 105                 110
Gly Tyr Phe Pro Glu Val Ser Val Leu Ser Leu Asn Val Gly Phe Asp
        115                 120                 125
Glu Thr His Pro Ser Leu Leu Glu Phe Pro Pro Phe Arg Asn Met Phe
    130                 135                 140
Leu Pro Cys Leu Arg Ile Ile Ser Arg Lys Pro Pro Ile Glu Leu Pro
145                 150                 155                 160
Glu Arg Gln Ser Asn Trp Leu Ser Gly Ile Leu Leu Asp Arg Lys Ser
                165                 170                 175
Thr Thr Asp Cys Gly His Ser His Ile Pro Lys Gln Ile Phe Cys Ser
            180                 185                 190
Ser Ala Leu Pro Ser Thr Val Leu His Arg
        195                 200

<210> 33360
<211> 113
<212> PRT
<213> A.fumigatus

<400> 33360
Ile Ser Ala Phe Gln Lys Tyr Val Pro Thr Val Phe Glu Asn Tyr Ile
1               5                   10                  15
Thr Gln Thr Thr His Arg Ala Ser Gly Lys Thr Val Glu Leu Ala Leu
            20                  25                  30
Trp Asp Thr Ala Gly Gln Glu Glu Tyr Asp Arg Leu Arg Pro Leu Ser
        35                  40                  45
Tyr Pro Glu Thr Asp Leu Leu Phe Val Cys Phe Ala Ile Asp Cys Pro
    50                  55                  60
Ala Ser Leu Glu Asn Val Met Asp Lys Val Phe Tyr Ser Pro Leu Val
65                  70                  75                  80
Phe Pro Gln His Leu Thr Asn Met Asn Ser Gly Ile Pro Lys Tyr Cys
                85                  90                  95
```

```
Ile Ser Val Pro Pro Ser Ser Pro Arg Gly Trp Lys Asp Glu Gln Gly
            100                 105                 110
Phe


<210> 33361
<211> 109
<212> PRT
<213> A.fumigatus

<400> 33361
Ser Cys Ser Ile Met Glu Pro Arg Gln Ile Pro Ser Val Phe Pro Ser
1               5                   10                  15
Ser Phe Ser Ser Phe Ser Ser Ser Leu Val Leu Phe Ile Leu Phe Leu
            20                  25                  30
Thr Leu Ser Ser Thr Val Arg Ala Thr Ala Ser Ser Ala Gly Cys Ile
        35                  40                  45
Val Leu Pro Ser Asn Ser Ser Ala Asp Leu Ser Phe Thr Asn Gln Lys
    50                  55                  60
Arg Phe His Leu Gln Ser Asp Gln Tyr Thr Val Pro Ser Asp Ala Ile
65                  70                  75                  80
Val Ala Pro Leu Thr Gln His Leu Val Asn Leu Asn Gly Thr Asp Leu
                85                  90                  95
Gln Val Gly His Val Phe Arg Gln Arg Phe Glu Val Arg
            100                 105

<210> 33362
<211> 151
<212> PRT
<213> A.fumigatus

<400> 33362
Tyr His Lys Arg Phe Asn Val Thr Gly Asn Pro Val Asp Ala Ala Ala
1               5                   10                  15
Tyr Asn Ser Leu Ser Leu Ser Thr Gly Asp Ile Ala Phe Val Ser Cys
            20                  25                  30
Asp Thr Ser Leu Tyr Pro Gly Asn Leu Asp Ala Ser Ala Thr Val Ser
        35                  40                  45
Asn Leu Leu Thr Ala Gln Glu Lys Ala Ser Ala Val Leu Leu Tyr Ser
    50                  55                  60
Thr Ser Ala Ser His Cys Asn Tyr Thr Val Thr Asn Asp Ala Ala Ala
65                  70                  75                  80
Gln Tyr Thr Asn Val Phe Thr Leu Leu Asn Pro Ala Phe Ala Glu Ser
                85                  90                  95
Leu Arg Val Gln Leu Ser Arg Gln Asn Gly Asn Gly Ser Leu Ser Ile
            100                 105                 110
Val Tyr Asn Met Ser Phe Val Gly Thr Val Thr Pro Ser Thr Gln Asp
        115                 120                 125
Gly Ser Thr Asp Ser Pro Asn Thr Gly Ala Phe Val Ser Leu Leu Glu
    130                 135                 140
Ala Arg Leu Leu Leu Thr Asn
145                 150

<210> 33363
<211> 951
<212> PRT
```

<213> A.fumigatus

<220>
<221> UNSURE
<222> (915)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33363

```
Leu Val Leu Asp Thr Pro Lys Gln Ile Tyr Arg Cys Asp Phe Pro Asp
1               5                  10                  15
Cys Tyr Arg Thr Phe Val Arg Gln Asp Leu Cys Val Arg His Arg Glu
            20                  25                  30
Arg His Thr Thr Gln Gly Ser Gln Leu Gln Lys Arg Asp His Phe Ala
        35                  40                  45
Gln Ala Ala Ser Gln Asn Lys Gln Gln Ser Gln Leu Pro His Asn Val
    50                  55                  60
Ala Asn Asn Asn Val Pro Gln Met Gly Ser Thr Gln Lys Pro Pro Ile
65                  70                  75                  80
Leu Pro Ala Thr Thr Val Asp Leu Thr Ser Ala Arg Ser Ala Thr Thr
                85                  90                  95
Phe Pro Glu Gly Gly Val Glu Thr Leu Thr Pro Gln Ser Ala Asn Gly
            100                 105                 110
Ser Ser Lys His Ile Ser Val Ser Ser Ser Thr Ser Met Ser Leu Gly
        115                 120                 125
Arg Pro Leu Asn Tyr Gln Pro Leu Ile Ala Gln His Gly Val Gly Thr
    130                 135                 140
Pro Asp Ser Thr Thr Ser Arg Ser Asn Ser Leu Ser Asn His Ser Ile
145                 150                 155                 160
Asn Ser Pro Pro Gly Gln Ala Asn Ala Pro Phe Ser Pro Pro Asp Leu
                165                 170                 175
Gln Lys Pro Ala Tyr Val Pro Leu Thr Gly Arg His Ser Ile Tyr Pro
            180                 185                 190
Ser Gly Ser Pro Ser Asp Gln Thr Tyr Gln Leu Thr Gly Leu Asn Pro
        195                 200                 205
Ile Ser Arg Thr Arg Pro Gln Asp Ala Thr Ala Tyr Ser Met Ser Ala
    210                 215                 220
Asp Val Asn Gly Ser Ser Val Val Gln Ser Leu Pro Tyr Gly Ser Pro
225                 230                 235                 240
Thr Gly Leu Gln Met Pro Val Gly Gly Phe Ser Asp Leu Ser Met Asn
                245                 250                 255
Thr Val Pro Pro Ser Thr Gln Ala Ser Leu Asp Arg Ser Thr Ser Ile
            260                 265                 270
Thr Gly Leu Asp Ser Leu Ser Gly Met Ile Thr Ser Ala Asp Pro Ala
        275                 280                 285
Phe Asp Pro Met Ala Ser Cys Val Tyr Pro Ile Phe Gly Gly Glu Thr
    290                 295                 300
Tyr Asn Asn Arg Ser Pro Phe Ala Met Ala Asp Asp Phe Thr Ala Trp
305                 310                 315                 320
Leu Phe Asn Glu Pro Leu Pro Gly Ser Ser Ser Leu Thr Tyr Pro Pro
                325                 330                 335
Thr Ala Ser Met Met Pro Asn Tyr Leu Asp Pro Thr Gln Leu Gln Asn
            340                 345                 350
Gln Phe Leu Ile Ser Glu Pro Ala Phe Gly Ser Phe Leu Asn Gly Val
        355                 360                 365
Leu Pro Gln His Pro Met Ser Val Thr Ser Ile Leu Asp Pro Gly Ser
    370                 375                 380
```

```
Pro Gln Ala Ile Met Ser Glu Glu Lys Arg Gln Glu Leu Leu His Leu
385                 390                 395                 400
Met Ala Thr Arg Phe Asn Glu Ala Ala Tyr Ser Ala Val Ala Lys Arg
                405                 410                 415
Lys Asp Ala Leu Met Asp Gly Asp Val Asp Asp Asp Ser His Val Leu
            420                 425                 430
Ser Leu Arg Met Met Gln Thr Tyr Ile Gly Ser Tyr Trp Tyr His Phe
        435                 440                 445
His Ser Gln Leu Pro Ile Leu His Gln Pro Thr Phe Val Ala Asp Lys
    450                 455                 460
Ala Pro Asn Leu Leu Leu Leu Ala Val Met Ala Ile Gly Ala Ala Thr
465                 470                 475                 480
Leu Asp Asn Ile His Gly Gln Glu Val Thr Glu Thr Ala Ala Glu Leu
                485                 490                 495
Ala Asn Phe Ile Gly Trp His Leu Arg Trp Glu Ile Phe Met Asp Ala
            500                 505                 510
Asp Phe Arg Pro Pro Ala Lys Leu Trp Val Phe Gln Ala Leu Leu Leu
        515                 520                 525
Leu Glu Val Phe Glu Lys Met Tyr Ser Thr Arg Ala Leu His Glu Arg
    530                 535                 540
Ala His Ile His His Asp Thr Thr Leu Thr Leu Met Arg Arg Gly Ser
545                 550                 555                 560
Ser Leu Ile Gly Arg Ser Ala Leu Asp Ser Pro Ala Ser Phe Arg Asp
                565                 570                 575
Asp Arg Gln Thr Arg Ser Thr Thr Gly Ser Gly Ser Asn Ser Glu Phe
            580                 585                 590
Ala Ala Asp Asp Ser Trp Thr His Trp Ile Lys Ala Glu Ala Thr Arg
        595                 600                 605
Arg Val Ala Phe Ala Ala Phe Val Leu Asp Ser Thr His Ala Thr Met
    610                 615                 620
Phe Gly His Ser Ala Lys Met Val Ala His Glu Leu Arg Leu Pro Leu
625                 630                 635                 640
Pro Cys Asp Glu Ala Leu Trp Ser Ala Thr Ser Ala Ala Glu Val Ala
                645                 650                 655
Arg Val Gln Ser Ser Leu His Ala Asn Gly Val Lys Pro Thr Met Phe
            660                 665                 670
Leu Asp Gly Leu Lys Lys Thr Leu Asn Gly Gln Arg Val Thr Thr Asn
        675                 680                 685
Ala Phe Gly Arg Thr Ile Leu Met Ala Gly Leu Leu Ser Val Ser Trp
    690                 695                 700
His Met Asn Gln Arg Asp Leu Gln Val Ser Ser Leu Gly Val Pro Gln
705                 710                 715                 720
Ala Leu Gly Gly Arg Asp Lys Trp Arg Ser Ala Leu Leu Arg Ala Phe
                725                 730                 735
Asp Asn Trp Arg Arg Asp Phe Asp Glu Ala Leu Ala Gln Ala Gly Pro
            740                 745                 750
Pro Pro Phe Pro Asn Gln Tyr Arg Arg His Ser Leu Glu Asp Asp Gly
        755                 760                 765
Val Ser Glu Ser Arg Asp Val Leu His Gly Leu Ala His Met Ala Ser
    770                 775                 780
His Val Asp Ile Val Asp Cys Gln Ile Phe Ala Gly Ala Gly Arg Leu
785                 790                 795                 800
Met Gly Arg Ser Ile Thr Pro Arg Asp Tyr Ser Ala Ala Arg Glu Lys
                805                 810                 815
Met Thr Glu Arg Trp Ala Thr Lys Ala Ser Ala Arg Asp Ala Thr Phe
            820                 825                 830
```

```
His Ala Leu Lys Phe Leu Ser Glu Cys Leu Leu Asn Asn Arg Ser Val
        835                 840                 845
Ser Glu Glu Thr Gly Thr Tyr Ser Gly Arg Asp Asp Tyr Leu Leu Asn
    850                 855                 860
Arg Pro Trp Val Ile Tyr Val Ala Val Leu Val Val Trp Cys Tyr Gly
865                 870                 875                 880
Tyr Ala Leu Asp Gly Pro Ile Ala Ser Pro Pro Ala Leu Glu Thr Val
                885                 890                 895
Ala Asp Gln Arg Arg Asp Met Glu Ala Phe Leu Arg Arg Val Gly Gly
            900                 905                 910
Val Arg Xaa Pro His Glu Leu Ala Thr Met Lys Gly Arg Asn Gln Cys
        915                 920                 925
Leu Gly Leu Leu Met Ile Leu Arg Asp Gly Phe Ala Asn Thr Arg Trp
    930                 935                 940
Glu Leu Leu Ser Glu Ser Ile
945                 950

<210> 33364
<211> 115
<212> PRT
<213> A.fumigatus

<400> 33364
Ser Met Arg Phe Thr Gly Pro Ser Gly Arg Pro Gly Glu Lys Phe Ser
1               5                   10                  15
Ala Ser Val His Asp Met Thr Phe Ala Val Gly Thr Val Thr Gly Ser
            20                  25                  30
Asp Gln Gln Leu Asp Tyr Lys Arg Lys Glu Pro Gly Asp Lys Glu Glu
        35                  40                  45
Thr Met Glu Thr Asp Ala Leu Arg Ala Asp Gly Ala Pro Arg Lys Arg
    50                  55                  60
Lys Arg Ala Arg Lys Val Asn Ser Asp Arg Lys Phe Glu Cys Thr His
65                  70                  75                  80
Glu Gly Cys Gly Lys Ser Tyr Ser Arg Ala Glu His Leu Tyr Arg His
                85                  90                  95
Gln Leu Asn Arg Met Ser Asp Val Phe Gln Pro Gln Ala Arg Phe Gly
            100                 105                 110
Gly Cys Gln
        115

<210> 33365
<211> 403
<212> PRT
<213> A.fumigatus

<400> 33365
Gly Thr Pro Gly Gly Ser Lys Met Lys Leu Leu Thr Glu Ala Arg His
1               5                   10                  15
Leu Arg Arg Thr Val Ser Met Phe Thr Met Thr Gly Ser Lys Asp His
            20                  25                  30
Ser Val Arg Lys Arg Met Leu Ser Asn Ile Tyr Ser Lys Ser Phe Leu
        35                  40                  45
Gln Ser Ser Pro His Met Arg Leu Ile Ser Arg Thr Ile Val Tyr Asp
    50                  55                  60
Arg Leu Leu Pro Ile Leu Tyr Asp Ala Ala Thr Ser Ser Arg Pro Val
65                  70                  75                  80
```

```
Asp Val His Asp Leu Asn Gln Gly Leu Thr Met Asp Phe Val Ser Ala
                 85                  90                  95
Tyr Leu Tyr Gly Val Thr Asn Gly Thr Asn Phe Leu Gln Asp Ala Pro
            100                 105                 110
Tyr Arg Gln Arg Met Leu His Leu Tyr Gln Ser Arg Lys Pro Phe Glu
        115                 120                 125
Phe Tyr His Gln Glu Val Pro Asn Leu Leu Ser Trp Thr Lys Ser Leu
    130                 135                 140
Gly Ile Arg Leu Ile Pro Arg Tyr Cys Asp Gln Ala Asn Glu Ile Leu
145                 150                 155                 160
Asp Ser Trp Gly Leu Gly Leu Cys Asp Lys Ala Glu Glu Ser Leu Lys
                165                 170                 175
Ser Asn Arg Leu Glu Asp Glu Pro Ala Val Tyr Lys His Leu Lys Gln
            180                 185                 190
Met Ile Ser Lys His Leu Pro Glu Asn Lys Asn Asp Val Glu Tyr Ala
        195                 200                 205
Arg Ile Leu Glu Gln Gln Arg Leu Asp Ile Ala Cys Glu Met Tyr Asp
    210                 215                 220
His Leu Thr Ala Gly His Glu Thr Ser Ala Val Ala Leu Thr Tyr Leu
225                 230                 235                 240
Leu Trp Glu Leu Ser Lys His Pro Glu Leu Gln Asp Ala Leu Arg Ala
                245                 250                 255
Glu Leu Ser Thr Leu Glu Pro Met Val Ile Phe Pro Arg Pro Ser Glu
            260                 265                 270
Ser Ala Glu Leu Pro Pro Ala Lys Ser Ile Asp Ser Leu Pro Leu Leu
        275                 280                 285
Glu Ala Ile Val Thr Glu Thr Leu Arg Leu His Ala Pro Ile Pro Gly
    290                 295                 300
Ile Gln Pro Arg Val Thr Pro Tyr Pro Ser Cys Thr Leu Ala Gly Tyr
305                 310                 315                 320
Asn Asn Ile Pro Pro Lys Thr Arg Val Asn Ala Gln Ala Tyr Ser Leu
                325                 330                 335
His Arg Asn Pro Glu Val Phe Pro Asp Pro Glu Thr Trp Glu Pro Lys
            340                 345                 350
Arg Trp Leu Lys Asp Val Asn Thr Pro Ser Glu Leu Glu Glu Arg Arg
        355                 360                 365
Arg Trp Phe Trp Ala Phe Gly Ser Gly Gly Arg Met Cys Val Gly Ser
    370                 375                 380
Asn Leu Ala Leu Gln Gly Lys Gly Ala Phe Arg Ser His Gln Ser Leu
385                 390                 395                 400
Lys Leu Thr
```

<210> 33366
<211> 65
<212> PRT
<213> A.fumigatus

<400> 33366

```
Gly Asn Gly Arg Arg Arg Asn Ala Phe Arg Arg Trp Ala His Asp Phe
1                   5                  10                  15
Phe Ala Pro Ile Leu Thr Lys Gly Gly Met Ala Ala Asp Pro Phe Ser
            20                  25                  30
Arg Arg Ile Ile Val Thr Glu Ile Val Val Ile Ile Asn Glu Leu Glu
        35                  40                  45
Trp His Phe Glu Thr Leu Arg Ile Thr Ser Asn Asp Ser Val Met Pro
```

```
    50                  55                  60
Lys
65

<210> 33367
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33367
Cys Leu Gly Leu Leu Val Glu Thr Lys Ser Ala Trp Gln Ala Val Ile
1               5                  10                  15
Arg Phe Gln Gly Gly Leu Gly Val Cys Leu Ser Asp Val Thr Leu Asn
            20                  25                  30
Glu Leu Ser Leu Pro Lys Leu Ser Asp Phe Asp Glu Ser Asn Leu Thr
        35                  40                  45
Asp Ala Tyr Asn Ala Ala Leu Thr Gln Lys Lys Ser Lys Tyr Cys
    50                  55                  60

<210> 33368
<211> 60
<212> PRT
<213> A.fumigatus

<400> 33368
His Thr Leu Ala Gly Thr Val Thr Ser Met Thr Ala Lys Ser Tyr Arg
1               5                  10                  15
His Tyr Ile Val Leu Phe Val Arg Thr Met His Leu Lys Trp Phe Ser
            20                  25                  30
Ser Phe Ser Ser Ile Ala Pro Leu Ser Gly Pro Ala Asp Gly Ile Gly
        35                  40                  45
Thr Thr Pro Tyr Glu Ile Val Thr Ile Lys Gly Leu
    50                  55                  60

<210> 33369
<211> 361
<212> PRT
<213> A.fumigatus

<400> 33369
Pro Ala Thr Gly Ile Ser Arg Ser Ile Leu Asn Phe Ile Thr Leu Cys
1               5                  10                  15
Met Arg Ala Phe Gly Asn Arg Leu Ala Leu Thr His Leu Pro Ala Met
            20                  25                  30
Val Ala Thr Tyr Asn Gln Gly Thr Arg Ala Ser Glu Leu Val Arg Gln
        35                  40                  45
Tyr Ala Pro Gln Ile Ala Gly Lys Ile Ile Leu Ile Thr Gly Val Ser
    50                  55                  60
Pro Gly Ser Leu Gly Glu Ser Phe Val Lys Gln Val Ala Val Ala Gln
65                  70                  75                  80
Pro Ala Met Phe Ile Leu Ala Ser Arg Ser Ile Ser Lys Val Gln Asn
                85                  90                  95
Leu Ile Asp Glu Leu Ala Thr Ala Tyr Pro Ser Val Lys Val Lys Pro
            100                 105                 110
Leu Tyr Leu Asn Leu Leu Ser Phe Asp Asp Val Arg Glu Ala Ala Glu
        115                 120                 125
```

```
Thr Val Asn Ser Trp Thr Asp Val Pro His Ile Asp Ile Leu Val Asn
    130                 135                 140
Asn Ala Gly Ile Met Ala Val Pro Tyr Lys Leu Thr Glu Asp Gly Tyr
145                 150                 155                 160
Glu Ser Gln Phe Gln Thr Asn His Leu Ser His Phe Leu Leu Thr Asn
                165                 170                 175
Leu Leu Met Gly Lys Ile Leu Ala Ser Lys Thr Pro Arg Ile Val Val
            180                 185                 190
Val Ser Ser Ser Val His Arg Ile Gly His Ile His Trp Ser Asp Pro
        195                 200                 205
Asn Phe Asn Gly Gly Lys His Tyr Gln Arg Trp Leu Gly Tyr Ser Gln
    210                 215                 220
Ser Lys Thr Ala Asn Ala Leu Met Gly Val Ser Leu Ala Glu Lys Leu
225                 230                 235                 240
Gly His Arg Gly Leu Leu Ala Phe Pro Ile Cys Pro Gly Val Ser Leu
                245                 250                 255
Thr Asn Leu Ala Ala His Gly Arg Glu Asp Leu Ala Ala Phe Ser Ala
            260                 265                 270
Asp Leu Thr Asp Met Asp Asn Ile Tyr Gly Asn Lys Trp Leu Trp Gly
        275                 280                 285
Met Ala Glu Ile Lys Ile Lys Asp Leu Asp Gln Gly Ala Ala Thr His
    290                 295                 300
Val Phe Ala Ala Phe Asp Thr Ser Ile Ala Asn Gln Asn Gly Ala Phe
305                 310                 315                 320
Leu Ser Asp Cys His Ala Ala Asp Pro Asp Met Glu Glu Val His Ser
                325                 330                 335
Trp Ala Thr Ser Lys Val Asp Ala Glu Arg Leu Trp Arg Met Ser Glu
            340                 345                 350
Lys Leu Val Gly Gln Glu Phe Lys Tyr
        355                 360

<210> 33370
<211> 259
<212> PRT
<213> A.fumigatus

<400> 33370
Ala Ile Val Val Lys Ser Glu Pro Ser Ile Met Ser Leu Phe Ala Phe
1               5                   10                  15
Gly Ser Asn Gly Ser Gly Gln Leu Gly Ile Gly His Asp Glu Asp Val
            20                  25                  30
Ser Val Pro Thr Arg Cys Leu Phe Glu Glu Gly Gln Thr Pro Ser Glu
        35                  40                  45
Glu Glu Asn Gly Thr Gln Ala Lys Thr Ile Ser Cys Ile Val Ala Gly
    50                  55                  60
Gly Asn His Thr Leu Ile Leu Tyr Gln Asp Gly Ser Val Tyr Ala Ala
65                  70                  75                  80
Gly Cys Asn Glu Asp Gly Arg Cys Gly His His Pro Ala Thr Ala Ser
                85                  90                  95
Leu Gln Lys Phe Arg Gln Val Ile Val Lys Ser Arg Asp Gly Thr Cys
            100                 105                 110
Tyr His Thr Phe Lys His Leu Ser Ala Thr Trp Glu Gly Thr Phe Leu
        115                 120                 125
Val Val Gly Ser Glu Asp Pro Ser Ala Glu Ala Asp Ser Ile Phe Val
    130                 135                 140
Ile Gly Ser Gly Ala Lys Gly Glu Leu Gly Leu Gly Gln Gly Cys Thr
```

```
145                 150                 155                 160
Lys Ala Val Glu Pro Thr Arg Ile Pro Asn Phe Pro Pro Gln Gly Thr
                165                 170                 175
Lys Val Val Ser Ile Ala Ser Gly Met Gly His Thr Val Val Val Leu
            180                 185                 190
Ser Asn Gly Glu Val Tyr Gly Trp Gly Gly Ala Arg Lys Gly Gln Leu
        195                 200                 205
Gly Glu Ser Ala Arg Gly Met Lys Ile Val Trp Cys Pro Thr Lys Val
    210                 215                 220
Glu Gly Ile Pro Phe Gln Ala Lys Gly Ala Val Cys Gly Arg Glu Phe
225                 230                 235                 240
Thr Val Val Ser Gly Asn Lys Ser Ala Gly Glu Tyr Ala Ile Ile Gly
                245                 250                 255
Ser Met Arg
```

<210> 33371
<211> 145
<212> PRT
<213> A.fumigatus

<400> 33371

```
Phe Arg Ala Thr Ser Pro Gln Gly Asn Met Pro Leu Leu Gly Gln Cys
1               5                   10                  15
Asp Asn Lys Trp Asn Ile Leu Ser Asp Ala Pro Ala Ser Gln Ser Leu
            20                  25                  30
Thr Tyr Tyr Arg Gly Ile Ala Ala Ser Trp His Gly Val Tyr Val His
        35                  40                  45
Gln Asn Asp Phe Ser Val Ile Ala Trp Gly Arg Asn Asp Arg Gly Gln
    50                  55                  60
Leu Pro Pro Pro Asp Leu Pro Arg Ser Gln Lys Leu Ala Val Gly Ser
65                  70                  75                  80
Glu His Val Leu Ala Leu Leu Asp Glu His Thr Val Val Ala Phe Gly
                85                  90                  95
Trp Gly Glu His Gly Asn Cys Gly Pro Asp Ile Asp Val Gln Gly Asn
            100                 105                 110
Val Asn Gly Thr Tyr Lys Pro Val Pro Leu Glu Met Leu Gln Gly Ser
        115                 120                 125
Asn Val Val Gly Ile Gly Ala Gly Cys Ala Thr Ser Trp Ile Ile Thr
    130                 135                 140
Ser
145
```

<210> 33372
<211> 150
<212> PRT
<213> A.fumigatus

<400> 33372

```
Arg Leu Val Leu Thr Tyr Leu Phe Leu Pro Asp Thr Thr Gly Leu Asp
1               5                   10                  15
Leu Lys Glu Gln Glu Arg Arg Trp Ala Phe Ile Arg Ser Gly Arg Glu
            20                  25                  30
His Glu Tyr His Gly Pro Ala Val His Pro Lys His Leu Ser Val Trp
        35                  40                  45
Glu Arg Leu Arg Gly Lys Gly Lys Tyr Tyr Asp Ala Glu Leu Asp Tyr
```

```
    50                  55                  60
Lys Gln Lys Val Glu Glu Phe Arg Ala Glu Trp Glu Ala Ala Met Ala
65                  70                  75                  80
Arg Lys Val Ser Glu Asn Asp Lys Gly Glu Asp Phe Ala Ile Asp Thr
                85                  90                  95
Asp Asp Ser Leu Leu Glu Gly His Val His Ser Tyr Phe His Arg Thr
            100                 105                 110
Ser Pro Met Phe Arg Gly Met Glu Glu Asn Pro Ser Lys Ser Asp Asn
        115                 120                 125
Phe Ala Leu Pro Pro Ala Ala Gln Glu Gly Asp Ser Thr Asp Ser Phe
    130                 135                 140
Asn Glu Lys Thr Gln Gln
145                 150
```

<210> 33373
<211> 494
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (19)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33373

```
Ser Ser Thr Ile Ala Phe Leu Asp Trp Ser Leu Ser Leu Tyr Ser Leu
1               5                   10                  15
Ile Ile Xaa Met Pro Ser Phe Phe Thr Ala Gly Leu Gln Gly Leu Pro
            20                  25                  30
Pro Thr Pro Pro His Val Leu Ser Gly Gly Arg Ile Glu Asn Glu Pro
        35                  40                  45
Phe Tyr Ile Val Asn Asn Ser Ala Phe Pro Pro Arg Tyr Thr Gln Asn
    50                  55                  60
Gly Cys Glu Phe Ile Glu Gln Tyr Ser Gln Ser Ala His Tyr Ser Lys
65                  70                  75                  80
Pro Ala Pro Met Asn Leu His Pro Pro Ser Ala His His Met His Asn
                85                  90                  95
Gly Arg Asp Leu Thr Thr Ala His Pro Ala Leu Asn Gln Ser Phe Gly
            100                 105                 110
Pro Leu Pro Thr Thr Asn Val Leu Pro Pro Ile Arg Thr Gly Leu Gln
        115                 120                 125
Leu Pro Pro Met Glu Ser Ala Ile Pro Pro Gln Tyr Arg Arg Gln Asp
    130                 135                 140
Arg Leu Met Gln Pro Glu Gln Gln Gln Arg Lys Glu Glu Lys Ala Thr
145                 150                 155                 160
Gly Gly Val Ala Ala His Leu Asp Tyr Glu Met Glu Gln Met Ser Asp
                165                 170                 175
Phe Val Ala Glu Met Ala Gln Gly Met Tyr Ala Leu Tyr Ile Thr Lys
            180                 185                 190
Ile Asn Ile Ala Asp Ile Asp Phe Ala Arg Ser Val Tyr Pro Gly Thr
        195                 200                 205
Ser Val Pro Pro Gln Phe Arg Lys Tyr Val Tyr Gln Ile Leu Ser Ser
    210                 215                 220
Thr Arg Leu Pro Ser Ser Thr Ile Leu Leu Gly Leu Tyr Tyr Leu Ala
225                 230                 235                 240
Ser Arg Met Arg Met Leu Ser Ser Ala Asn Val Tyr Thr Ser Gly Ser
```

```
                245                 250                 255
Gly Gln Val Tyr Arg Met Leu Thr Val Ala Leu Leu Leu Gly Ser Lys
            260                 265                 270
Phe Leu Asp Asp Asn Thr Phe Gln Asn Lys Ser Trp Ala Glu Val Ser
        275                 280                 285
Asn Ile Pro Val Gly Glu Leu Asn Ser Met Glu Leu Glu Trp Leu Phe
    290                 295                 300
Ala Phe Glu Trp Lys Leu His Glu Arg Ile His Asp Lys Gln Asp Gly
305                 310                 315                 320
Phe Ala Ser Trp Leu Ser His Trp Glu Thr Trp Arg Ala Lys Ala Val
                325                 330                 335
Ala Arg Ala Gln Glu Ser Leu His Asn Leu Ala Pro Ile Asp Thr Asn
            340                 345                 350
Val Ser Arg Gly His Met Val Ser Lys Pro Leu Leu Ser Pro Glu Gly
        355                 360                 365
Pro Ile Pro Pro Gln Tyr Gln Arg Ser Ser His Tyr Glu Asn Ser Trp
    370                 375                 380
Leu Asn Pro Ala Ala Ser Glu Tyr Ser Pro Pro Ser Ala Pro His Ser
385                 390                 395                 400
Gly Pro Asn Thr Pro Asp Tyr Tyr Ala Val Gly Pro Trp Ala Tyr Ala
                405                 410                 415
Asn Pro Pro Pro Pro Tyr Thr Arg Thr Trp Ile Leu Pro Pro Gln Gln
            420                 425                 430
Tyr Met Pro Gln Ser Ala Pro Arg Ser Gln Pro Pro Ser Tyr His His
        435                 440                 445
Thr Pro Ser Tyr Ala Leu Pro Phe Ala Gln Ser Val Trp Thr Gly His
    450                 455                 460
Gly Ser Ser Cys Gly Cys Leu Tyr Cys Ala Lys His Val Glu His Tyr
465                 470                 475                 480
Met Cys Ala Asn Ala Phe Gly Pro Met Gln Ala Met Val Ala
                485                 490
```

<210> 33374
<211> 77
<212> PRT
<213> A.fumigatus

<400> 33374

```
Leu Thr Val Cys Met Cys Lys Met Trp Asn Arg Glu Ile Met Met Glu
1               5                   10                  15
Gly Glu Cys Ile Arg Ile Arg Ser Val Lys Ala Pro Ser Asp Ala Pro
            20                  25                  30
Val Met Leu Ser Phe Gly Leu Lys Phe Gly Val Gly Val Leu Phe Ser
        35                  40                  45
Ile Phe Ala Val Val Ile Val Phe Leu Arg Val Phe Val Met Ala Gly
    50                  55                  60
Ser Val Gly Lys Gly Tyr Ser Arg Lys Gly Val Thr Tyr
65                  70                  75
```

<210> 33375
<211> 269
<212> PRT
<213> A.fumigatus

<400> 33375

```
His Ala Asp Arg Lys Gln Met Phe Ser Ile Leu Asn Glu Ile Ser Asn
```

```
1               5                   10                  15
Asn Ser His Phe Arg Val Thr Gly Val Val Leu Ala Ser Ile Gly Ser
            20                  25                  30
Ser Ala Ala Thr Tyr Ile Leu Val Ala Ile Thr Gly Tyr Leu Ser Phe
        35                  40                  45
Gly Asp Asn Val Gly Gly Asn Ile Val Ser Met Tyr Pro Pro Gly Val
    50                  55                  60
Trp Ala Thr Val Gly Arg Ala Ala Ile Val Met Leu Val Met Phe Ser
65                  70                  75                  80
Tyr Pro Leu Gln Cys His Pro Cys Arg Ala Ser Ile Asp Ala Val Leu
                85                  90                  95
Arg Trp Arg Pro Lys Pro Ala Ala Gly Asn Asp Asn Leu Pro His His
            100                 105                 110
His Pro Leu Leu Gly Pro Arg Gly His Arg Ala Pro Glu Pro Met Ser
        115                 120                 125
Asp Leu Arg Phe Ser Leu Ile Thr Thr Thr Ile Leu Ile Leu Ser Tyr
    130                 135                 140
Ile Val Ala Met Thr Val Ser Ser Leu Glu Ala Val Leu Ala Tyr Val
145                 150                 155                 160
Gly Ser Thr Gly Ser Thr Ser Ile Ser Phe Ile Leu Pro Gly Leu Phe
                165                 170                 175
Tyr Tyr Lys Ile Ser Ser Pro Asp Ser Pro Thr His Gln Arg Leu Met
            180                 185                 190
Lys Glu Asp Asp Glu Ala Val Asp Asn Ile Leu Ser Asp Asp Asp Asn
        195                 200                 205
Ser Asp Glu Asn Gly Ile Glu Gly Gly Gln Asn Leu Pro Leu Thr Asp
    210                 215                 220
Ser Ala Ile Leu Arg Leu Thr Asn Arg His Trp Arg Arg Gly Leu Leu
225                 230                 235                 240
Arg Lys Leu Ser Leu Ala Leu Val Val Tyr Gly Ile Leu Val Met Ile
                245                 250                 255
Val Cys Leu Ile Val Asn Thr Phe Phe Ile Ala Ser Gln
            260                 265
```

<210> 33376
<211> 108
<212> PRT
<213> A.fumigatus

<400> 33376

```
Asp Gly Pro Val Leu Thr Thr Pro Pro Arg Val Met Val Ile Pro Leu
1               5                   10                  15
Ser Tyr Leu Arg Arg Leu Asp Ser Leu Lys Tyr Thr Ser Ile Ala Ala
            20                  25                  30
Leu Val Ser Met Gly Tyr Leu Val Ile Leu Val Val Tyr His Phe Val
        35                  40                  45
Lys Gly Asp Thr Met Asp Glu Arg Gly Pro Val Arg Leu Ile His Trp
    50                  55                  60
Ala Gly Pro Val Pro Ala Leu Ser Ser Leu Pro Val Ile Val Phe Ala
65                  70                  75                  80
Phe Thr Cys His Gln Asn Val Gly Arg Leu His Gly Phe Asp Cys Arg
                85                  90                  95
His Ser Met Leu Thr Gly Ser Arg Cys Ser Leu Ser
            100                 105
```

<210> 33377

<211> 156
<212> PRT
<213> A.fumigatus

<400> 33377
Val Ile Leu Ile Gly Ala Ser Gly Phe Leu Ile Phe Pro Glu Leu Ile
1 5 10 15
Glu Pro Cys Leu Asn Ser His Arg Cys Arg Arg Ser Gly Asp Ala Ala
20 25 30
Arg His Leu Ser His Gly Asn Gly Pro Arg Tyr Leu Arg His Ser Leu
35 40 45
Val Trp Asn Asp Arg Trp Ala Arg Pro Leu Pro Leu Gly Ser Met Ala
50 55 60
His Ser Thr Leu Asp Arg Gly Ser Leu Val Phe Phe Arg Pro Tyr Glu
65 70 75 80
Ala His Ile Ser Gln Cys Arg Pro Leu Phe Leu Asn Gly Gly Ile Ala
85 90 95
Ile Lys Cys Phe Gly Val Gly Val Ser Tyr Leu Ile Ile Leu Gly Asp
100 105 110
Leu Met Pro Asp Val Glu Gln Gly Leu Asp Trp Tyr His Ser Arg Gln
115 120 125
Met Thr Cys Trp Arg Thr Gly Ile Cys Gly Leu Leu Pro Ser Cys Ser
130 135 140
Leu Tyr Ser His Ser Gln Val Glu Met Asp Leu Cys
145 150 155

<210> 33378
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33378
Lys Asn Asn Tyr Tyr Tyr Ile Ser Arg Thr Cys Phe Gln Phe Leu Ile
1 5 10 15
Phe Asn Asn Asn Tyr Leu Leu Lys Tyr Lys Phe Thr Ser Leu Ile Tyr
20 25 30
Leu Leu Leu Ser Thr Ile Lys Tyr Ile Tyr Leu Ile Asn Leu Thr Ser
35 40 45
Ile Ser Ile Ile Ile Ile Leu Ile Leu Pro Leu Asp Tyr Pro
50 55 60

<210> 33379
<211> 468
<212> PRT
<213> A.fumigatus

<400> 33379
Thr Phe Asn Asp Asp Asp Leu Thr Arg Thr His Ser Ala Phe Leu Trp
1 5 10 15
Ala Phe Arg Ala Ser Arg Asn Trp Lys Leu Val Lys Asp Val Val Pro
20 25 30
Phe Leu Arg Ser Arg Ile Glu Ser Glu Lys Ala Ala Glu Gln Gln Phe
35 40 45
Ser Pro Gln Gly Gly Ala Thr Asp Gly Asp Thr Glu Met Gln Gly Asp
50 55 60
Phe Asp Gly Phe Phe Lys Gln His Phe Cys Val Ser Ala Gln Asp Leu

```
65                  70                  75                  80
Ala Asp Glu Leu Arg Gln Pro Leu Gln Asp Met Gly Val Leu Tyr Asp
                85                  90                  95
Asp Phe Leu Thr Thr Thr Thr Pro Val Ser Arg Phe Ser Arg Ala Met
            100                 105                 110
Gly Tyr Ser Arg Leu Ser Ala Asn Lys Gly Arg Met Met Tyr Thr Val
        115                 120                 125
Arg Gln Leu Ser Met Leu Asp Ala Ala Arg Leu Ser Ala Ser Gly Leu
    130                 135                 140
Arg Phe Thr Ser Ile Glu Asn Val Ile Pro Val Leu Ser Arg Arg Val
145                 150                 155                 160
His Ile Pro Ser Met Thr Leu Ala Ala His Leu Arg Asp Met Arg Asp
                165                 170                 175
Tyr Ser Ile Ser Gly Arg Asn Phe Glu Pro Gly Val His Leu Val Ser
            180                 185                 190
Phe Val Met Arg Pro Thr Val His Asp Asn Phe Glu Val Leu Thr Ala
        195                 200                 205
Lys Gly Val Ser Asn Pro Leu Pro Ser Ala Ser Leu Pro Leu Lys Arg
    210                 215                 220
Leu Gln Ile Ala His Leu Glu Ser Leu Ser His Met Glu Gly Trp Thr
225                 230                 235                 240
Val Ser Thr Cys Leu Asn Trp Leu Thr Ser Glu Thr Ala Arg Gly Tyr
                245                 250                 255
Arg Asp Val Asp Ala Phe Arg Gln Gln Leu Ile Gln Ala Met Arg Asp
            260                 265                 270
Leu Ser Ser Val Met Pro Pro Asp Ile Asn Ser Ala Ser Arg Phe Ser
        275                 280                 285
Ala Arg Pro Leu Ile Ala Pro Cys Arg Pro Ser Arg His Ser Asp Gly
    290                 295                 300
Asn Asn Cys Ile Ile Leu Pro Phe Cys Val Val Gly Thr Leu Asp Thr
305                 310                 315                 320
Gln Ile Ser Asn Pro Asp Phe Thr Phe Thr Pro Leu Arg Leu Phe Lys
                325                 330                 335
Ala Gln Gln Gln Val Asn Asp Gly Phe Thr Gly Gly Asp Gly Phe Ala
            340                 345                 350
Lys Glu Leu Ser Gln Glu Leu Tyr Tyr Ser Asn Ala Arg Ser Ser Ser
        355                 360                 365
Thr Thr Asp Pro Glu Ile Ala Pro Ser Val Arg Ala Leu Arg Arg Phe
    370                 375                 380
Trp Pro Ser Arg Lys Gln Pro Ser Asp Lys Met Ser Ala Thr Ser Gln
385                 390                 395                 400
Glu Thr Leu Met Glu His Ser Pro Phe Gly Glu Asn Thr Val Arg Lys
                405                 410                 415
Gly Ser Glu Ser Gly His His Lys Phe Thr Glu Leu Ser Thr Glu Pro
            420                 425                 430
Arg Pro Gly Ser Ala Cys Leu Thr Asp Tyr His Asn Gly Arg Arg Leu
        435                 440                 445
Gly Leu Ser Ala His Met Trp Thr Ser Phe Thr Ile Phe Ala Thr Pro
    450                 455                 460
Leu Arg Tyr Gly
465
```

<210> 33380
<211> 218
<212> PRT
<213> A.fumigatus

<400> 33380
Leu Ser Ala Asp Pro Ser Pro Pro Val Gly Glu Asp Val Gln Asp Phe
1 5 10 15
Asn His Tyr Ser Ser Val Arg His Val Asp Gly Pro His Thr Gly Leu
20 25 30
Pro Arg Ile Pro Lys Asp Leu Lys Ser Asp Thr Arg Ser Leu Asn Thr
35 40 45
Ser Pro Pro Ser Tyr Ala Gly Thr Lys Arg Ser Ala Asp Glu Ser Glu
50 55 60
Asp Glu Asp Ala Arg Pro Ala Val Arg Arg Lys Lys Val Arg Val Gly
65 70 75 80
Ala Ser Glu Ser Lys Leu Thr Met Lys Leu Arg Ser Arg Ser Ser Ser
85 90 95
Arg Ala Leu Ser Pro Leu Val Arg Thr Asp Arg Ser Ala Glu Glu Ala
100 105 110
Ala His Glu Asp Pro Arg Pro Ala Leu Gly Ala Lys Arg Pro Ala Asp
115 120 125
Glu Ala Ala Asn Lys Asp Ser His Ser Ile Leu Gly Ser Lys Arg Ser
130 135 140
Ala Asp Asp Ser Glu Asp Glu Asp Pro Arg Pro Ala Val Arg Arg Lys
145 150 155 160
Lys Val Arg Leu Gly Ala Ser Glu Asn Lys Leu Thr Met Lys Leu Arg
165 170 175
Ser Arg Ser Ser Ser Arg Ala Leu Ser Pro Ser Pro Ala Ser Met Lys
180 185 190
Arg Ser Ala Asp Gly Thr Val Glu Glu Asp Pro Arg Pro Thr Leu Arg
195 200 205
Arg Arg Arg Leu Arg Asn Arg Ile Ser Thr
210 215

<210> 33381
<211> 67
<212> PRT
<213> A.fumigatus

<400> 33381
Thr Pro Gly Phe Leu Gln His Ala Asp Ser Leu Phe Lys Glu Ser Leu
1 5 10 15
Asp Ser Lys Arg Pro Ser Gly Ser Gly Tyr Thr Ser Lys Val Arg Val
20 25 30
Arg Asp Lys Tyr His Ile Val Gly Phe Ile Ser Ser Gly Thr Tyr Gly
35 40 45
Arg Val Tyr Lys Ala Ile Gly Lys Asp Gly Arg Lys Gly Glu Tyr Ala
50 55 60
Ile Lys Lys
65

<210> 33382
<211> 422
<212> PRT
<213> A.fumigatus

<400> 33382
Thr Pro Arg Asp Pro Arg Asp Leu Gly Ile Pro Ala Lys Tyr Gly Ser
1 5 10 15

```
Val Thr Ser Ile Thr Ser Ser Ala Ser Ser Ala Val Val Leu Met Val
            20                  25                  30
Ala Ser Thr Lys Pro Ser Glu Lys Met Ala Gly Lys Ala Asn Met Arg
        35                  40                  45
Ser Arg Ser Glu Ser Asn Ser Pro Leu Tyr Phe Phe Pro Ile Val Ala
    50                  55                  60
Asp Gln Ile Arg Phe Lys Pro Asp Lys Glu Gly Glu Ile Ile Gln Tyr
65                  70                  75                  80
Thr Gly Leu Ser Gln Ser Ala Ile Arg Glu Met Ala Leu Cys Ser Glu
                85                  90                  95
Leu Asp His Pro Asn Val Val Gln Leu Ala Glu Ile Ile Leu Glu Asp
            100                 105                 110
Lys Cys Ile Phe Met Val Phe Glu Tyr Thr Glu His Asp Leu Leu Gln
        115                 120                 125
Ile Ile His His His Thr Gln Pro Gln Arg His Ala Ile Pro Ala Pro
    130                 135                 140
Met Ile Lys Ser Ile Leu Phe Gln Leu Leu Asn Gly Leu Leu Tyr Leu
145                 150                 155                 160
His Thr Asn Trp Val Leu His Arg Asp Leu Lys Pro Ala Asn Ile Leu
                165                 170                 175
Val Thr Ser Ser Gly Ala Val Arg Ile Gly Asp Leu Gly Leu Ala Arg
            180                 185                 190
Leu Phe Tyr Lys Pro Leu Asn Ser Leu Tyr Ser Gly Asp Lys Val Val
        195                 200                 205
Val Thr Ile Trp Tyr Arg Ala Pro Glu Leu Leu Met Gly Ser Arg His
    210                 215                 220
Tyr Thr Pro Ala Val Asp Leu Trp Ala Val Gly Cys Ile Phe Ala Glu
225                 230                 235                 240
Leu Leu Ser Leu Arg Pro Ile Phe Lys Gly Glu Glu Ala Lys Met Asp
                245                 250                 255
Ser Lys Lys Thr Val Pro Phe Gln Arg Asn Gln Met Met Lys Ile Ile
            260                 265                 270
Asp Ile Met Gly Leu Pro Arg Lys Glu Thr Trp Pro Gly Leu Val Ser
        275                 280                 285
Met Pro Glu Phe Ser Gln Leu Gln Ser Leu Ala Met Ser Thr Gly Tyr
    290                 295                 300
Ile Asn Arg Gln Cys Asn Leu Glu Gly Trp Tyr Gln Ser Cys Leu Lys
305                 310                 315                 320
Asn Asn Gly Tyr Ser Pro Gly Ser Ala Ala Gly Thr Pro Arg Ala Glu
                325                 330                 335
Arg Phe Asp Leu Leu Ser Arg Leu Leu Glu Tyr Asp Pro Thr Lys Arg
            340                 345                 350
Ile Ser Ala Arg Glu Ala Leu Glu His Pro Tyr Phe Thr Thr Gly Thr
        355                 360                 365
Pro Val Thr Ala Asn Cys Phe Ala Gly Tyr Glu Gly Lys Tyr Pro His
    370                 375                 380
Arg Arg Val Thr Gln Asp Asp Asn Asp Ile Arg Ser Gly Ser Leu Pro
385                 390                 395                 400
Gly Thr Lys Arg Ser Gly Leu Pro Asp Asp Ser Leu Met Gly Arg Ala
                405                 410                 415
Ala Lys Arg Leu Lys Glu
            420
```

<210> 33383
<211> 315
<212> PRT

<213> A.fumigatus

<400> 33383
Val Ala Thr Asp Asp Val Glu Ala Ala Lys Glu Asp Ala Asn Asp Asp
1 5 10 15
Glu Asp Thr Leu Leu Pro Pro Gly Phe Pro Ala Glu Asp Asp Phe Glu
20 25 30
Thr Phe Leu Cys Tyr Lys Cys Val Glu Ser Asn Leu Trp Leu Lys Arg
35 40 45
Tyr Ala Gly Thr Pro Gly Phe Leu Pro Ala Val Tyr Lys Asp Gly Gly
50 55 60
Leu Ser Lys Val Ser Glu Glu Glu Arg Thr Gly Ala Asp Pro Leu Asn
65 70 75 80
Ala Ser Ser Asn Gln Leu Ala Asn Thr Lys Lys Arg Lys Ala Asp Glu
85 90 95
Asp Asp Thr Thr Glu Ala Lys Glu Thr Val Glu Leu Ala Ala Lys Arg
100 105 110
Thr Lys Ser Glu Val Asp Gly Glu Gln Ser Phe Thr Glu Ser Lys Ser
115 120 125
Glu Thr Thr Gln Ala Glu Pro Ala Lys Pro Lys His Glu Ser Leu Pro
130 135 140
Asn Pro Pro Pro Ser Gly Thr Phe Ser Leu Phe Leu Lys Glu Asp Phe
145 150 155 160
Arg Glu His Phe Cys Arg Cys Pro Glu Cys Tyr Pro Asn Leu Ala Lys
165 170 175
Tyr Pro Gln Leu Arg Glu Glu Glu Glu Thr Tyr Glu Pro Pro Leu Ser
180 185 190
Glu Asp Gly Asp Ala Asn Gly Gly Gly Ser Thr Gly Thr Gly Ser Ile
195 200 205
Tyr Glu Arg Gly Glu Ala Ala Leu Ser Asn Ile Asp Arg Val Arg Ala
210 215 220
Ile Glu Gly Ala Met Val Tyr Asn His Leu Arg Asp Lys Val Lys Glu
225 230 235 240
Phe Leu Lys Pro Phe Ala Glu Ser Gly Thr Ala Val Ser Ala Glu Asp
245 250 255
Ile Lys Ala Tyr Phe Glu Lys Leu Arg Gly Asp Glu Lys Pro Ile Lys
260 265 270
Asp Ala Ala Ala Gly Gln Ala Ser Ala Ser Ser Gly Asn Gly Gly Asn
275 280 285
Glu Lys Asp Glu Gly Gly Asp Gly Arg Lys Glu Gln Ser Gly Met Leu
290 295 300
Arg Leu Arg Ile Tyr Val Ala Ser Gly Leu Phe
305 310 315

<210> 33384
<211> 370
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (29),(41),(53),(65)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33384
Lys Ser Gln Gly Phe Lys His Tyr Asp Asp Leu Ile Gln Thr Phe Leu

```
1               5                   10                  15
Asp Ala Gly Met Leu Pro Met Val Thr Phe Leu His Xaa Asp Ser Pro
            20                  25                  30
Trp Met Leu Val Ala Gly Gly Asn Xaa Thr Ala Lys Pro Asp Ile Gly
        35                  40                  45
Tyr Asn Asn Gly Xaa Tyr His Asn Glu Thr Phe Val Asp Ala Phe Val
    50                  55                  60
Xaa Tyr Ala Lys Ile Val Leu Thr His Phe Ala Asp Arg Val Pro Ile
65                  70                  75                  80
Trp Val Thr Phe Asn Glu Pro Leu Leu Tyr Ser Phe Asn Phe Lys Gly
                85                  90                  95
Ala Asp Asn Val Val Arg Ala His Ala Gln Val Tyr His Phe Tyr His
            100                 105                 110
Asp Val Leu Asn Ala Thr Gly Arg Met Gly Ile Lys Phe Asn Asp Asn
        115                 120                 125
Phe Gly Val Pro Arg Asn Pro Arg Asn Ala Ser Asp Val His Ala Ala
    130                 135                 140
Asn Arg Phe Gln Glu Met Gln Leu Gly Leu Phe Ala Asn Pro Ile Phe
145                 150                 155                 160
Leu Gly Gln Gln Tyr Pro Asp Ser Ile Leu Asn Thr Leu Pro Gly Ala
                165                 170                 175
Glu Pro Leu Ser Lys Lys Asp Leu Ala Tyr Ile Ala Asn Thr Ser Asp
            180                 185                 190
Phe Phe Gly Ile Asp Pro Tyr Thr Ala Thr Val Val Ser Pro Ala Ala
        195                 200                 205
Glu Gly Ile Asp Ala Cys Ala Ala Asn Thr Ser Ser Glu Leu Phe Pro
    210                 215                 220
Tyr Cys Val Val Gln Glu Thr Lys Asn Arg Tyr Gly Trp Asn Leu Gly
225                 230                 235                 240
Tyr Arg Ser Gln Ser Tyr Val Tyr Ile Thr Pro Thr Tyr Leu Arg Glu
                245                 250                 255
Tyr Leu Asn Tyr Leu Trp Asn Thr Phe Arg Ser Pro Val Phe Val Ser
            260                 265                 270
Glu Phe Gly Phe Pro Val Phe Gly Glu Ala Glu Lys Thr Asp Leu Ser
        275                 280                 285
Asp Gln Leu Phe Asp Thr Pro Arg Ser Ile Tyr Tyr Leu Ser Phe Met
    290                 295                 300
Ser Glu Ile Leu Lys Ala Ile His Glu Asp Gly Val Arg Val Met Gly
305                 310                 315                 320
Ala Leu Ala Trp Ser Trp Ala Asp Asn Trp Glu Phe Gly Asp Tyr Glu
                325                 330                 335
Gln Gln Phe Gly Leu Gln Val Val Asn Arg Thr Thr Gln Glu Arg Tyr
            340                 345                 350
Tyr Lys Lys Ser Leu Phe Asp Leu Val Asp Phe Val Ser Ser Arg Met
        355                 360                 365
Ser Lys
    370
```

<210> 33385
<211> 206
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (121),(128),(148),(183)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33385
Met Arg Gln Cys Gly Glu Leu Ala Val Gly Lys Ser Gly Ser Glu Glu
1 5 10 15
Thr Tyr Ala Asn Asp Tyr Ser Phe Ala Thr Ser Val Pro Arg Pro Thr
20 25 30
Ser Thr His Thr Tyr Gly Pro Pro Tyr Ala His Ala Val Lys His Leu
35 40 45
Ser Pro Val Pro Ala Thr Thr Thr Trp Gly Asn Trp Leu Pro Tyr Gln
50 55 60
Thr Val Ile Thr Ala Thr Asp Thr Thr Asp Pro Tyr Gly Gln Ala Ala
65 70 75 80
Trp Ser Met Leu Trp Gln Gln Ala Gly Ile Glu Asn Tyr Thr Thr Thr
85 90 95
Gly Leu Tyr Ser Thr Thr Val Ser Pro Thr Ala Val Pro Ser Ser Ser
100 105 110
Leu Val Pro Ala Ala Ala Asp Tyr Xaa Gly Pro Thr Asp Cys Tyr Xaa
115 120 125
Leu His Ala Asp Phe Val Phe Gly Val Ala Gly Ser Ala Ala Gln Val
130 135 140
Glu Gly Ala Xaa Arg Leu Glu Gly Arg Ser Pro Thr Ile Leu Glu Lys
145 150 155 160
Leu Ala Asn Ala Thr Gln Pro Lys Asp Tyr Val Thr Asn Glu Asn Tyr
165 170 175
Tyr Leu Tyr Lys Gln Asp Xaa Gln Arg Leu Ala Thr Ile Gly Val Asn
180 185 190
Thr Thr Ser Phe Ser Asn Ser Gly Asp Ala His Ser Phe Leu
195 200 205

<210> 33386
<211> 80
<212> PRT
<213> A.fumigatus

<400> 33386
Val Ala Trp Gln Ser Thr Ala Arg Asp Ala Trp Cys Leu Asp Pro Leu
1 5 10 15
Ala Pro Gln Lys Asn Ser Ile Ala Ser Phe Cys Gly Ile Pro Arg Arg
20 25 30
Ser Asn Arg Ser Ser Gln Gln Arg Asp Lys Met Val Ser Gly Pro Arg
35 40 45
Pro Tyr Ser His Leu Asn Ile Asn Asn Val Ser Met Asn Ser Val Ala
50 55 60
Thr Lys Val His Ile Asp Asn Gln Glu Leu Glu Ile Gly Arg Ser Leu
65 70 75 80

<210> 33387
<211> 68
<212> PRT
<213> A.fumigatus

<400> 33387
Ala Glu Leu Asn Gly Gln Ile Pro Leu Pro Pro Asp Ala Val Leu Asn
1 5 10 15
Ile Trp Lys Ala Ile Lys His Thr Glu Phe Asp Asp Ala His Gly Ala

```
            20                  25                  30
Phe Val Gly Trp Asp Thr His Gly Asp Ser Lys Lys Arg Val Leu Glu
        35                  40                  45
Ser Ala Lys Ile Tyr Val Arg Ala Met Gly Tyr Leu Asp His Ala Ile
    50                  55                  60
His Gln Glu Gln
65
```

<210> 33388
<211> 209
<212> PRT
<213> A.fumigatus

<400> 33388

```
Ser Gln Ser Trp Thr Thr Leu Arg Thr Leu Gln Ser Ala Asn Gln Tyr
1               5                   10                  15
His Asn Asp Phe Ala Pro Asp Pro Asp Tyr Pro Asp Ser Leu Ile Thr
            20                  25                  30
Ile His Thr Ser Pro Lys Val Gly Ile Gly Gln Arg Ala Phe Leu Cys
        35                  40                  45
Arg Thr Ala Tyr Gly Asn Val Leu Trp Asp Cys Leu Ser Tyr Ile Asp
    50                  55                  60
Glu Asp Thr Ile Arg Gln Ile Asn Glu Leu Gly Gly Leu Ala Ala Ile
65                  70                  75                  80
Val Ile Ser His Pro His Phe Phe Gly Ala Asn Val His Trp Ala Glu
                85                  90                  95
Val Phe Gly Cys Pro Val Tyr Ile Ala Ala Glu Asp Glu Glu Trp Val
            100                 105                 110
Met Arg Lys Ser Glu Arg Gln Val Phe Trp Glu Gly Arg Glu Leu Arg
        115                 120                 125
Ile Pro Leu Pro Gly Lys Gly Asp Gly Asp Ala Asp Leu Val Ala Val
    130                 135                 140
Lys Thr Gly Gly His Phe Pro Gly Ser Ser Val Leu Trp Phe Lys Pro
145                 150                 155                 160
Leu Arg Lys Leu Leu Val Ala Asp Ser Ile Ala Val Val Pro Ser Gly
                165                 170                 175
Val Tyr His Lys Asp Arg Leu Pro Gly Thr Ala Ser Tyr Thr Phe Met
            180                 185                 190
Trp Ser Tyr Pro Asn Met Val Cys Gly Ser Cys Leu Ala Thr Gly Ile
        195                 200                 205
Gly
```

<210> 33389
<211> 208
<212> PRT
<213> A.fumigatus

<400> 33389

```
Tyr Leu Asp Leu Ala Gly Leu Ala Ala Gly Val Thr Glu Ala Val Ala
1               5                   10                  15
Val Val Asn Pro Met Glu Val Val Lys Ile Arg Leu Gln Ala Gln His
            20                  25                  30
His Ser Leu Ala Asp Pro Leu Asp Thr Pro Lys Tyr Arg Ser Ala Pro
        35                  40                  45
His Ala Leu Phe Thr Val Ile Arg Glu Glu Gly Phe Ser Ala Leu Tyr
```

```
    50                  55                  60
Arg Gly Val Ser Leu Thr Ala Leu Arg Gln Gly Thr Asn Gln Ala Ala
65                  70                  75                  80
Asn Phe Thr Ala Tyr Thr Glu Leu Lys Ala Phe Leu Gln Arg Val Gln
                85                  90                  95
Pro Glu Tyr Ser Asn Ser Gln Leu Pro Ser Tyr Gln Thr Thr Val Ile
            100                 105                 110
Gly Leu Ile Ser Gly Ala Val Gly Pro Phe Ser Asn Ala Pro Ile Asp
        115                 120                 125
Thr Ile Lys Thr Arg Leu Gln Lys Thr Arg Ala Glu Pro Gly Gln Ser
    130                 135                 140
Ala Ile Asn Arg Ile Met Val Ile Ala Lys Asp Met Phe Lys Gln Glu
145                 150                 155                 160
Gly Ala Arg Ala Phe Tyr Lys Gly Ile Thr Pro Arg Val Met Arg Val
                165                 170                 175
Ala Pro Gly Gln Ala Val Thr Phe Thr Val Tyr Glu Phe Leu Lys Gly
            180                 185                 190
Lys Leu Glu Glu Ser Asn Trp Ala Phe Val Gly Gly Lys Tyr Glu Glu
        195                 200                 205
```

<210> 33390
<211> 104
<212> PRT
<213> A.fumigatus

<400> 33390

```
Ser Arg Phe Ile Thr Gln Ser Phe Ala Met Ala Ala Lys Ser Val Glu
1               5                   10                  15
Gly Asn Lys Gly Lys Lys Pro Ala Ser Ala Ala Val Asn Leu Ile Gly
            20                  25                  30
Met Met Thr Leu Leu Trp Cys Met Asp Thr Ser Leu Ala Val Met Leu
        35                  40                  45
Thr Cys Asp Thr Ala Gly Gly Gly Ala Gly Met Met Glu Ala Leu Val
    50                  55                  60
Cys His Pro Leu Gly Lys Ala Ile Ile Gln Arg Tyr Arg Val Leu Lys
65                  70                  75                  80
Ala Glu Leu Thr Ile Ser His Ile Pro Ser Lys Ser Glu Cys Ser Ser
                85                  90                  95
Arg Asp Gly Leu Arg Pro Leu Gly
            100
```

<210> 33391
<211> 68
<212> PRT
<213> A.fumigatus

<400> 33391

```
Val Lys Pro Arg Gly Phe Ile Thr Thr Gly Val Asp Ile Val Lys Lys
1               5                   10                  15
Glu Thr Ala Leu Gly Leu Tyr Lys Gly Leu Gly Ala Val Leu Gly Gly
            20                  25                  30
Ile Ile Pro Lys Met Ala Ile Arg Phe Thr Ser Tyr Glu Trp Tyr Lys
        35                  40                  45
Gln Met Leu Ala Asp Lys Glu Thr Gly Thr Val Thr Ser Lys Ala Thr
    50                  55                  60
Phe Leu Gly Thr
```

65

<210> 33392
<211> 148
<212> PRT
<213> A.fumigatus

<400> 33392
Arg Asn Thr Leu Thr Cys Leu Leu Pro Val Ser Ser Glu Leu His Asp
1 5 10 15
Ala Phe Asn Asn Phe Ser Ser Asp Ser Ser Ile Phe Cys Leu Pro Val
20 25 30
Thr Ile Thr Ala Glu Ser Leu Thr Pro Leu Ser Pro Ile Arg Phe Ser
35 40 45
Ser Pro Gly Ala Phe Tyr Pro Ser Leu Ser Gln Leu Ser Ser Val Leu
50 55 60
Gln Pro Lys Thr Pro Leu Tyr Leu Leu Phe Arg Arg Pro Glu Ser Gly
65 70 75 80
Ser Ser Ser Leu Cys Ala Leu Thr Tyr Ile Pro Ser Asn Ala Pro Val
85 90 95
Arg Ala Lys Thr Leu Phe Ala Ser Thr Arg Ala Thr Leu Val Arg Glu
100 105 110
Leu Gly Ser Glu Lys Phe Ala Thr Thr Ile Phe Ala Thr Glu Glu Glu
115 120 125
Glu Ile Thr Ser Glu Glu Ala Trp Arg Glu Arg Asp Ala Glu Asn Lys
130 135 140
Gly Ser Gly Ser
145

<210> 33393
<211> 107
<212> PRT
<213> A.fumigatus

<400> 33393
Cys Arg His Arg Tyr Cys Asn Ser Lys Lys Lys Thr Glu Pro Asn Val
1 5 10 15
Gln Lys Trp Gly Asp Pro Glu Glu Ala Leu Arg Gln Ala Ser Asn Asn
20 25 30
Asp Leu Tyr Arg Phe Leu Gly Trp Ser Leu Lys Leu Lys Arg Gly Lys
35 40 45
Asn Gly Arg Arg Asn Lys Gly Ile His Lys Ser Ser Ser Leu Asn Thr
50 55 60
Asp Trp Lys Asn Leu Arg Gly Tyr Tyr Gln Lys Leu Thr Lys Ser Lys
65 70 75 80
Ile Asp Asp Ile Asp Gly Ser Glu Val Arg Arg Val Ser Ser Met Asn
85 90 95
His Tyr Ser Phe Asp Leu Phe Asp Arg Leu Val
100 105

<210> 33394
<211> 108
<212> PRT
<213> A.fumigatus

<400> 33394

```
Gly Ile Lys Tyr Leu Val Val Glu His Gly Leu Asp Thr Gln Pro Lys
1               5                  10                  15
Lys Lys Thr Pro Val Tyr Ile Glu Asp Ile Gly Pro Leu Asn Glu Thr
            20                  25                  30
Ile Leu Ser Thr Gln Leu Lys Lys Phe Tyr Leu Gly Leu Gln Arg Ile
        35                  40                  45
Gln Val Cys Leu Phe Asn Ser Leu Ala Leu Phe Thr Val His Arg Arg
    50                  55                  60
Ser Ala Leu Leu Ser Leu Gln Phe Lys Asp Leu Gln Ile Ser Leu Gln
65                  70                  75                  80
Lys Asp Pro Arg Gly Gly Pro Pro Ile Pro Leu Val Glu Leu Thr Ala
                85                  90                  95
Asp Gly Cys Lys Lys Phe Leu Gly Gln Thr Lys Leu
            100                 105
```

<210> 33395
<211> 123
<212> PRT
<213> A.fumigatus

<400> 33395

```
Arg Arg Thr Gly Arg Glu Ser Arg Glu Phe Pro Thr Gly Glu His Ile
1               5                  10                  15
Phe Val Trp Ser Ile Ala Gly Glu Cys Gly Ala Arg Arg Pro Leu Ala
            20                  25                  30
Thr Ser Glu Ser His Ile Thr Arg Leu Phe Ser Ser Pro Ser Ser Ser
        35                  40                  45
Tyr Gly Asp Ser Pro Asp Leu Ala Ser Thr Met Ala Asp Gly Thr Leu
    50                  55                  60
Leu Tyr Thr Phe Ile Pro Ser Leu Gln Pro Arg His Lys Pro Trp Arg
65                  70                  75                  80
Leu Ile Leu Val Pro Lys Leu Pro Arg Leu Pro Ser Arg Thr Ser Phe
                85                  90                  95
Ile Asp Arg Ile Thr Ile His Leu Pro Ala Thr Ile Pro Lys Ile Ser
            100                 105                 110
Ser Cys Ala Thr Tyr Pro Pro Phe Ala Glu Pro
        115                 120
```

<210> 33396
<211> 299
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (215),(223),(224)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33396

```
Phe Ile Ala Ser Ser Lys Pro Leu Leu Arg Met Ile Ser Asp Asp Leu
1               5                  10                  15
Leu Asp Ser Cys Leu Gln Ile Leu Gln Asp Lys Ala Leu Asp Glu Glu
            20                  25                  30
Glu Gln Ala Glu Lys Val Glu Ser Phe Leu Arg Glu Asn Thr Ser Leu
        35                  40                  45
Ser Gly Ala Ser Leu Glu Asn Ala Val Leu Asp Val Leu Trp Arg His
```

```
    50                  55                  60
Arg Asn Arg Thr Leu Pro Asp Ser Ser Pro Pro Pro Pro Arg His Thr
65                  70                  75                  80
Val Ile Arg Arg Thr Ser Pro Ala Pro Trp Gln Met Ala Arg Ser Ser
                85                  90                  95
Thr Pro Leu Ser Pro Pro Ser Asn Leu Gly Thr Ser Pro Gly Gly Ser
            100                 105                 110
Ser Trp Phe Gln Ser Ser Arg Gly Phe Pro Arg Ala Pro Leu Ser Ser
        115                 120                 125
Thr Val Ser Pro Phe Thr Ser Pro Arg Pro Ser Pro Arg Leu Ala Leu
    130                 135                 140
Ala Gln Pro Ile Pro His Ser Pro Asn Leu Asn Ala Tyr Glu Phe Ser
145                 150                 155                 160
Asp Gln Ser Gln Val Ser Asp Phe Tyr Ser Asp Phe Gly Asn Asp Ser
                165                 170                 175
Asn Val Asp Trp Leu Val Ala Asp Asp Ala Gln Ser Thr Thr Ser Ser
            180                 185                 190
Val Gly Thr Met Ser Ala Ser Gly Ala Leu Ser Ala Thr Ala Pro Gly
        195                 200                 205
Phe Val Pro Asp Met Ser Xaa His Asp Ile Leu Arg Thr Val Xaa Xaa
    210                 215                 220
Arg His Arg Phe Asn Glu Glu Ile Glu Ala Ala Leu Glu Ala Asn Gly
225                 230                 235                 240
Tyr Asp Leu Gly Ala Thr Ile Ala Ser Phe Ser Gln Asp Gln Ser Gly
                245                 250                 255
Gly Ser Phe Ser Gln Val Asp Asp Gly Arg Val Leu Val Arg Gln Ile
            260                 265                 270
Met Thr Ile Glu Gln Pro Arg Leu Ser Thr Ser Pro Asp Tyr Asn Arg
        275                 280                 285
Ser Pro Val Val Cys Lys Tyr Trp Leu Ala Thr
    290                 295

<210> 33397
<211> 72
<212> PRT
<213> A.fumigatus

<400> 33397
Gly Ala Glu Gly Leu Lys Leu Leu Ala Pro Asn Lys Glu Ser Arg His
1               5                   10                  15
Phe Tyr Tyr Ala Met Tyr Ile Asn Pro Ala Val Thr Arg Glu Leu Pro
            20                  25                  30
Phe Leu Ser Tyr Glu Lys Lys Lys Lys Lys Asn Cys Asp Leu Phe Leu
        35                  40                  45
Ser Phe Phe Pro Asn Leu Tyr Lys Ile Thr Pro Gln Arg Val Glu Thr
    50                  55                  60
Leu Arg Ser Lys Phe Thr Ala Ile
65                  70

<210> 33398
<211> 158
<212> PRT
<213> A.fumigatus

<400> 33398
Lys Met Pro Ala Asp Tyr Thr Ser Thr Ala Arg Ala Leu Ser Leu Pro
```

```
1               5                   10                  15
Met Ser Pro Ala Glu Ser Leu Ser Pro Ala Glu Glu Asp Thr Arg Pro
            20                  25                  30
Leu Trp Ser His Leu Ala Ser Ser Arg Arg Asn Thr Ala Ser Pro Ser
        35                  40                  45
Val Arg Glu Ser Thr Gly Leu Arg Asp Gln Val Val Asn Gln Ala Thr
    50                  55                  60
Lys Met Leu Arg Arg Thr Lys Lys Thr Trp Arg Arg Leu Thr Phe Trp
65                  70                  75                  80
Gln Arg Ile Gly Ala Ile Gly Ala Ala Leu Leu Ala Ile Leu Leu Gly
                85                  90                  95
Leu Ser Phe Met Ile Phe Thr Gly Gln Val Phe Phe Trp Leu Gly Pro
            100                 105                 110
Val Ala Glu Lys Trp Glu Gln Ser Trp Leu Ala Phe Phe Val Leu Trp
        115                 120                 125
Leu Cys Val Phe Phe Val Ser Phe Pro Pro Leu Val Gly Trp Ser Thr
    130                 135                 140
Phe Gly Thr Ile Ser Gly Phe Ile Tyr Gly Ile Trp Lys Gly
145                 150                 155
```

<210> 33399
<211> 160
<212> PRT
<213> A.fumigatus

<400> 33399

```
Phe Ile Phe Leu Phe Tyr Leu Ile Asp Cys Ser Glu Pro Arg Ser Asn
1               5                   10                  15
Thr Tyr Leu Ser Trp Ile Leu Tyr Ala Thr Ala Thr Val Leu Gly Ser
            20                  25                  30
Thr Cys Ser Phe Ile Val Ser Arg Thr Ile Leu Ser Lys Phe Val Asn
        35                  40                  45
Arg Met Met Glu Arg Asp Lys Arg Phe Ala Ala Leu Ala Leu Thr Leu
    50                  55                  60
Lys Tyr Asp Gly Leu Lys Leu Leu Cys Met Ile Arg Leu Cys Pro Leu
65                  70                  75                  80
Pro Tyr Ser Val Cys Asn Gly Ala Val Ser Thr Phe Pro Thr Val His
                85                  90                  95
Pro Leu Met Tyr Gly Leu Ala Thr Ala Leu Ile Thr Pro Lys Leu Leu
            100                 105                 110
Val Pro Ala Phe Ile Gly Ser Arg Ile Arg Ile Leu Ser Glu Lys Asn
        115                 120                 125
Glu Asp Met Ser Ser Ala Ser Lys Ala Val Asn Ile Cys Ser Ile Ile
    130                 135                 140
Leu Thr Ile Gly Ile Gly Val Phe Thr Gly Trp Tyr Ile Tyr Lys Arg
145                 150                 155                 160
```

<210> 33400
<211> 141
<212> PRT
<213> A.fumigatus

<400> 33400

```
Val Ser Leu Val Ile Asp Ser Ala Leu Thr Pro Gln Asp Ala Asn Asn
1               5                   10                  15
Tyr Gly Tyr Arg Thr Leu Ala Arg Ala Lys Glu Leu Glu Ala Lys Glu
```

```
            20                  25                  30
Arg Ala Asp Ile Arg Arg Ser Leu Gln Ala Asp His Ala Ala His Arg
        35                  40                  45
Pro His Gly Ser Phe Ser Glu Asp Pro Asp Val Asn Thr Ala Ala Thr
    50                  55                  60
Thr Leu Ala Arg Asp Glu Glu Glu Arg Ile Glu Phe Asn Asp Phe Asp
65                  70                  75                  80
Asp Asp Asn Val Asp Leu Val Ile Asp Asp Asp Ser Gly Ser Glu Ile
                85                  90                  95
Ser Pro Asn Leu Thr Lys Lys Gln Phe Pro Gly Pro Tyr Arg Asp Glu
            100                 105                 110
Phe Thr Asp Asn Asp Ser Asp Val Phe Gly Asp Gly Asp Gly Pro Asp
        115                 120                 125
Ser Gln Met Phe Arg Leu His Thr His Val Arg Ser Gly
    130                 135                 140
```

<210> 33401
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33401

```
Cys Thr Gly Tyr Ala Leu Arg Val Arg Ser Leu Ile Ile Thr Pro Ser
1               5                   10                  15
Ser Gly Pro Ile Val Asn Lys Ser Ser Asp Arg Gln Ile Ala Gln Thr
            20                  25                  30
Ala Thr Asp Ile Asn Leu Ala Gly Tyr Asp Glu Ala Thr Asn Asn Arg
        35                  40                  45
Tyr Phe Trp Leu Val Gln Ser Thr Glu Tyr His Asp Leu Thr Tyr
    50                  55                  60
```

<210> 33402
<211> 74
<212> PRT
<213> A.fumigatus

<400> 33402

```
Lys Val Trp Ser Ala Val Ser Asn Glu Arg Gly Gly Asp Arg Ile Pro
1               5                   10                  15
Tyr Lys Val Tyr His Leu Ile Lys Ala Gln Asp Thr Leu Cys His Ala
            20                  25                  30
Val Asn Lys Ala Gly Gly Gly His Thr Lys Tyr Gly Ala Arg Gly Ser
        35                  40                  45
Arg Cys Gly Trp Ala Ser Leu Gly Tyr Thr Leu Asn Arg Gly Glu Lys
    50                  55                  60
Leu Thr Tyr Thr Tyr Tyr Leu Ile Glu Leu
65                  70
```

<210> 33403
<211> 136
<212> PRT
<213> A.fumigatus

<400> 33403

```
Trp Thr Ile Arg Trp Gln Arg Lys Cys Met Ser Arg Ser Thr Leu Phe
1               5                   10                  15
```

```
Tyr Arg Arg Leu Thr Ser Ile Cys Ser Leu Ser Asn Leu Ile Gly Phe
            20                  25                  30
Lys Gly His Leu Asn Asn Ser Ala Asp Phe Arg Pro Asp Glu Tyr Glu
        35                  40                  45
Val Glu Trp Ile Thr Asp Arg Arg Tyr Ala Asp Phe Lys Phe Ser Asn
    50                  55                  60
Glu Tyr Asn Lys Thr Cys Asp Tyr Pro Lys Phe Trp Asn Glu Thr Gly
65                  70                  75                  80
Phe Pro Leu Tyr Ser Gly Gly Val Glu Glu Leu Lys Gly Cys Tyr Asn
                85                  90                  95
Ser Asp Phe Asp Gln Tyr Gly Glu Leu Glu Ala Phe Gly Asn Phe Pro
            100                 105                 110
Asp Trp Lys Arg Gln Leu Thr Lys Phe Ala Ser Val Gln Asp Arg Leu
        115                 120                 125
Arg Glu Trp His Lys Pro Arg Ser
    130                 135
```

<210> 33404
<211> 87
<212> PRT
<213> A.fumigatus

<400> 33404

```
Arg His Leu Ala Thr Ser Leu Thr Gly Ser Ala Ser Ser Pro Ser Ser
1               5                   10                  15
Pro Arg Tyr Lys Ile Gly Cys Val Asn Gly Thr Ser Pro Val Arg Asp
            20                  25                  30
Ile Ile Thr Arg His Tyr Cys Ile Gln Ile Ala Ser Leu Asp Ile Asp
        35                  40                  45
Gly Phe Arg Tyr Asp Lys Ala Val Gln Ala Thr Leu Glu Pro Leu Gly
    50                  55                  60
Glu Met Ser Ala Ala Phe Arg Glu Cys Ala Lys Lys Tyr Gly Lys His
65                  70                  75                  80
Asn Phe Phe Pro Thr Trp Arg
                85
```

<210> 33405
<211> 151
<212> PRT
<213> A.fumigatus

<400> 33405

```
Ser Thr Asp Ser Val His Asp Ser Arg Glu Leu Glu Gly Thr Ser Glu
1               5                   10                  15
Met Phe Thr Glu Thr Gln Arg Ser Val Ala Leu Ile Leu Ser Leu Leu
            20                  25                  30
Ser Val Ser Ala Leu Cys Trp Pro Tyr Thr Glu Ser Leu Val Asp Tyr
        35                  40                  45
Asn Leu Asn Glu Asn Arg Ser Ala Glu Ser Pro Ile Asp Tyr Trp Gly
    50                  55                  60
Glu Trp Pro Asn His Lys Tyr His Pro Ser Pro Asp Asn Trp Arg Phe
65                  70                  75                  80
Pro Val Tyr Thr Ile Phe Leu Asp Arg Ile Ala Asn Gly Asp Pro Thr
                85                  90                  95
Asn Asp Asp Ile Asn Gly Thr Thr Phe Glu His Val Val Asn Ser Asn
            100                 105                 110
```

```
Gln Met Arg His Gly Gly Asp Leu Val Gly Leu Ile Asp Thr Leu Asp
        115                 120                 125
Tyr Ile Arg Gly Met Gly Phe Lys Val Cys Leu Lys Ser Leu Pro Cys
    130                 135                 140
Leu Ile Cys His Leu Gln Ile
145                 150
```

<210> 33406
<211> 339
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (45)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33406

```
Leu Gln Gly Ala Met Phe Gln Leu Ser Met Phe Leu Arg Val Phe Ser
1               5                   10                  15
Ser Leu Ser Ser Phe Gly Gln Pro Ser Arg Phe Gln Glu Thr Ile Ser
            20                  25                  30
Ala Glu His Arg Ile Cys Asn Met Thr Ser Thr Glu Xaa Gln Phe Thr
        35                  40                  45
Val Ala Ile Val Gly Gly Gly Ile Gly Gly Leu Ala Leu Ala Ala Gly
    50                  55                  60
Leu Leu Arg Arg Asn Val Pro Val Gln Ile Tyr Glu Ala Ala Pro Lys
65                  70                  75                  80
Phe Lys Glu Ile Gly Leu Gly Leu Thr Ile Gly Pro Ala Ala His Arg
                85                  90                  95
Ala Met Pro Leu Ile Asp Pro Gln Ile Arg His Val Tyr Asp Ser Leu
            100                 105                 110
Ile Thr Thr His Ala Asp Ser Pro Gly Tyr Glu Arg Phe Lys Gln Thr
        115                 120                 125
Trp Phe Glu Val Val Trp Ala Ser Gly Pro Lys Ser Gly Gln Val Leu
    130                 135                 140
Met Asn Leu Lys Ala Leu Pro Ser Gly Gln Thr Thr Val Arg Arg Ala
145                 150                 155                 160
Asp Phe Leu Asp Ala Leu Val Gly Leu Val Pro Pro Glu Ile Ala His
                165                 170                 175
Phe Gly Lys Arg Leu Ile Arg Leu Val Glu Ser Pro Thr Gly Val Asn
            180                 185                 190
Leu Tyr Phe Glu Asp Gly Thr Ser Ala Ser Ala Asp Val Val Val Gly
        195                 200                 205
Cys Asp Gly Ile His Ser Lys Val Lys Glu Phe Met Leu Pro Asp Glu
    210                 215                 220
Tyr Glu Gln Thr Met Pro Arg Tyr Ser Gly Met Tyr Gly Tyr Arg Ala
225                 230                 235                 240
Val Leu Asp Met Glu Thr Met Val Glu Ala Val Gly Asp His Arg Ala
                245                 250                 255
Arg Val Ala Thr Met Tyr Val Gly Asp Gly Ala Tyr Gly Ile Ser Tyr
            260                 265                 270
Pro Ile Met His Ala Lys Lys Val Asn Val Gly Leu Tyr Val Leu His
        275                 280                 285
Asp Met Trp Asp Asp Ala Ala Trp Val Arg Gln Ala Ser Lys Glu Asn
    290                 295                 300
```

```
Met Ala Arg Asp Met Lys His Met Gly Glu Tyr Val Asn Arg Leu Val
305                 310                 315                 320
Glu Val Cys Gly Lys Gln Glu Ser His Phe Thr Ala Pro Pro Ala Asp
                325                 330                 335
Ser Gly Pro
```

<210> 33407
<211> 147
<212> PRT
<213> A.fumigatus

<400> 33407

```
Gln Tyr Met Pro Asp Pro Ser Gln Trp Ala Ile Phe Asp His Pro His
1               5                   10                  15
Ser Ser Thr Phe Ala Arg Ser Arg Ile Ala Ile Leu Gly Asp Ala Ala
            20                  25                  30
His Ala Ser Thr Pro His Gln Gly Ala Gly Ala Gly Gln Ala Ile Glu
        35                  40                  45
Asp Ala His Val Leu Ala Glu Leu Leu Gly Asp Arg Arg Val Ile Glu
    50                  55                  60
Ala Arg Asp Val Leu Ala Ala Phe Gln Ala Tyr Asp Glu Val Arg Arg
65                  70                  75                  80
Pro Arg Ser Gln Arg Val Val Thr Ser Ser Lys Glu Asn Ala Tyr Leu
                85                  90                  95
Leu Cys Leu His Leu Asp Gly Val Glu His Asp Glu Glu Lys Leu Arg
            100                 105                 110
Thr Thr Phe Gln Glu Arg Leu Arg Trp Leu Trp Asp Ile Asp Ile Gln
        115                 120                 125
Asp Gln Ala Glu Arg Ala Arg Arg Ile Met Leu Lys Lys Met Gln Asn
    130                 135                 140
Ser Ser Ser
145
```

<210> 33408
<211> 199
<212> PRT
<213> A.fumigatus

<400> 33408

```
Ile Ala Gln Gly Asn Val Pro Gly Lys Ser Ser Ile Leu Thr Ser Arg
1               5                   10                  15
Gly His Phe Leu Gln Tyr Ser Thr Leu Thr Ser Ala Phe Pro Leu Ile
            20                  25                  30
Ile Arg Pro Ala Met Ala Ser Leu Arg Pro Ser Val Lys Arg Leu Leu
        35                  40                  45
Arg Gln Pro Pro Cys Arg Leu Tyr Ser Gly Ala Pro Ser Ser Ser Ser
    50                  55                  60
Arg Leu Asn Leu Pro Ile Asp Tyr Lys Ser Thr Pro Leu Leu His His
65                  70                  75                  80
Thr Ser Ser Ser Leu Ser Ser Ala Leu Glu Leu Pro Gly Ser Thr Thr
                85                  90                  95
Ser Lys Ser Leu Asn Leu Tyr Gln Ala Ile Asn Ser Ala Leu Arg Thr
            100                 105                 110
Ala Leu Ala Thr Asp Asn Arg Val Met Leu Phe Gly Glu Asp Val Ala
        115                 120                 125
```

```
Phe Gly Gly Val Phe Arg Cys Ser Met Asp Leu Gln Thr Glu Phe Gly
    130                 135                 140
Ser Glu Arg Val Phe Asn Thr Pro Leu Thr Glu Gln Gly Ile Val Gly
145                 150                 155                 160
Phe Ala Ile Gly Ala Ala Ala Gln Gly Met Lys Pro Val Ala Glu Ile
                165                 170                 175
Gln Phe Ala His Cys Leu His His Gly Ala Gly Arg Ile Ser Val Ser
            180                 185                 190
Val Glu Ile Ser Ser Val Asn
        195
```

<210> 33409
<211> 202
<212> PRT
<213> A.fumigatus

<400> 33409

```
Ser Val Ala Lys Leu Leu Ala Lys Ser Gly Pro Val Arg Val Leu Phe
1               5                   10                  15
Thr His Ala Ile Asp Ser His Asn Ala Phe Glu Ala Val Asp Cys Gly
            20                  25                  30
Thr Phe Thr Gln Leu Pro Asn Gly Asp Asp Leu Glu Thr Gly Ser Met
        35                  40                  45
Pro Arg Trp Asp Leu Pro Gly Lys Pro Val Arg Glu Tyr Glu Glu Val
    50                  55                  60
Trp Arg Glu Leu Ala Phe Arg Glu Gly Pro Glu Gly Pro Gly Arg Gly
65                  70                  75                  80
Val Ser Trp Val Leu Glu Ala Arg Gly Asp Val Gln Gly Val Ser Gly
                85                  90                  95
Gln Asp Ala Ser Thr Val Thr Arg Met Phe Ile Ala Arg Ile Trp Gly
            100                 105                 110
Thr Tyr Val Ala Leu Arg Gln Glu Gln Met His Ser Gly Gly Asp Ser
        115                 120                 125
Glu Ala Glu Ile Lys Asp Gly Gly Glu Val Ser Ala Arg Arg Glu Glu
    130                 135                 140
Trp Asp Ser Thr Ser Gly Trp Lys Thr Lys Tyr Val Leu Gly Pro Asp
145                 150                 155                 160
Ala Asp Lys Leu Pro Ser Met Thr Thr Ile Gly Thr Gly Asp Gly Asp
                165                 170                 175
Trp Ser Ile Gly Ser Glu Val Leu Leu Ser Asp Gln Pro Tyr Ile Val
            180                 185                 190
Arg Ala Cys Glu Arg Ile Asp Gln Glu Tyr
        195                 200
```

<210> 33410
<211> 85
<212> PRT
<213> A.fumigatus

<400> 33410

```
Glu Ala Pro Arg Ser Ser Ile Lys Met Thr Ala Asn Gln Thr Ser Ser
1               5                   10                  15
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Leu Ser Thr Arg Ile
            20                  25                  30
Ser Leu Arg Trp Pro Pro Asp Pro Ala Phe Glu Asn Thr Asp Thr Ile
        35                  40                  45
```

```
Val Leu Ser Leu Met Gly Trp Tyr Val Asp Leu Arg Val Asp Lys Ser
    50                  55                  60
Thr Gly Lys Ile Asp Trp Ala Ile Ala Gly Gln Arg Ile Val Glu Ser
65                  70                  75                  80
Gln Glu Pro Arg Thr
                85
```

<210> 33411
<211> 211
<212> PRT
<213> A.fumigatus

<400> 33411

```
Ser Ile Arg His Ala Gly Ile Tyr Ile Lys Val Val Ile Leu Leu Val
1               5                   10                  15
Val Asn Lys Asp Val Ala Val Ala Gly Leu Ala Ile Val His Val Asp
            20                  25                  30
Asn Ser Leu Val Gly Ile Leu His Gly Ser Leu Leu Asp Pro Gly Val
        35                  40                  45
Asn Thr Leu Leu Ser Gly Lys Leu Glu His Leu Pro Asp Leu Thr Arg
    50                  55                  60
Ala Ala Asp Gln Gly Thr Ala His Pro Asp Ser Ala Ala Asp Gln Ser
65                  70                  75                  80
Met Arg Arg Asp Leu Gln Ser Thr Val Leu Gly Ser Thr His Leu Asp
                85                  90                  95
Glu Gly Thr Val Gly Ala Glu Lys Arg Ala Val Leu Asp Asn Gly His
            100                 105                 110
Leu Ala Met Ser Asp His Gly Leu Val Thr Gln Thr Glu Ser Asp Glu
        115                 120                 125
His Thr Leu Glu Glu Glu Thr Val Glu Thr Ile Arg Ser Arg Glu Arg
    130                 135                 140
Leu Trp Val Leu Ala Gln Ser Gly Ser Ser Ser Val Ala Met Tyr Ser
145                 150                 155                 160
Ser Ala Pro Ser Leu Arg Ala Ser Ser Leu Leu Leu Ala Leu Arg Glu
                165                 170                 175
Met Ala Thr Thr Leu Ser Ala Pro Arg Ala Leu Ala Asn Lys Ile Pro
            180                 185                 190
Lys Cys Pro Asn Pro Pro Ile Pro Thr Thr Pro Thr Phe Leu Pro Gly
        195                 200                 205
Pro Gln Pro
    210
```

<210> 33412
<211> 178
<212> PRT
<213> A.fumigatus

<400> 33412

```
Pro Leu Thr Pro Cys Thr Ser Pro Leu Ala Ser Ser Thr His Glu Thr
1               5                   10                  15
Pro Leu Pro Gly Pro Ser Gly Pro Ser Leu Lys Ala Asn Ser Arg His
            20                  25                  30
Thr Ser Ser Tyr Ser Leu Thr Gly Leu Pro Gly Lys Ser Gln Arg Gly
        35                  40                  45
Ile Asp Pro Val Ser Arg Ser Ser Pro Phe Gly Ser Trp Val Asn Val
    50                  55                  60
```

```
Pro Gln Ser Thr Ala Ser Asn Ala Leu Cys Glu Ser Met Ala Cys Val
65                  70                  75                  80
Lys Ser Thr Arg Thr Gly Pro Asp Leu Ala Ser Ser Leu Ala Thr Asp
                85                  90                  95
Tyr Gly Ser Val Thr Tyr Ala Ala Leu Gly Phe Leu Arg Cys Val Gly
            100                 105                 110
Arg Arg Ser Pro Ser Arg Phe Tyr Arg Trp Ile Cys Arg His Gly Gly
        115                 120                 125
Arg Arg Thr Asn Pro Ser Gly Thr Gly Arg Trp Cys Arg Tyr Phe Arg
    130                 135                 140
Arg Arg Gly Arg Glu Ala Asn Gly Gly Arg Phe Gly Leu Arg Gly Cys
145                 150                 155                 160
Cys Cys Cys Cys Cys Cys Cys Tyr Tyr Cys Cys Trp Phe Gly Trp Arg
                165                 170                 175
Ser Phe
```

<210> 33413
<211> 101
<212> PRT
<213> A.fumigatus

<400> 33413

```
His Arg Gln Met Pro Ile Val Gln Tyr Cys Ser Leu Leu Arg Thr Asn
1               5                   10                  15
Gly Ala Phe Val Gln Met Gly Ala Pro Glu Asp Gly Ala Leu Gln Ile
            20                  25                  30
Pro Ala His Ala Leu Ile Gly Arg Arg Ile Arg Met Gly Gly Ser Leu
        35                  40                  45
Ile Gly Ser Pro Ser Glu Ile Arg Glu Met Leu Gln Leu Ala Ala Glu
    50                  55                  60
Lys Gly Val His Pro Trp Ile Gln Glu Arg Pro Met Lys Asp Ala Asn
65                  70                  75                  80
Gln Ala Val Val Asp Met Asn Asp Gly Lys Ala Arg Tyr Arg Tyr Val
                85                  90                  95
Leu Val Asn Asp Gln
            100
```

<210> 33414
<211> 280
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33414

```
Ile Leu Phe Arg Cys Gly Ala Ser Arg Gly Glu Xaa Pro Arg Phe Ile
1               5                   10                  15
Leu Thr Ser Glu Thr Lys Leu Leu Gln Gly Pro Thr Met Tyr Pro Cys
            20                  25                  30
Cys Val Gly His Glu Ile Val Gly Ile Ala Val Arg Val Gly Ser Lys
        35                  40                  45
Ala Glu Gly Gly Ile Lys Val Gly Asp Arg Val Gly Val Gly Ala Gln
```

```
    50                  55                  60
Asn Asp Ser Cys Leu Gly Arg Lys Gly Asp Cys Glu Glu Cys Ala Ser
65                  70                  75                  80
Gly Met Glu Gln Tyr Cys Lys His Gly Met Val Gly Thr Tyr Asn Gly
                85                  90                  95
Val His Tyr Asn Gly Asp Lys Ser Tyr Gly Gly Tyr Ala Leu Tyr His
            100                 105                 110
Arg Ala Pro Ser His Phe Val Ile Lys Ile Pro Asp Ala Ile Pro Ser
        115                 120                 125
Ala Glu Ala Ala Pro Met Met Cys Gly Gly Ile Thr Leu Tyr Ser Pro
    130                 135                 140
Leu Lys His Tyr Gly Cys Gly Pro Gly Lys Lys Val Gly Val Val Gly
145                 150                 155                 160
Ile Gly Gly Leu Gly His Phe Gly Ile Leu Phe Ala Lys Ala Leu Gly
                165                 170                 175
Ala Asp Lys Val Val Ala Ile Ser Arg Lys Ala Asn Lys Arg Glu Asp
            180                 185                 190
Ala Leu Lys Leu Gly Ala Asp Glu Tyr Ile Ala Thr Asp Asp Glu Pro
        195                 200                 205
Asp Trp Ala Lys Thr His Asn Arg Ser Leu Asp Leu Ile Val Ser Thr
    210                 215                 220
Val Ser Ser Ser Lys Val Cys Ser Ser Leu Ser Val Trp Val Thr Arg
225                 230                 235                 240
Pro Trp Ser Asp Ile Ala Arg Cys Pro Leu Ser Asn Thr Ala Leu Phe
                245                 250                 255
Ser Ala Pro Thr Val Pro Ser Ser Arg Trp Val Leu Pro Arg Thr Val
            260                 265                 270
Leu Cys Arg Ser Leu Arg Met Leu
        275                 280
```

<210> 33415
<211> 212
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (65)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33415

```
Cys Asp Leu Cys Ile Cys Ser Thr Cys Thr Ile Tyr Leu Leu Ser His
1               5                   10                  15
Ser Asn Ala Ser Ala Val Met Tyr Ser Ser Ser Asn Ser Phe Leu Gly
            20                  25                  30
Gly Val Asn Asn Ala Arg Pro Gly Gln Pro Pro Phe Met Gln Gln Pro
        35                  40                  45
Pro Tyr Ser Gln Leu Pro Gln Gly Gln Gln Gln Ile Pro Gln Gln Ser
    50                  55                  60
Xaa Phe Gln Pro Gln Pro Thr Gly Tyr Gly Ser Gln Ser Ala Ser His
65                  70                  75                  80
Leu Gln Pro Gln Pro Thr Gly Phe Pro Thr Gly Gln Leu Gln Pro Gln
                85                  90                  95
Phe Thr Gly Phe Pro Gly Ala Ala Pro Pro Gln Gln Gln Gln Gln Phe
            100                 105                 110
Gly Gly Tyr Gln Ala Pro Ala Gln Gln Pro Gln Leu Thr Gly Tyr Pro
```

```
        115                 120                 125
Pro Gln Ser Gln Pro Pro Ser Leu Gln Val Pro Ser Thr Thr Gly Leu
    130                 135                 140
Pro Thr Arg Leu Ala Pro Arg Thr Ser Ser Glu Ile Ala Asn Ser Phe
145                 150                 155                 160
Ser Asp Gly Ala Gly Val Ala Pro Pro Pro Pro Pro Lys Ser Ser Gly
                165                 170                 175
Ser Lys Ile Pro Asn Ile Arg Leu Ser Phe Ile Thr Ala Gln Asp Gln
            180                 185                 190
Ala Lys Phe Glu Gln Leu Phe Lys Ser Ala Val Gly Asp Ser Gln Thr
        195                 200                 205
Met Asp Gly Arg
    210
```

<210> 33416
<211> 561
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (556),(557),(559)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33416

```
Arg Met Ile Val Lys Leu Ile Thr Gln Ser Arg Val Leu Ser Asp Thr
1               5                   10                  15
Thr Lys Ser Gly Gln Leu Phe Phe Pro Glu Phe Ala Leu Ala Met Tyr
            20                  25                  30
Leu Cys Asn Leu Arg Ile Thr Gly Arg Glu Leu Pro Ser Thr Leu Pro
        35                  40                  45
Asp Lys Ile Lys Asn Glu Val Ser Gly Met Val Asp Ile Ile Ser Phe
    50                  55                  60
Gly Val Pro Asp Thr Glu Pro Gln Gly Ala Ala Arg Thr Asn Val Pro
65                  70                  75                  80
Ser Phe Asp Ala Pro Leu Leu Glu Asn Lys Ser Ala Pro Pro Ala Pro
                85                  90                  95
Gln His Pro Lys Pro Gln Gln Pro Ser Asn Ala Gln Phe Leu Ser Gln
            100                 105                 110
Leu Ala Ala Gln Pro Thr Gly Phe Gly Pro Gln Ala Thr Gly Leu Gln
        115                 120                 125
Pro Asn Gln Pro Ser Leu Leu Gly Ala Asn Ala Thr Leu Ala Pro Gln
    130                 135                 140
Thr Thr Gly Phe Pro Gly Gln Ser Gln Gln Gln Tyr Leu His Ser Gln
145                 150                 155                 160
Pro Thr Gly Leu Met Thr Asn Pro Gln Ala Thr Gly Tyr Asn Gly Pro
                165                 170                 175
Arg Pro Pro Leu Pro Pro Met Pro Thr Gly Phe Gly Ser Asn Leu Ser
            180                 185                 190
Ser Met Gln Thr Gly Gly Leu Ala Ala Gln Pro Thr Gly Ile Pro Gly
        195                 200                 205
Gln Trp Gly Phe Val Asn Ala Pro Ser Ser Gly Leu Pro Asn Ile Glu
    210                 215                 220
Ala Leu Lys Gln Gln Leu Met Pro Gln Pro Gly Arg Glu Gly Gly Phe
225                 230                 235                 240
Thr Thr Ala Gly Leu Ser Gly Asn Val Ser Ile Pro Trp Ala Ile Thr
```

```
                245                 250                 255
Lys Glu Glu Lys Lys Ile Tyr Asp Asp Leu Phe Arg Ala Trp Asp Gly
            260                 265                 270
Leu His Lys Gly Phe Ile Gly Gly Asp Thr Ala Ile Glu Ile Met Gly
        275                 280                 285
Gln Ser Gly Leu Asp Arg Lys Asp Leu Glu Arg Ile Trp Thr Leu Ala
    290                 295                 300
Asp Pro Asn Asn Arg Gly Arg Leu Asn Met Asp Glu Phe Ala Val Ala
305                 310                 315                 320
Met His Leu Ile Tyr Arg Lys Leu Asn Gly Tyr Pro Val Pro Asn Arg
                325                 330                 335
Leu Pro Pro Glu Leu Ile Pro Pro Ser Thr Arg Asn Leu Asn Asp Ser
            340                 345                 350
Ile Gly Ala Val Lys Ser Leu Leu Ser Gln Asp Ala Glu Ser Arg Lys
        355                 360                 365
Ala Ser Gly Ala Phe Leu Gln Pro Gln Lys Thr Gly Val Ser Tyr Leu
    370                 375                 380
Lys Glu His Ser Phe Arg Gly Gly Ala Arg Ser Pro Gly Phe Gly Arg
385                 390                 395                 400
Lys Asp Ala Thr Leu Phe Lys Asn Asn Asp Glu Ala Ala Ala Gly Tyr
                405                 410                 415
Arg Ser Ser Ala Arg Arg Arg Val Gly Asn Asp Ala Arg Pro Ser Ser
            420                 425                 430
Pro Pro Thr Ser Gln Ala Ser Glu Glu Glu Leu Ser Val Glu Gln Leu
        435                 440                 445
Lys Lys Lys Ile Arg Glu Thr Gln Ile Met Leu Asp Ala Val Asp Phe
    450                 455                 460
Lys Asp Glu Asn Arg Ala Glu Glu Asp Glu Val Leu Asp Arg Arg Asp
465                 470                 475                 480
Arg Leu Glu Ala Glu Ser Leu Met Asp Arg Thr Arg Arg Val Gln Asp
                485                 490                 495
Asp Ile Asp Thr His Pro Asn Ala Val Phe Arg Lys Leu Asp Asn Gly
            500                 505                 510
Ala Glu Lys Arg Ser Leu Arg Arg Gln Leu Gln Ala Phe Glu Glu Gln
        515                 520                 525
Val Pro Gln Ile Ala Ser Glu Val Arg Arg Ile Glu Arg Glu Asn Cys
    530                 535                 540
Asp Ala Lys Leu Glu Leu Phe Arg Leu Lys Asp Xaa Xaa Gly Xaa Pro
545                 550                 555                 560
Lys
```

<210> 33417
<211> 139
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (48)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33417

```
Cys Glu Arg Cys Asp Val Leu Val Val Glu Leu Leu Leu Gly Arg Arg
1               5                   10                  15
Gln Gln Arg Pro Pro Arg Thr Thr Thr Leu His Ala Ala Thr Ser Ile
```

```
            20                  25                  30
Leu Ala Ile Thr Pro Gly Ser Ala Thr Asn Thr Thr Thr Glu Trp Xaa
        35                  40                  45
Pro Thr Thr Ala Asp Arg Ile Trp Ile Ser Ile Ser Leu Ser Ser Ala
    50                  55                  60
Thr Ser Ala Asn Gly Ile Pro Tyr Trp Thr Thr Ala Thr Ser Val His
65                  70                  75                  80
Arg Leu Pro Arg Arg Ser Ala Ser Thr Ala Ala Ala Thr Val Trp Arg
                85                  90                  95
Leu Ser Gly Ala Arg Thr Thr Thr Ala Thr His Gly Leu Ser Ser Ser
            100                 105                 110
Lys Ser Thr Ser Ile Ala Ala Gly Ser Phe Asp His Arg Pro Ala His
        115                 120                 125
Ser Ala Cys Ser Gln Asp Val Phe Gly Asp Ser
    130                 135
```

<210> 33418
<211> 102
<212> PRT
<213> A.fumigatus

<400> 33418

```
Gly Asn Leu Arg Asn Leu Phe Leu Glu Gly Leu Lys Leu Thr Thr Gln
1               5                   10                  15
Gly Ser Leu Phe Gly Ala Ile Ile Gln Leu Thr Glu His Cys Ile Arg
            20                  25                  30
Met Arg Ile Asp Ile Val Leu Asn Thr Thr Gly Ser Ile His Glu Ala
        35                  40                  45
Phe Arg Phe Gln Thr Ile Thr Ala Ile Gln Asp Leu Ile Leu Leu Gly
    50                  55                  60
Ser Ile Phe Ile Phe Glu Ile Tyr Ser Ile Lys His Asp Leu Ser Leu
65                  70                  75                  80
Pro Asp Leu Leu Leu Gln Leu Leu Asn Arg Gln Leu Leu Leu Arg Cys
                85                  90                  95
Leu Arg Gly Arg Gly Gly
            100
```

<210> 33419
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33419

```
Val Ile Ser Phe Thr Ile Ile Leu Gln Asn Asp Trp Arg Phe Thr His
1               5                   10                  15
His Ile Phe Asp Asn Ser Leu Pro Gly Ser Leu Glu Arg Arg Ser Asn
            20                  25                  30
Ser Leu Ala Phe Ser Pro Val Cys Asp Thr Leu Gln Gln Ile Ile Leu
        35                  40                  45
Ser Ile Asn Ala Met Ser Ser Glu Asp Tyr Arg Pro Ser Ile Val
    50                  55                  60
```

<210> 33420
<211> 290
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(50),(90),(93),(170),(175),(225),(244),(253),(259),(261),(262),(263),(264),(266),(267),(269)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33420
Arg Arg Gly Thr Asn Gln Glu Glu Lys Gly Lys Pro Ser Glu Lys Gly
1 5 10 15
Arg Glu Ala Gln Arg Arg Glu Ala Gly Gly Gly Glu Arg Asn Asp Gly
20 25 30
Arg Arg Gly Lys Thr Arg Arg Gly Glu Lys Lys Lys Lys Glu Gly Glu
35 40 45
Arg Xaa Glu Gly Gly Ala Arg Arg Arg Gly Glu Arg Gly Arg Gly Gly
50 55 60
Arg Glu Arg Lys Gly Gly Lys Arg Arg Gly Arg Gly Lys Gly Lys Gly
65 70 75 80
Asp Lys Glu Lys Arg Arg Arg Glu Arg Xaa Gly Lys Xaa Arg Arg Lys
85 90 95
Glu Gly Lys Gly Lys Arg Glu Gly Lys Arg Gly Arg Glu Gly Arg Arg
100 105 110
Glu Gly Gly Lys Arg Lys Gly Glu Gly Arg Glu Lys Glu Gly Gly Lys
115 120 125
Gly Lys Gly Arg Lys Glu Glu Arg Arg Glu Glu Arg Lys Arg Arg Lys
130 135 140
Gly Arg Gly Glu Lys Lys Arg Lys Lys Arg Lys Lys Glu Lys Gly Gly
145 150 155 160
Gly Glu Lys Glu Gly Glu Lys Arg Gly Xaa Lys Glu Glu Gly Xaa Arg
165 170 175
Arg Lys Arg Glu Gly Glu Glu Glu Lys Arg Gly Glu Arg Arg Gly Lys
180 185 190
Arg Glu Glu Glu Lys Lys Gly Glu Lys Lys Gly Glu Glu Arg Gly Arg
195 200 205
Glu Glu Lys Lys Gly Arg Lys Glu Glu Gly Gly Lys Gly Glu Lys Glu
210 215 220
Xaa Lys Glu Arg Lys Glu Lys Arg Lys Arg Lys Glu Lys Lys Arg Lys
225 230 235 240
Arg Glu Glu Xaa Glu Asp Lys Arg Arg Gly Gly Arg Xaa Arg Arg Lys
245 250 255
Val Arg Xaa Ser Xaa Xaa Xaa Xaa Gly Xaa Xaa Ser Xaa Asp Pro Ala
260 265 270
Ile Ser Met Lys Asn Ile Ile Ser Thr Ile Lys Phe Ile Asn Ile Gln
275 280 285
Ile Ser
290

<210> 33421
<211> 256
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (50),(89),(93),(170),(175),(225),(243),(252),(253)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33421

```
Gly Glu Gly Gln Thr Lys Arg Lys Arg Gly Ser Gln Ala Arg Arg Glu
1               5                  10                  15
Glu Lys Arg Arg Gly Glu Lys Arg Gly Glu Glu Arg Glu Thr Thr Glu
            20                  25                  30
Gly Glu Gly Arg Gln Gly Glu Gly Arg Arg Arg Lys Lys Arg Glu Lys
        35                  40                  45
Glu Xaa Arg Glu Glu Gln Gly Glu Glu Glu Arg Glu Gly Glu Glu Gly
    50                  55                  60
Glu Lys Glu Arg Glu Glu Lys Gly Glu Glu Gly Gly Arg Glu Arg Gly
65                  70                  75                  80
Thr Lys Arg Arg Glu Glu Gly Arg Xaa Gly Glu Lys Xaa Gly Gly Arg
                85                  90                  95
Lys Gly Lys Glu Lys Glu Lys Gly Lys Glu Glu Gly Lys Gly Gly Gly
            100                 105                 110
Arg Glu Glu Lys Gly Lys Glu Lys Gly Gly Lys Arg Lys Glu Glu Arg
        115                 120                 125
Glu Lys Glu Gly Lys Arg Arg Glu Gly Lys Arg Gly Arg Glu Gly Arg
    130                 135                 140
Gly Glu Glu Arg Arg Lys Gly Arg Arg Gly Lys Arg Lys Arg Glu Glu
145                 150                 155                 160
Glu Arg Lys Lys Gly Arg Lys Glu Gly Xaa Arg Lys Lys Gly Xaa Glu
                165                 170                 175
Gly Arg Gly Arg Glu Arg Lys Arg Lys Glu Gly Lys Gly Glu Glu Lys
            180                 185                 190
Gly Lys Lys Arg Lys Arg Glu Arg Arg Lys Glu Arg Lys Glu Gly Glu
        195                 200                 205
Lys Arg Arg Lys Gly Gly Lys Arg Lys Glu Glu Arg Gly Arg Arg Lys
    210                 215                 220
Xaa Arg Lys Glu Lys Arg Ser Gly Arg Glu Arg Lys Lys Lys Gly Arg
225                 230                 235                 240
Glu Arg Xaa Arg Lys Thr Arg Gly Glu Ala Glu Xaa Xaa Gly Gly Lys
                245                 250                 255
```

<210> 33422
<211> 260
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (49),(89),(93),(169),(174),(225),(243),(252),(253),(258),(260)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33422

```
Glu Arg Asp Lys Pro Arg Gly Lys Gly Glu Ala Lys Arg Glu Gly Lys
1               5                  10                  15
Arg Ser Ala Glu Glu Arg Ser Gly Gly Arg Arg Glu Lys Arg Arg Lys
            20                  25                  30
Ala Arg Glu Asp Lys Glu Arg Gly Glu Glu Glu Lys Arg Gly Arg Lys
        35                  40                  45
Xaa Gly Gly Arg Ser Lys Glu Lys Arg Arg Glu Arg Glu Arg Arg Glu
    50                  55                  60
Arg Lys Lys Gly Arg Lys Lys Glu Arg Lys Gly Glu Gly Lys Gly Gly
```

65 70 75 80
Gln Arg Glu Glu Lys Lys Gly Glu Xaa Gly Lys Lys Xaa Glu Glu Gly
85 90 95
Arg Glu Arg Lys Lys Arg Arg Glu Lys Arg Lys Gly Arg Glu Glu Gly
100 105 110
Gly Arg Lys Lys Glu Arg Arg Arg Glu Gly Lys Gly Arg Arg Lys Gly
115 120 125
Lys Arg Lys Glu Arg Gly Glu Lys Gly Arg Glu Glu Glu Lys Glu Gly
130 135 140
Glu Arg Arg Glu Glu Lys Glu Glu Glu Glu Lys Gly Lys Gly Arg Arg
145 150 155 160
Arg Glu Arg Arg Gly Glu Lys Arg Xaa Lys Gly Arg Arg Xaa Lys Lys
165 170 175
Glu Glu Gly Gly Arg Gly Arg Glu Lys Arg Gly Lys Glu Arg Lys Lys
180 185 190
Gly Arg Arg Glu Lys Gly Arg Glu Glu Arg Arg Gly Lys Arg Glu Arg
195 200 205
Arg Glu Glu Arg Glu Glu Arg Gly Arg Arg Lys Gly Gly Glu Gly Arg
210 215 220
Xaa Gly Lys Lys Arg Glu Ala Glu Glu Lys Gly Lys Lys Lys Glu Glu
225 230 235 240
Arg Gly Xaa Gly Arg Gln Glu Glu Arg Arg Lys Xaa Xaa Glu Glu Ser
245 250 255
Lys Xaa Glu Xaa
260

<210> 33423
<211> 273
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(5),(7),(8),(10),(11),(12),(13),(15),(21),(30),(49),(99),(104),(181),(184),(224
)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33423
Asp Gly Arg Val Xaa Ala Xaa Xaa Thr Xaa Xaa Xaa Xaa Ala Xaa Pro
1 5 10 15
Tyr Phe Pro Pro Xaa Ser Ser Ala Ser Pro Leu Val Phe Xaa Phe Leu
20 25 30
Ser Leu Pro Phe Phe Phe Leu Ser Leu Pro Leu Leu Phe Ser Phe Leu
35 40 45
Xaa Phe Leu Leu Pro Leu Ser Ser Phe Leu Phe Pro Pro Phe Leu Leu
50 55 60
Phe Ser Pro Ser Phe Leu Ser Phe Leu Leu Ser Leu Phe Leu Phe Phe
65 70 75 80
Pro Phe Ser Ser Pro Phe Pro Ser Phe Leu Phe Leu Ser Leu Pro Leu
85 90 95
Pro Ser Xaa Pro Phe Phe Leu Xaa Pro Ser Phe Leu Pro Phe Phe Leu
100 105 110
Ser Ser Ser Leu Phe Leu Phe Pro Leu Leu Pro Phe Leu Leu Ser Ser
115 120 125
Pro Leu Pro Ser Leu Pro Leu Phe Pro Ser Leu Leu Phe Pro Ser Phe

```
    130                 135                 140
Ser Leu Ser Ser Phe Leu Phe Pro Pro Phe Ser Phe Pro Phe Ser Ser
145                 150                 155                 160
Leu Pro Pro Pro Phe Pro Ser Ser Phe Pro Phe Ser Phe Ser Phe Pro
                165                 170                 175
Phe Leu Pro Pro Xaa Phe Ser Xaa Ser Leu Pro Ser Ser Leu Leu Phe
            180                 185                 190
Val Pro Leu Ser Leu Pro Pro Ser Ser Pro Phe Ser Ser Leu Ser Phe
        195                 200                 205
Ser Pro Ser Ser Pro Ser Leu Ser Ser Ser Pro Cys Ser Ser Leu Xaa
    210                 215                 220
Ser Phe Ser Leu Phe Phe Leu Leu Leu Pro Ser Pro Cys Leu Pro Ser
225                 230                 235                 240
Pro Ser Val Val Ser Leu Ser Ser Pro Arg Phe Ser Pro Leu Arg Phe
                245                 250                 255
Ser Ser Leu Leu Ala Trp Leu Pro Leu Phe Leu Leu Val Cys Pro Ser
            260                 265                 270
Pro
```

2005 patent pending

<210> 33424
<211> 286
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(18),(21),(24),(25),(27),(29),(34),(35),(44),(62),(113),(118),(194),(198),(238)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33424

```
Met Leu Ile Asn Phe Ile Val Glu Met Ile Phe Phe Ile Glu Met Ala
1               5                   10                  15
Gly Xaa Ala Leu Xaa Arg Pro Xaa Xaa Leu Xaa Leu Xaa Leu Thr Phe
            20                  25                  30
Leu Xaa Xaa Leu Pro Pro Leu Leu Leu Ser Ser Xaa Ser Ser Leu Phe
        35                  40                  45
Leu Phe Phe Ser Phe Leu Phe Arg Phe Ser Phe Leu Ser Xaa Ser Ser
    50                  55                  60
Phe Ser Pro Phe Pro Pro Ser Ser Phe Leu Pro Phe Phe Ser Ser Leu
65                  70                  75                  80
Pro Leu Ser Ser Pro Phe Phe Ser Pro Phe Phe Ser Ser Ser Leu Phe
                85                  90                  95
Pro Leu Leu Ser Pro Leu Phe Ser Ser Ser Pro Ser Leu Phe Leu Leu
            100                 105                 110
Xaa Pro Ser Ser Phe Xaa Pro Leu Phe Ser Pro Ser Phe Ser Pro Pro
        115                 120                 125
Pro Phe Ser Phe Phe Leu Phe Phe Leu Phe Phe Ser Pro Leu Pro Phe
    130                 135                 140
Leu Leu Phe Leu Ser Ser Leu Leu Ser Ser Phe Leu Pro Phe Pro Phe
145                 150                 155                 160
Pro Pro Ser Phe Ser Leu Pro Ser Pro Phe Leu Phe Pro Pro Ser Leu
                165                 170                 175
Leu Pro Ser Leu Pro Leu Phe Pro Ser Leu Phe Pro Phe Pro Ser Phe
            180                 185                 190
```

```
Leu Xaa Phe Phe Pro Xaa Leu Ser Leu Leu Leu Phe Ser Leu Ser Pro
        195                 200                 205
Phe Pro Phe Pro Leu Pro Leu Leu Phe Pro Pro Phe Leu Ser Leu Pro
    210                 215                 220
Pro Leu Pro Leu Ser Pro Leu Leu Leu Ala Pro Pro Ser Xaa Leu Ser
225                 230                 235                 240
Pro Ser Phe Phe Phe Phe Ser Pro Leu Leu Val Phe Pro Arg Leu Pro
                245                 250                 255
Ser Phe Leu Ser Pro Pro Pro Ala Ser Leu Leu Cys Ala Ser Leu Pro
            260                 265                 270
Phe Ser Leu Gly Phe Pro Phe Ser Ser Trp Phe Val Pro Leu
        275                 280                 285
```

<210> 33425
<211> 357
<212> PRT
<213> A.fumigatus

<400> 33425

```
Ile Val Thr Arg Glu Phe Lys Lys Pro Ser Phe Ser Pro Ser Asn Thr
1               5                   10                  15
Asn Gln Glu Tyr Ile Thr Val Val Glu Ala Ile Ser Ala Asp Gly His
            20                  25                  30
Phe Ile Pro Pro Phe Ile Ile Phe Pro Gly Lys Cys Ile Leu Ala Gly
        35                  40                  45
Trp Phe Asp Val Cys Asp Glu Pro Asp Tyr Ile Ile Gly Val Ser Asp
    50                  55                  60
Ser Gly Tyr Ile Asn Asp Ile Leu Ala Phe Gln Trp Ile Gln His Phe
65                  70                  75                  80
Lys His His Thr Arg Arg Arg Met Leu Gly Val Lys Arg Leu Leu Leu
                85                  90                  95
Cys Asp Gly Tyr Gly Ser His Met Thr Tyr Glu Phe Ile Asn Phe Cys
            100                 105                 110
Glu Lys Asn Asn Ile Leu Leu Tyr Phe Leu Pro Pro His Thr Ser His
        115                 120                 125
Ile Leu Gln Pro Leu Asp Val Gly Val Phe His Ala Tyr Lys His Trp
    130                 135                 140
His Ser Glu Ala Ile Glu Asn Ala Thr Gln Thr Gly Cys Gly Lys Phe
145                 150                 155                 160
Thr Lys Val Glu Phe Leu Ser Ala Leu Phe Glu Ile Gln His Arg Thr
                165                 170                 175
Phe Lys Gln Arg Thr Leu Lys His Ala Phe Arg Leu Thr Gly Leu Asn
            180                 185                 190
Pro Trp Asn Pro Ser Val Ala Leu Glu Arg Leu Gln Asp Ser Lys Leu
        195                 200                 205
Phe Thr Asp Glu Ser Ser Ser Asn Ser Ser Phe Ser Ile Thr Asn Thr
    210                 215                 220
Pro Gln Thr Ala Arg Gln Ile Asp Gln Phe Asn Arg His Leu Leu Asp
225                 230                 235                 240
Leu Ser Pro Thr Glu Glu Asp Ser Phe His Thr Thr Leu Ser Lys Leu
                245                 250                 255
Val Lys Ala Ala Lys Thr Gln Ala Ile Leu Val Glu His Leu Thr Glu
            260                 265                 270
Arg Val Arg Glu Ser Asp Thr Ala Lys Leu Ala Arg Gln Arg Arg Ala
        275                 280                 285
Gln Ala Ser Arg Ala His Leu Gln Ile Gly Gly Ile Met Arg Lys Glu
```

```
    290                 295                 300
Glu Val Thr Arg Met Lys Arg Ile Arg Gln Asp Tyr Asp Glu Leu Val
305                 310                 315                 320
Glu Lys Asn Arg Leu Gln Pro Gln Trp Arg Lys Val Met Ala Glu Leu
                325                 330                 335
Gln Glu Tyr Cys Leu Ala Lys Gly Ile Ile Val Arg Lys Arg Arg Lys
            340                 345                 350
Val Arg Lys Val Val
        355
```

<210> 33426
<211> 277
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222>
(9),(11),(12),(15),(16),(18),(19),(20),(25),(26),(35),(53),(103),(108),(185),(189),(228)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33426

```
Tyr Phe Ser Leu Arg Trp Gln Gly Xaa Arg Xaa Xaa Asp Pro Xaa Xaa
1               5                   10                  15
Tyr Xaa Xaa Xaa Leu Leu Ser Ser Xaa Xaa Phe Arg Leu Ser Ser Cys
            20                  25                  30
Leu Pro Xaa Pro Leu Ser Ser Phe Phe Phe Pro Phe Ser Ser Ala Ser
        35                  40                  45
Leu Phe Phe Pro Xaa Leu Pro Ser Pro Pro Phe Leu Leu Pro Leu Ser
    50                  55                  60
Ser Leu Ser Ser Leu Leu Ser Leu Phe Pro Leu Leu Ser Ser Leu Pro
65                  70                  75                  80
Phe Ser Leu Leu Pro Phe Phe Leu Ser Phe Pro Leu Phe Ser Leu Pro
                85                  90                  95
Leu Pro Pro Ser Ser Phe Xaa Ser Leu Leu Pro Xaa Ser Leu Phe Ser
            100                 105                 110
Pro Leu Leu Ser Leu Leu Leu Pro Phe Pro Phe Ser Ser Ser Ser Phe
        115                 120                 125
Ser Ser Leu Leu Ser Pro Ser Phe Ser Ser Ser Leu Pro Phe Ser Pro
    130                 135                 140
Leu Ser Phe Leu Phe Pro Phe Leu Leu Pro Phe Pro Ser Leu Leu Leu
145                 150                 155                 160
Ser Phe Phe Leu Pro Pro Ser Ser Leu Pro Phe Leu Phe Ser Leu Leu
                165                 170                 175
Phe Phe Leu Ser Leu Pro Ser Ser Xaa Phe Phe Pro Xaa Ser Pro Phe
            180                 185                 190
Phe Ser Ser Leu Cys Pro Pro Phe Pro Ser Pro Phe Leu Ser Phe Phe
        195                 200                 205
Leu Pro Phe Phe Leu Ser Leu Leu Ser Leu Ser Leu Leu Phe Ser Leu
    210                 215                 220
Leu Leu Pro Xaa Leu Phe Leu Pro Leu Phe Ser Ser Ser Pro Leu Ser
225                 230                 235                 240
Leu Ser Ser Leu Ala Phe Arg Arg Phe Ser Leu Leu Pro Pro Leu Leu
                245                 250                 255
Ser Ser Ala Leu Leu Phe Pro Ser Arg Leu Ala Ser Pro Phe Pro Leu
```

260 265 270
Gly Leu Ser Leu Ser
275

<210> 33427
<211> 76
<212> PRT
<213> A.fumigatus

<400> 33427
Tyr Phe Ala Pro Asp Tyr Glu Leu Asp Val Arg Pro Ser Asn Met Asp
1 5 10 15
Asn Ala Asn Thr Lys Asp Tyr Leu Asp Lys Ile Arg Ala Gln Val Val
20 25 30
Glu Asn Leu Lys Arg Thr Ala Phe Ala Pro Ser Val Gln Met Thr Asp
35 40 45
Val Pro Arg Glu Pro Leu Val Glu Gly Met Asp Asp Glu Ala Asp Ala
50 55 60
Ile Leu Asp Asp Leu Asp Glu Asp Glu Tyr Leu Asp
65 70 75

<210> 33428
<211> 191
<212> PRT
<213> A.fumigatus

<400> 33428
Pro Gly Tyr Glu Leu Trp Pro Leu Gln Glu Asp Gly Asp Leu Arg Glu
1 5 10 15
Cys Ser Trp Thr Phe Lys Ala Arg Phe Lys Gln Asn Thr Asn Gly Leu
20 25 30
Ser Ala Gln Arg Ala Lys Pro Ala Ser Lys Tyr Glu Met Thr Gln Phe
35 40 45
His Thr Asp Glu Tyr Ile Asp Phe Leu Ser Lys Val Thr Pro Asp Asn
50 55 60
Met Asp Gln Phe Ser Lys Glu Gln Gly Lys Tyr Asn Val Gly Asp Asp
65 70 75 80
Cys Pro Val Phe Asp Gly Leu Phe Glu Phe Cys Gly Ile Ser Ala Gly
85 90 95
Gly Ser Met Glu Gly Ala Ala Arg Leu Asn Arg Asn Lys Cys Asp Ile
100 105 110
Ala Val Asn Trp Ala Gly Gly Leu His His Ala Lys Lys Ser Glu Ala
115 120 125
Ser Gly Phe Cys Tyr Val Asn Gly Lys Leu Ile Phe Leu Ala Ala Ile
130 135 140
Val Ile Ile Gln Arg His Leu Leu Thr Phe Tyr Arg Asp Arg Ser Trp
145 150 155 160
Tyr Pro Arg Ala Val Thr Phe Gln Ala Lys Ser Ser Leu Arg Arg Tyr
165 170 175
Arg Cys Pro Pro Arg Arg Arg Cys Arg Gly Ser Val Leu His Asn
180 185 190

<210> 33429
<211> 105
<212> PRT
<213> A.fumigatus

<400> 33429
Gln Ile Pro Val Arg Leu Cys Thr Val Ser Phe Thr Met Ala Ala Pro
1 5 10 15
Pro Ile Asp Leu Asn Leu Asn Gly Ser Gly Asp Arg Ser Arg Lys Val
20 25 30
Ala Tyr Phe Tyr Asp Ser Asp Val Gly Asn Tyr Ala Tyr Val Ser Gly
35 40 45
His Pro Met Lys Pro His Arg Ile Arg Met Thr His Ser Leu Val Met
50 55 60
Asn Tyr Gly Leu Tyr Lys Lys Met Glu Ile Tyr Val Ser Val His Gly
65 70 75 80
Leu Ser Arg Leu Gly Ser Ser Arg Thr Leu Met Gly Tyr Arg Arg Ser
85 90 95
Val Arg Asn Arg Pro Gln Ser Met Lys
100 105

<210> 33430
<211> 216
<212> PRT
<213> A.fumigatus

<400> 33430
Met Val Ser Leu Ser Ser Trp Arg Arg Leu Ser Leu Ser Asn Asp Ile
1 5 10 15
Phe Ser Leu Phe Thr Glu Ile Val Leu Gly Ile Leu Glu Leu Leu Arg
20 25 30
Phe Lys Gln Arg Val Leu Tyr Val Asp Ile Asp Val His His Gly Asp
35 40 45
Gly Val Glu Glu Ala Phe Tyr Thr Thr Asp Arg Val Met Thr Val Ser
50 55 60
Phe His Lys Tyr Gly Glu Tyr Phe Pro Gly Thr Gly Glu Leu Arg Asp
65 70 75 80
Ile Gly Val Gly Gln Gly Lys His Tyr Ala Val Asn Phe Pro Leu Arg
85 90 95
Asp Gly Ile Asp Asp Ile Ser Tyr Lys Ser Ile Phe Glu Pro Val Ile
100 105 110
Arg Ser Val Met Glu Trp Tyr Arg Pro Glu Ala Val Val Leu Gln Cys
115 120 125
Gly Gly Asp Ser Leu Ser Gly Asp Arg Leu Gly Cys Phe Asn Leu Ser
130 135 140
Met Arg Gly His Ala Asn Cys Val Asn Phe Val Lys Ser Phe Asn Leu
145 150 155 160
Pro Thr Met Ile Leu Gly Gly Gly Gly Tyr Thr Met Arg Asn Val Ala
165 170 175
Arg Thr Trp Ala Phe Glu Thr Gly Ile Leu Leu Gly Glu Asn Leu Gly
180 185 190
Pro Glu Leu Pro Tyr Asn Asp Tyr Tyr Glu Val Gly Leu Asp Trp Phe
195 200 205
Lys Cys Arg Met Pro Ala Asp Cys
210 215

<210> 33431
<211> 85
<212> PRT
<213> A.fumigatus

<400> 33431
Asp Thr Pro Asn Leu Ile Asp Asn Ser Glu Thr Val His Ile Ser Ser
1 5 10 15
Leu Ala Leu Leu Lys Met Leu Arg His Gly Arg Ala Gly Val Pro Met
20 25 30
Glu Val Met Gly Leu Met Leu Gly Glu Phe Val Asp Glu Tyr Thr Val
35 40 45
Arg Val Val Asp Val Phe Ala Met Pro Gln Ser Gly Thr Gly Val Ser
50 55 60
Val Glu Ala Val Asp Pro Val Phe Gln Thr Lys Met Met Glu Met Leu
65 70 75 80
Arg Gln Thr Gly Arg
85

<210> 33432
<211> 169
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (160)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33432
Val Ser Ala Gly Gln Ser Lys Leu Glu Ser Cys Thr Ala Asp Arg Ser
1 5 10 15
Ser Lys Leu Arg Pro Glu Thr Val Val Gly Trp Tyr His Ser His Pro
20 25 30
Gly Phe Gly Cys Trp Leu Ser Ser Val Asp Ile Asn Thr Gln Gln Ser
35 40 45
Phe Glu Gln Leu Thr Pro Arg Ala Val Ala Val Val Val Asp Pro Ile
50 55 60
Gln Ser Val Lys Gly Lys Val Val Ile Asp Ala Phe Arg Leu Ile Gln
65 70 75 80
Pro Gln Thr Val Val Met Gly Gln Glu Pro Arg Gln Thr Thr Ser Asn
85 90 95
Leu Gly His Leu Asn Lys Pro Ser Ile Gln Ala Leu Ile His Gly Leu
100 105 110
Asn Arg His Tyr Tyr Ser Ile Ala Ile Asn Tyr Arg Lys Thr Gly Leu
115 120 125
Gly Glu Asn Met Leu Met Asn Leu His Lys His Val Leu Thr Glu Ala
130 135 140
Leu Gln Asn Asp Arg Leu Pro Leu Arg Lys Ala Thr Thr Met Trp Xaa
145 150 155 160
Arg Ile Glu Gln Leu Val Tyr Pro Cys
165

<210> 33433
<211> 353
<212> PRT
<213> A.fumigatus

<400> 33433
Tyr Tyr Leu Pro Phe Thr Arg Ile Pro Ala Ser Pro Ala Arg Ile Phe

```
1               5                   10                  15
Arg Val Arg His Arg Arg Arg Ile His Pro Ala Ser Phe Phe Pro Ser
            20                  25                  30
Thr Leu Leu Asn Cys Leu Gln Leu Leu Leu Lys Ser His Arg Ile Thr
        35                  40                  45
Gly Phe Thr Thr Thr Thr Leu Phe Pro Ser Ser Ser Phe Leu Pro Leu
    50                  55                  60
Ile Pro Val Phe His His Ile Ile Ser Glu Lys Ser His Leu Phe Ser
65                  70                  75                  80
Leu Ala Met Ser Thr Arg Arg Ser Leu Arg Ser Arg Pro Met Arg Asp
                85                  90                  95
Asp Gln Ser Ser Ile Asp Ser Asp Leu Ser Pro Arg Arg Thr Arg Ser
            100                 105                 110
Thr Arg Gly Val Pro Pro Ala Pro Leu Val Thr Val Thr Arg Ser Val
        115                 120                 125
Ser Gly Ser Ala Glu Asn Pro Ile Arg Ser Leu Phe Leu Thr Val Arg
    130                 135                 140
Met Pro Ser Ser Lys Leu Arg Glu Val Thr Gly Gly Ser Ala Arg Gly
145                 150                 155                 160
Ile Thr Ser Thr Arg Arg Ser His Asn Val Phe Thr Glu Asn Pro Ile
                165                 170                 175
Ile Thr Gly Pro Arg Ser Ser Arg Pro Lys Arg Lys Leu Val Glu Val
            180                 185                 190
Ser Thr Ser Glu Gly Asp Asp Leu Ala Asp Gln Glu Glu Asp Glu Val
        195                 200                 205
Asp Glu Asp Ala Pro Gly Glu Asp Asp Val Asp Ala Asp Gly Asp Leu
    210                 215                 220
Glu Leu Asp Asp Ala Pro Pro Arg Pro Pro Thr Ser Lys Arg Asn Ala
225                 230                 235                 240
Lys Gly Thr Ala Thr Ser Thr Gly Lys Ser Val Lys Ser Val Glu Glu
                245                 250                 255
Lys Glu Met Glu Leu Glu Glu Glu Asp Asp Glu Asp Asp Asp Glu Leu
            260                 265                 270
Ser Glu Leu Asp Thr Asp Ala Glu Gly Glu Pro Asp Asp Gln Asp Glu
        275                 280                 285
Ser Gly Leu Gly Asn Gly Asn Gly Gly Asp Glu Asp Leu Asp Glu Glu
    290                 295                 300
Asp Glu Glu Asp Glu Glu Asp Asp Asp Ser Glu Glu Val Thr Pro Gly
305                 310                 315                 320
Gly Asp Leu Ser Arg Leu Thr Lys Arg Gln Arg Gly Thr Leu Gly Asn
                325                 330                 335
Asp Phe Leu Gln Leu Pro Met Gly Glu Phe Ser Phe Cys Lys Cys Phe
            340                 345                 350
Gln
```

<210> 33434
<211> 146
<212> PRT
<213> A.fumigatus

<400> 33434

```
Ser Ala Ala Ala Asp Arg Ile Pro Glu Pro Gln Val Lys Lys His Leu
1               5                   10                  15
Thr Ala Glu Glu Arg Ala Met Arg Arg Ala Glu Met Ala Arg Arg Arg
            20                  25                  30
```

```
Lys Asn Leu Ser Glu Lys Arg Asn Glu Glu Glu Lys Val Arg Trp Ala
        35                  40                  45
Gly Glu Ala Ala Phe Leu Gly Leu Glu Ile Ser Leu Ser Thr Gly Cys
    50                  55                  60
Ile Thr Ser Leu Thr Cys Lys His Arg Trp Ile Arg Leu Ile Gly Cys
65                  70                  75                  80
Cys Ala Asn Arg Leu Gln Asn Val Val Val Val Phe Gln Leu Leu Lys
                85                  90                  95
Arg Lys Pro Thr Pro Pro Lys Gln Arg Gln Lys Arg Gln Arg Asn His
            100                 105                 110
Ser Gln Arg Trp Ser Asp Gly Ser Val Val Ala Arg Ala Val Val Ser
        115                 120                 125
Val Cys Leu Lys Asn Gly Ser Gly Leu Leu Arg Asp Ala Ser Leu Gly
    130                 135                 140
Asn Ser
145
```

<210> 33435
<211> 79
<212> PRT
<213> A.fumigatus

<400> 33435

```
Pro Ala Lys Ile Ala Ser Gly Arg Asp Leu Phe Ala Ile Ile Val Phe
1               5                   10                  15
Leu Val Phe Phe Ile Leu Phe Ile Gln Val Leu Val Ser Ser Ile Ser
            20                  25                  30
Ile Ala Lys Pro Thr Leu Val Leu Val Ile Arg Leu Thr Leu Gly Ile
        35                  40                  45
Arg Ile Gln Leu Arg Gln Leu Val Ile Ile Phe Val Val Phe Leu Phe
    50                  55                  60
Gln Phe His Leu Leu Leu Leu His Ala Leu His Arg Phe Ser Arg
65                  70                  75
```

<210> 33436
<211> 266
<212> PRT
<213> A.fumigatus

<400> 33436

```
Gly Ser Gly Ile Arg Ser Ala Ala Ala Leu His Trp Lys His Leu Gln
1               5                   10                  15
Lys Glu Asn Ser Pro Met Gly Ser Cys Lys Lys Ser Leu Pro Arg Val
            20                  25                  30
Pro Leu Cys Arg Leu Val Asn Arg Leu Arg Ser Pro Pro Gly Val Thr
        35                  40                  45
Ser Ser Leu Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Arg
    50                  55                  60
Ser Ser Ser Pro Pro Phe Pro Leu Pro Ser Pro Leu Ser Ser Trp Ser
65                  70                  75                  80
Ser Gly Ser Pro Ser Ala Ser Val Ser Ser Ser Asp Ser Ser Ser Ser
                85                  90                  95
Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ile Ser Phe Ser Ser Thr Leu
            100                 105                 110
Phe Thr Asp Phe Pro Val Asp Val Ala Val Pro Leu Ala Phe Leu Phe
        115                 120                 125
```

```
Glu Val Gly Gly Arg Gly Gly Ala Ser Ser Ser Ser Lys Ser Pro Ser
    130                 135                 140
Ala Ser Thr Ser Ser Ser Pro Gly Ala Ser Ser Ser Thr Ser Ser Ser
145                 150                 155                 160
Ser Trp Ser Ala Lys Ser Ser Pro Ser Leu Val Leu Thr Ser Thr Ser
                165                 170                 175
Phe Leu Leu Gly Arg Leu Asp Arg Gly Pro Val Met Met Gly Phe Ser
            180                 185                 190
Val Lys Thr Leu Trp Glu Arg Leu Val Glu Val Ile Pro Arg Ala Leu
        195                 200                 205
Pro Pro Val Thr Ser Arg Ser Leu Leu Glu Gly Ile Leu Thr Val Arg
    210                 215                 220
Lys Arg Asp Leu Met Gly Phe Ser Ala Leu Pro Glu Thr Asp Arg Val
225                 230                 235                 240
Thr Val Thr Ser Gly Ala Gly Gly Thr Pro Arg Val Asp Leu Val Arg
                245                 250                 255
Leu Gly Leu Lys Ser Glu Ser Met Leu Asp
            260                 265
```

<210> 33437
<211> 421
<212> PRT
<213> A.fumigatus

<400> 33437

```
Leu Ala Gln Gly Thr Gly Met Leu Met Thr Ala Gly Cys Ser Ser Asn
1               5                   10                  15
Ala Lys Leu Glu Ala Asp Ser Ile Phe Leu Asn Arg Gly Thr Ala Ile
            20                  25                  30
Ala Lys Ile Val Ala Glu Asn Thr Ala Ser Asn Asp Ser Leu Phe Glu
        35                  40                  45
Arg Asp Val Glu Met Trp Val Phe Glu Glu Lys Val Glu Ile Pro Lys
    50                  55                  60
Asn Ser Arg His Tyr Asp Pro Ser Ser Pro Leu Cys Gln Gly Pro Gln
65                  70                  75                  80
Asn Leu Thr Glu Ile Ile Asn Lys Thr His Glu Asn Val Lys Tyr Leu
                85                  90                  95
Pro Gly Ile Ala Leu Pro Glu Asn Ile His Ala Asn Pro Ser Val Val
            100                 105                 110
Asp Ala Val Lys Asp Ser Thr Ile Leu Ile Phe Asn Leu Pro His Gln
        115                 120                 125
Phe Ile Asn Lys Thr Cys Glu Gln Ile Lys Gly Lys Ile Leu Pro Tyr
    130                 135                 140
Ala Arg Gly Ile Ser Cys Ile Lys Gly Val Asp Val Thr Glu Glu Gly
145                 150                 155                 160
Val Ser Leu Phe Ser Glu Thr Ile Gly Lys Thr Leu Gly Ile Tyr Cys
                165                 170                 175
Gly Ala Leu Ser Gly Ala Asn Ile Ala Asn Glu Val Ala Gln Glu Lys
            180                 185                 190
Trp Cys Glu Ser Ser Ile Ala Tyr Asp Pro Pro His Leu Asp Ser Lys
        195                 200                 205
Ala Pro Ser Pro Asn Arg Ser Pro Ser Ala Ser Thr Val Asp Val Val
    210                 215                 220
His Phe Glu His Lys Asp Val Ser Gly Gln Leu Ser Gln Val Lys Leu
225                 230                 235                 240
Gln Pro Leu Pro Ser Glu Tyr Pro Pro Ile Asp His Thr Val Leu Lys
```

```
                245                 250                 255
Thr Leu Phe His Arg Pro Tyr Phe His Ile Arg Val Val Ser Asp Val
            260                 265                 270
Ala Gly Val Ser Leu Gly Gly Ala Leu Lys Asn Ile Val Ala Leu Ala
        275                 280                 285
Ala Gly Trp Val Asp Gly Met Gly Trp Gly Asp Asn Ala Lys Ala Ala
    290                 295                 300
Ile Met Arg Val Gly Leu Leu Glu Met Val Lys Phe Gly Glu Lys Phe
305                 310                 315                 320
Phe Gly Ala Thr Ile Asp Thr Arg Thr Phe Thr Glu Glu Ser Ala Gly
                325                 330                 335
Val Ala Asp Leu Ile Thr Ser Cys Ser Gly Gly Arg Asn Phe Arg Cys
            340                 345                 350
Ala Lys Leu Ser Ile Glu Arg Lys Gln Pro Ile Asp Lys Ile Glu Glu
        355                 360                 365
Thr Glu Leu Asn Gly Gln Lys Leu Gln Gly Thr Leu Thr Ala Val Glu
    370                 375                 380
Val Asn Lys Phe Leu Lys Lys Gln Gly Leu Glu Asp Glu Phe Pro Leu
385                 390                 395                 400
Phe Thr Ala Val Tyr Arg Met Ser Pro Ser Pro Phe Cys Ala Ala Leu
                405                 410                 415
Phe Val Arg Asn Tyr
            420
```

<210> 33438
<211> 732
<212> PRT
<213> A.fumigatus

```
<400> 33438
Ser Ser Val Gly Thr Leu Arg Asn Leu Gly Leu Pro Lys Glu Phe Lys
1               5                   10                  15
Thr Val Asn Asn Leu Leu Ala Ile Arg Thr Ala Leu Gln Glu Lys Val
            20                  25                  30
Ile Ser Gly Ile Arg Leu Trp Glu Tyr Tyr Val Ile Asp Val Thr Ala
        35                  40                  45
Asn Ala Gly His Ile Leu Glu Asn Trp Lys Ala Ser Glu Leu Lys His
    50                  55                  60
Ser Ala Ser Lys Lys Tyr Ala Glu Val Asp Ile Ser Gly Phe Lys Asp
65                  70                  75                  80
Arg Pro Leu Lys Gln Gln Ala Asp Leu Ile Arg Gln His Ala Ile Pro
                85                  90                  95
Thr Ile Lys Gln Val Leu Gly Arg Phe Gly Arg Ala Leu Asp Pro Glu
            100                 105                 110
Phe Gly Ser Leu Val Leu Thr Ala Met Phe Gly Lys Tyr Asp Ser Ser
        115                 120                 125
Asn Ser Asp Ile Ala Ser Ile Glu Lys Ala Leu Val Thr Ile Leu Asp
    130                 135                 140
Glu Val Asn Val Pro Phe Tyr Glu Glu Tyr Asn Ala Asp Val Ser Glu
145                 150                 155                 160
Ile Met Asn Gln Leu Phe Asn Arg Ile Lys Tyr Ile Arg Ile Asp Asp
                165                 170                 175
His Gly Pro Lys Leu Gly Pro Val Thr Asp Glu Asn Pro Leu Ile Glu
            180                 185                 190
Thr Tyr Phe Thr Arg Leu Pro Leu Asn Asp Ile Thr Lys Lys His Ser
        195                 200                 205
```

```
Pro Lys Ala Leu Ala Leu Val Asn Asn Gly Trp Ile Trp Asn Ala Asp
    210                 215                 220
Ala Met Arg Asp Asn Ala Gly Pro Glu Ser Lys Ala Tyr Leu Arg Arg
225                 230                 235                 240
Glu Val Ile Val Trp Gly Asp Cys Val Lys Leu Arg Tyr Gly Ser Ser
                245                 250                 255
Pro Glu Asp Asn Pro Phe Leu Trp Asp Tyr Met Ala Lys Tyr Thr Arg
            260                 265                 270
Leu Met Ala Lys His Phe Ser Gly Phe Arg Ile Asp Asn Cys His Ser
        275                 280                 285
Thr Pro Leu Ala Val Ala Glu Tyr Leu Leu Asp Glu Ala Arg Lys Val
    290                 295                 300
Arg Pro Asn Leu Thr Val Phe Ala Glu Leu Phe Thr Gly Ser Glu Glu
305                 310                 315                 320
Ala Asp Tyr Ile Phe Val Lys Arg Leu Gly Ile Asn Ala Leu Ile Arg
                325                 330                 335
Glu Ala Met Gln Ala Trp Ser Thr Gly Glu Leu Ser Arg Leu Val His
            340                 345                 350
Arg His Gly Gly His Pro Ile Gly Ser Phe Asp Val Glu Leu Pro Ser
        355                 360                 365
Ala Gly Ser Ser His Ala Ile Ala Ser Ala Gly Val Asn Gln Asn Gln
    370                 375                 380
Glu Lys Ile Ser His Ile Arg Pro Cys Pro Val Gln Ala Leu Phe Met
385                 390                 395                 400
Asp Cys Thr His Asp Asn Glu Thr Pro Ala Gln Lys Arg Asp Ala Arg
                405                 410                 415
Asp Thr Leu Pro Asn Ala Ala Leu Val Ser Met Cys Ala Ser Ala Val
            420                 425                 430
Gly Ser Val Met Gly Tyr Asp Glu Ile Tyr Pro Lys Leu Val Asp Leu
        435                 440                 445
Val His Glu Lys Arg Leu Tyr Phe Ser Glu Phe Ser Gln Ser Ala Glu
    450                 455                 460
Val Arg His Asp Cys Glu Arg Gly Gly Ile Gly Gly Val Lys Lys Leu
465                 470                 475                 480
Leu Asn Glu Leu His Ala Met Met Gly Val Glu Gly Tyr Asp Glu Thr
                485                 490                 495
His Ile His His Asp Gly Glu Tyr Ile Thr Val His Arg Val His Pro
            500                 505                 510
Lys Thr Arg Arg Gly Ile Phe Leu Ile Ala His Thr Ala Phe Pro Gly
        515                 520                 525
His Ser Thr Asn Ala Val Leu Ala Pro Thr His Leu Val Gly Thr Gln
    530                 535                 540
Ala Lys His Ile Gly Thr Trp Asn Leu Glu Val Asp Ala Ser Asp Ser
545                 550                 555                 560
Met Arg Ala Val Ile Leu Ser Asp Lys Asp His Leu Arg Gly Leu Pro
                565                 570                 575
Ser Arg Ile Arg Lys Phe Glu Gly Thr Lys Ala Glu Gln Gln Gly Asp
            580                 585                 590
Asp Thr Val Ile Ser Val Leu Asp Thr Phe Ala Pro Gly Ser Ile Ala
        595                 600                 605
Leu Phe Glu Thr Ser Ile Ala Lys Ala Glu His Ala Ala Gly Leu Glu
    610                 615                 620
Asn Asn Ile Thr Glu Gly Val Asp Glu Ala Phe Ala Glu Leu Ser Leu
625                 630                 635                 640
Val Asp Leu Asn Phe Val Leu Tyr Arg Cys Asp Ala Glu Glu Arg Asp
                645                 650                 655
```

```
Leu Ser Gly Gly Gln Asp Gly Val Tyr Asn Val Pro Asn His Gly Pro
            660                 665                 670
Leu Val Tyr Ala Gly Leu Gln Gly Trp Trp Ser Val Ile Gly Arg Tyr
        675                 680                 685
His Gln Val Gln Arg Thr Arg Pro Ser Thr Leu Arg Pro Ser Pro Ser
    690                 695                 700
Arg Pro Val Gly Pro Arg Phe His Arg Arg Ala His Gly Glu Ser Arg
705                 710                 715                 720
Lys Glu Gly Arg Ile His Cys Thr Gly Glu Ala Cys
                725                 730
```

<210> 33439
<211> 542
<212> PRT
<213> A.fumigatus

<400> 33439

```
Ala Val Ala Arg Thr Gly Phe Thr Thr Ser Pro Thr Met Asp Arg Trp
1               5                  10                  15
Ser Thr Leu Val Phe Arg Asp Gly Gly Ala Ser Leu Glu Asp Ile Ile
            20                  25                  30
Lys Tyr Asn Ala Leu Gly His Pro Leu Cys Asp His Leu Arg His Gly
        35                  40                  45
Gln Trp Ala Leu Asp Phe Ile Val Gly Arg Met Glu Arg Ala Ala Lys
    50                  55                  60
Lys Glu Gly Tyr Thr Ala Leu Glu Lys Pro Ala Lys Trp Leu His Glu
65                  70                  75                  80
Lys Phe Gln Ala Val Arg Asp Leu Pro Ser Phe Leu Leu Pro Arg Tyr
                85                  90                  95
Phe Gly Ile Ile Ile Gln Val Ala Tyr Asn Ala Ala Trp Lys Arg Gly
            100                 105                 110
Ile Gln Leu Leu Gly Pro Asp Val Arg Gln Gly Gln Glu Phe Ile His
        115                 120                 125
Gln Leu Gly Met Val Ser Val Gln Val Thr Gly Leu Val Lys Ser Ala
    130                 135                 140
Ser Leu Trp Pro Thr Lys Thr Val Pro Ser Leu Ala Ala Gly Leu Pro
145                 150                 155                 160
His Phe Ala Val Asp Trp Ala Arg Cys Trp Gly Arg Asp Ile Phe Ile
                165                 170                 175
Ser Leu Arg Gly Leu Phe Leu Cys Thr Gly Arg Phe Asp Asp Ala Lys
            180                 185                 190
Glu His Ile Leu Ala Phe Ala Ser Val Leu Lys His Gly Met Ile Pro
        195                 200                 205
Asn Leu Leu Ser Ser Gly Lys Leu Pro Arg Tyr Asn Ser Arg Asp Ser
    210                 215                 220
Val Trp Phe Phe Leu Gln Ala Ile Gln Asp Tyr Thr Lys Met Ala Pro
225                 230                 235                 240
Asn Gly Ile Glu Ile Leu Asn Glu Thr Val Ala Arg Arg Phe Val Pro
                245                 250                 255
Tyr Asp Asp Thr Trp Phe Ala Tyr Asp Asp Pro Arg Ala Tyr Ser Lys
            260                 265                 270
His Ser Thr Ile Ser Glu Val Ile Gln Glu Val Leu Gln Arg His Ala
        275                 280                 285
His Gly Leu Ser Phe Arg Glu Tyr Asn Ala Gly Pro Asp Leu Asp Met
    290                 295                 300
Gln Met Lys Pro Glu Gly Phe Gln Ile Asp Val Lys Val Asp Trp Glu
```

```
305                 310                 315                 320
Thr Gly Ile Ile Phe Gly Gly Ser Gln His Asn Cys Gly Thr Trp Gln
                325                 330                 335
Asp Lys Met Gly Glu Ser Gly Lys Ala Gly Asn Lys Gly Val Pro Gly
            340                 345                 350
Thr Pro Arg Asp Gly Ala Ala Ile Glu Ile Thr Gly Leu Leu Tyr Ser
        355                 360                 365
Ala Leu Thr Trp Val Ala Arg Leu His Glu Arg Gly Leu Tyr Pro His
    370                 375                 380
Asp Lys Val Asp Ile Ala Glu Gly Arg Ser Ile Thr Phe Lys Glu Trp
385                 390                 395                 400
Ala Ala Lys Ile Lys Gln Asn Phe Glu Arg Cys Tyr Tyr Val Pro Glu
                405                 410                 415
Ser Pro Glu Glu Asp Gly Gln Tyr Asp Val Asp Pro Ser Val Val Asn
            420                 425                 430
Arg Arg Gly Ile Tyr Lys Asp Leu Tyr Lys Ser Gly Lys Pro Tyr Glu
        435                 440                 445
Asp Tyr Gln Leu Arg Ala Asn Phe Pro Ile Ala Met Thr Val Ser Pro
    450                 455                 460
Asp Leu Phe Thr Pro Ser Lys Ala Leu Gly Ala Leu Ala Leu Ala Asp
465                 470                 475                 480
Ser Val Ile Val Gly Pro Ile Gly Val Ala Thr Leu Asp Pro Ser Asp
                485                 490                 495
Leu Asn Tyr Asn Pro Asn Tyr Tyr Asn Ser Glu Asp Ser Asp Asn Phe
            500                 505                 510
Ala Thr Ala Lys Gly Met Asn Tyr His Gln Gly Thr Glu Trp Val Trp
        515                 520                 525
Gln Arg Gly Phe Phe Pro Pro Ala Phe Leu His Phe Gly Ser
    530                 535                 540
```

<210> 33440
<211> 84
<212> PRT
<213> A.fumigatus

<400> 33440

```
Arg Ser Ser Gly Pro Trp Pro Phe Leu Ser Phe Cys Asn Ala Thr Tyr
1               5                   10                  15
Leu Tyr Ala Glu Lys Ala Pro Gly Lys Thr Glu Met Lys Pro Lys Ala
            20                  25                  30
Asp Ser Ser Gly Leu Ser Arg Met Leu Leu Ser Leu Tyr Ser Lys Phe
        35                  40                  45
Cys Pro Ala Thr Asn Gly Leu Ser Asn Phe Leu Pro Cys Asp Ser Met
    50                  55                  60
Thr Leu Ile Ser Pro Gln Ala Pro Pro His Met Gly Ser Thr Ser Asn
65                  70                  75                  80
Ala Phe His Ser
```

<210> 33441
<211> 363
<212> PRT
<213> A.fumigatus

<400> 33441

```
Cys Glu Ser Gln Gly Asn Phe Phe Leu Val Phe His Ile Leu Thr Thr
```

```
1               5                   10                  15
Tyr Leu Gly Asp Ala Glu Leu Leu Gly Thr Thr Gly Lys Val Leu Gly
            20                  25                  30
Val Val Phe Glu Trp Leu Tyr Leu Ala Thr Leu Val Thr Cys Phe Val
        35                  40                  45
Leu Ser Leu Gly Asn Arg Pro Gly Gly Ser Asn Lys Phe Tyr Met Thr
    50                  55                  60
Met Val Tyr Phe Trp Ile Gly Ile Met Ile Tyr Leu Thr Phe Ala Ala
65                  70                  75                  80
Ile Phe Val Thr Val Lys Ser Ile Gln Lys Glu Val Ala Asp Asn Ser
                85                  90                  95
Phe Ser Val Gly Gln Leu Phe Ser Asn Ser Gln Phe Phe Ser Ile Phe
            100                 105                 110
Val Ser Leu Gly Ser Thr Tyr Val Met Trp Leu Leu Ala Ser Leu Ile
        115                 120                 125
Phe Phe Asp Pro Trp His Met Phe Thr Ser Val Ser Leu Leu Arg Thr
    130                 135                 140
Leu Ala Ile Cys Glu Ala Asn Leu Tyr Gln Phe Ile Gln Tyr Met Leu
145                 150                 155                 160
Leu Thr Pro Thr Tyr Ile Asn Val Leu Asn Ile Tyr Ala Phe Cys Asn
                165                 170                 175
Thr His Asp Ile Thr Trp Gly Thr Lys Gly Asp Asp Lys Ala Glu Lys
            180                 185                 190
Leu Pro Ser Ala Asn Met Lys Pro Gly Gly Lys Val Asp Val Asp Ile
        195                 200                 205
Pro Gln Asp Asp Gly Asp Leu Asn Ala Gln Tyr Glu Ala Glu Leu Ala
    210                 215                 220
Lys Phe Ala Gln Lys Pro Pro Lys Glu Thr Lys Val Ile Ser Glu Glu
225                 230                 235                 240
Glu Arg Gln Ala Asp Tyr Tyr Lys Gly Phe Arg Ser Ala Val Val Leu
                245                 250                 255
Ala Trp Val Phe Cys Asn Phe Ala Leu Gly Ala Val Val Leu Ser Ala
            260                 265                 270
Ala Gly Leu Asp Arg Phe Asn Ser Asp Lys Asn Ala Thr Asp Asp Asp
        275                 280                 285
Arg Ala Thr Ile Tyr Met Ala Val Val Leu Trp Ser Val Ala Gly Leu
    290                 295                 300
Ser Ile Phe Lys Phe Ile Gly Ala Met Trp Phe Leu Val Val Arg Met
305                 310                 315                 320
Val Cys Ser Arg Ile Phe Asp Phe Ser Ile Leu Leu Ser His Ala Asn
                325                 330                 335
Ala Ser His Ser Ser Glu Ala Phe Asp Val Ile Ser Leu Val Phe Ser
            340                 345                 350
Phe Pro Cys Asp Cys Thr His Pro Ala Leu Tyr
        355                 360
```

<210> 33442
<211> 69
<212> PRT
<213> A.fumigatus

<400> 33442

```
Thr Phe Gly Thr Gly Ala Phe Ile Ala Val Phe Gly Gly Tyr Gln Val
1               5                   10                  15
Gly Met Ala Lys Gln Arg Val Asn Gly Lys Asp Val Ala Gln His Phe
            20                  25                  30
```

```
Tyr Glu Tyr Thr Thr Gln Val Gly Phe Glu Phe Arg Gly Thr Arg Val
        35                  40                  45
His Ile Arg Gly Arg Ser Ala Cys Pro Val Gln Met Ile Phe Cys Leu
    50                  55                  60
Lys Glu Lys Asn Gln
65
```

<210> 33443
<211> 294
<212> PRT
<213> A.fumigatus

<400> 33443

```
Lys Ile Asn Ser His Arg Trp Leu Phe Gln Ala Phe Gly Arg Val Leu
1               5                   10                  15
Asp Pro Asn Ile Cys Val Leu Leu Asp Ala Gly Thr Lys Pro Gly Arg
            20                  25                  30
Asp Ser Ile Tyr Gln Leu Trp Lys Ala Phe Asp Val Glu Pro Met Cys
        35                  40                  45
Gly Gly Ala Cys Gly Glu Ile Lys Val Met Leu Ser His Gly Lys Lys
    50                  55                  60
Leu Leu Asn Pro Leu Val Ala Gly Gln Asn Phe Glu Tyr Lys Leu Ser
65                  70                  75                  80
Asn Ile Leu Asp Lys Pro Leu Glu Ser Ala Phe Gly Phe Ile Ser Val
                85                  90                  95
Leu Pro Gly Ala Phe Ser Ala Tyr Arg Tyr Val Ala Leu Gln Asn Asp
            100                 105                 110
Lys Asn Gly Gln Gly Pro Leu Glu Arg Tyr Phe Leu Gly Glu Lys Met
        115                 120                 125
His Gly Ala Asn Ala Gly Ile Phe Thr Ala Asn Met Tyr Leu Ala Glu
    130                 135                 140
Asp Arg Ile Leu Cys Phe Glu Ile Val Thr Lys Arg Asn Cys Arg Trp
145                 150                 155                 160
Leu Leu Gln Tyr Val Lys Ser Ser Thr Gly Glu Thr Asp Val Pro Asp
                165                 170                 175
Arg Met Ala Glu Phe Ile Leu Gln Arg Arg Arg Trp Leu Asn Gly Ser
            180                 185                 190
Phe Phe Ala Ala Val Tyr Ala Ile Ala His Phe Tyr Gln Ile Trp Arg
        195                 200                 205
Ser Asp His Ser Phe Met Arg Lys Phe Met Leu Leu Val Glu Phe Ile
    210                 215                 220
Tyr Gln Thr Ile Asn Met Ile Phe Ala Trp Phe Asn Ile Val Cys Ala
225                 230                 235                 240
Val Phe Ser Ser Pro Glu Trp Thr Asn Ala Asn Val Asn Arg Arg Ala
                245                 250                 255
Thr Ser Ser Trp Ser Phe Thr Phe Ser Pro Pro Thr Leu Val Thr Pro
            260                 265                 270
Asn Phe Trp Gly Leu Arg Val Lys Ser Leu Val Trp Ser Ser Ser Gly
        275                 280                 285
Ser Ile Leu Arg Pro Trp
    290
```

<210> 33444
<211> 119
<212> PRT
<213> A.fumigatus

<400> 33444
Pro Trp Gly Thr Tyr Phe Leu Pro Ala Ala Leu Phe Glu Asn Ser Met
1 5 10 15
Leu Leu Val Arg Ile Met Val Gly Lys Val Ala Asp Gly Asn His Leu
20 25 30
Val Lys Ile Leu Arg Asp Thr Pro Ile Arg Gln Gly Gln Leu Gly Trp
35 40 45
Asn Cys Val Tyr Trp Val Lys Glu Ala Leu Glu Thr Leu Lys Ala Asn
50 55 60
Pro Lys Ala Leu Gly Thr Ser Ile Ile Lys Trp Glu Lys Val Arg Ser
65 70 75 80
Glu Ala Met Asp Tyr Tyr Gln Arg Lys Lys Asp Gln His Arg Phe Asp
85 90 95
Gly Gln Gly Asn Phe Asn Met Arg Lys Val Pro Thr Tyr Asp Leu Met
100 105 110
Glu Arg Lys Glu Ile Ile Ile
115

<210> 33445
<211> 287
<212> PRT
<213> A.fumigatus

<400> 33445
Arg Gly Tyr Leu Asn Asp Ala Leu Thr Gly Ser Leu Gln Ser Asn Asp
1 5 10 15
Gly Ile Leu Gly Phe Asp Val Gly His Lys Val Gln Pro Thr Pro Thr
20 25 30
Leu Ile Pro Ser Leu Lys Lys Ile Lys His Leu Ala Cys Gly Asp Asn
35 40 45
His Val Leu Ala Leu Asp Glu Lys Gly Ala Val Phe Ser Trp Gly Ser
50 55 60
Gly Gln Gln Asn Gln Leu Gly Arg Arg Ile Ile Glu Arg Asn Arg Leu
65 70 75 80
Asn Gly Leu Gln Pro Arg Glu Phe Gly Leu Pro Lys Asn Ile Val His
85 90 95
Val Ser Cys Gly Ala Phe His Ser Phe Ala Val Asp Ala Thr Gly Lys
100 105 110
Val Tyr Ala Trp Gly Leu Asn Ser Phe Gly Glu Thr Gly Ile Arg Glu
115 120 125
Gly Ala Gly Asp Asp Glu Ala Ala Ile Ile His Pro Thr Val Val Asp
130 135 140
Ser Leu Ser Gly Lys Asn Ile Val Gln Leu Cys Gly Gly Ala His His
145 150 155 160
Ser Leu Ala Val Ser Lys Asp Gly Gln Cys Leu Val Trp Gly Arg Leu
165 170 175
Asp Gly Phe Gln Thr Gly Leu Lys Val Asp Thr Leu Pro Asp Asp Ala
180 185 190
Val Val Lys Asp Glu Arg Gly Arg Pro Arg Ile Leu Ile Glu Pro Thr
195 200 205
Pro Leu Pro Gly Ile Lys Ala Ser Val Val Ala Ala Gly Ser Asp His
210 215 220
Ser Ile Ala Ile Asp Val Asp Gly Arg Ala Trp Ser Trp Gly Phe Ser
225 230 235 240
Ala Thr Tyr Gln Thr Gly Gln Gly Thr Gln Asp Asp Ile Glu Val Ala

```
                245                 250                 255
Thr Val Val Glu Asn Thr Ala Val Arg Gly Lys Lys Leu Asn Trp Ala
            260                 265                 270
Gly Ala Gly Gly Gln Phe Ser Val Phe Thr Glu Pro Ala Thr Val
        275                 280                 285
```

<210> 33446
<211> 397
<212> PRT
<213> A.fumigatus

<400> 33446

```
Lys Lys Ser Asn Tyr Ser Arg Ile Ser Lys Ile Ala Phe Leu Ile Phe
1               5                  10                  15
Leu Trp Arg Pro Val Phe Gln Gln Ile His Thr Leu Leu Cys Ile Cys
            20                  25                  30
Ile Asn Leu Phe Pro Ser Ile Lys Thr Ala Ser Glu Ile Phe Ile Met
        35                  40                  45
Phe Val Ser Leu Leu Ser Pro Leu Met His Ser Val His Tyr Pro Pro
    50                  55                  60
Ser Pro Phe Pro Leu Glu Lys Val Phe Trp Tyr Ser Asn Lys Gln Lys
65                  70                  75                  80
Lys Lys Arg Glu Leu Pro Pro Lys Lys Arg Gly Pro Lys Ala Ala Ala
                85                  90                  95
Lys Pro Ser Thr Ser Thr Thr Lys Thr Thr Thr Thr Lys Lys Thr Thr
            100                 105                 110
Val Ala Lys Thr Ala Asn Lys Gly Gln Pro Ala Lys Thr Thr Ala Ala
        115                 120                 125
Ser Gln Leu Lys Ala Thr Ser Lys Lys Gln Ser Gln Ala Thr Asp Ala
    130                 135                 140
Ser Ala Lys Ser Arg Lys Ser Lys Ala Thr Ser Ala Ser Ala Ala Ala
145                 150                 155                 160
Ala Thr Lys Lys Arg Lys Ala Glu Glu Val Asp Lys Glu Pro Asp Val
                165                 170                 175
Lys Thr Lys Lys Ala Arg Val Thr Gln Pro Pro Val Lys Lys Pro Lys
            180                 185                 190
Pro Lys Val Val Ile Asn His Ala Pro Thr Thr Arg Leu Asn Val Tyr
        195                 200                 205
Val Cys Gly Glu Gly Ser Ser Gly Glu Leu Gly Leu Gly Thr Ala Lys
    210                 215                 220
Asn Ala Val Asp Val Lys Arg Pro Arg Leu Asn Pro His Leu Pro Ala
225                 230                 235                 240
Asp Arg Val Gly Val Val Gln Val Ala Val Gly Gly Met His Cys Val
                245                 250                 255
Ala Leu Thr Tyr Asp Asn Lys Ile Leu Thr Trp Gly Val Asn Asp Gln
            260                 265                 270
Gly Ala Leu Gly Arg Asp Thr Thr Trp Glu Gly Gly Tyr Lys Asp Ile
        275                 280                 285
Asp Asp Asn Lys Ser Asp Ala Asp Ser Asp Ser Asp Ser Asp Asp Asp
    290                 295                 300
Ser Gly Leu Asn Pro Tyr Glu Ala Thr Pro Thr Ala Ile Ser Ser Asp
305                 310                 315                 320
Ala Phe Pro Pro Glu Thr Val Phe Val Glu Val Ala Ala Gly Asp Ser
                325                 330                 335
Ser Ser Phe Ala Leu Thr Asp Asp Gly Gln Val Tyr Gly Trp Gly Thr
            340                 345                 350
```

```
Phe Arg Val Ser Tyr Thr Arg Arg Leu Leu Pro Thr Asn Phe Phe Phe
        355                 360                 365
Cys Ser Ser Ser Leu Pro Pro Val Lys Gly Leu Pro Gln Arg Cys Ala
    370                 375                 380
Asn Gly Phe Ser Pro Glu Gln Arg Arg Tyr Phe Arg Leu
385                 390                 395

<210> 33447
<211> 114
<212> PRT
<213> A.fumigatus

<400> 33447
Tyr Thr Leu Ser Phe Gly Pro Ser Thr Ala Gly Val Lys Thr Ile Gly
1               5                   10                  15
Pro Thr Asn Gly Pro Val Tyr Gly Pro Ile Ile Gly Gly Phe Val Phe
            20                  25                  30
Glu Asn Leu Gly Trp Arg Trp Thr Asn Trp Ile Val Leu Ile Ile Gly
        35                  40                  45
Gly Gly Val Leu Val Leu Met Ala Ser Ile Lys Glu Thr Tyr Ala Pro
    50                  55                  60
Val Ile Leu Arg Arg Arg Ala Ala Arg Lys Arg Lys Glu Thr Gln Asn
65                  70                  75                  80
Ser Arg Trp Trp Thr Arg Tyr Asn Gly Glu Gln Asp Phe Lys Ser Ser
                85                  90                  95
Leu Arg Ala Asn Leu Ser Arg Pro Phe Arg Met Leu Leu Thr Glu Pro
            100                 105                 110
Ile Trp


<210> 33448
<211> 220
<212> PRT
<213> A.fumigatus

<400> 33448
Arg Ser Asn Ser Ile Phe Trp Asp Val Tyr Val Ala Leu Val Tyr Gly
1               5                   10                  15
Val Leu Tyr Leu Cys Phe Val Ala Tyr Pro Ile Ala Phe Gln Gln Glu
            20                  25                  30
Arg Gly Trp Ser Pro Gly Ile Gly Gly Leu Ser Phe Ile Gly Ile Gly
        35                  40                  45
Val Gly Val Leu Ile Ala Ile Ala Cys Glu Pro Ile Phe Arg Lys Ile
    50                  55                  60
Ile Asn Leu His Arg Lys Ser Glu Asp Gly Ile Val Glu Pro Glu Ala
65                  70                  75                  80
Met Val Ser Ile Val Gly Phe Gly Ala Thr Leu Leu Thr Val Gly Gln
                85                  90                  95
Leu Trp Ser Ser Trp Thr Trp Thr Pro Ser Val His Trp Ile Val Pro
            100                 105                 110
Ile Leu Ala Gly Val Pro Phe Gly Ala Gly Asn Ala Cys Val Phe Ile
        115                 120                 125
Tyr Ala Ser Asn Tyr Leu Ala Arg Ser Tyr Gly Ile Tyr Ala Ala Ser
    130                 135                 140
Ala Leu Ala Gly Asn Met Leu Leu Arg Ser Ile Val Gly Ala Cys Leu
145                 150                 155                 160
```

```
Pro Leu Ala Gly Pro Ser Met Tyr Gly Asn Leu Gly Leu Asn Trp Ala
                165                 170                 175
Ser Thr Leu Leu Gly Leu Leu Glu Ala Ala Cys Ile Ser Ile Pro Val
            180                 185                 190
Val Phe Tyr Phe Tyr Gly His Lys Ile Arg Glu Ala Ser Pro Leu Leu
        195                 200                 205
Lys Lys Leu Lys Asp His Thr Leu Ser Pro His His
    210                 215                 220
```

<210> 33449
<211> 736
<212> PRT
<213> A.fumigatus

<400> 33449

```
Glu Arg Val Ser Phe Gln Pro Arg Pro Cys Arg Arg Phe Ile Leu Ser
1               5                  10                  15
Leu Gly Ser Cys Asp Ser Cys Leu Val Val Asp Asp Glu Leu Asn Val
            20                  25                  30
Leu Pro Ile Ser Gly Gly Lys Asn Val Lys Pro Leu Pro Pro Pro Glu
        35                  40                  45
Thr Leu Asp Asp Asn Thr Gly Thr Lys Lys Glu Leu Lys Glu Ile Lys
    50                  55                  60
Asp Ser Leu Ala Asp Thr Gln Pro Val Gly Ser Leu Val Ser Leu Ala
65                  70                  75                  80
Arg Thr Val Asp Gln Ala Lys Ala Leu Leu Thr Phe Val Asp Val Ile
                85                  90                  95
Ala Glu Lys Thr Leu Arg Ser Thr Val Thr Leu Thr Ala Ala Arg Gly
            100                 105                 110
Arg Gly Lys Ser Ala Ala Leu Gly Val Ala Ile Ala Ala Ala Val Ala
        115                 120                 125
His Gly Tyr Ser Asn Ile Phe Ile Thr Ser Pro Ser Pro Glu Asn Leu
    130                 135                 140
Lys Thr Leu Phe Glu Phe Ile Phe Lys Gly Phe Asp Ala Leu Gly Tyr
145                 150                 155                 160
Leu Asp His Val Asp Tyr Thr Ile Leu Gln Ser Thr Asn Pro Asp Phe
                165                 170                 175
Asn Lys Ala Ile Val Arg Val Asn Ile His Arg Gln His Arg Gln Thr
            180                 185                 190
Ile Gln Tyr Ile Gln Pro Gln Asp Ala His Val Leu Gly Gln Ala Glu
        195                 200                 205
Leu Leu Val Ile Asp Glu Ala Ala Ala Ile Pro Leu Pro Leu Val Arg
    210                 215                 220
Lys Leu Met Gly Pro Tyr Leu Val Phe Met Ala Ser Thr Ile Asn Gly
225                 230                 235                 240
Tyr Glu Gly Thr Gly Arg Ser Leu Ser Leu Lys Leu Ile Gln Gln Leu
                245                 250                 255
Arg Glu Gln Ser Arg Gly Gly Leu Lys Ala Asn Gly Gln Asp Asp Thr
            260                 265                 270
Asp Ile Ala Asp Arg Ala Thr Gly Lys Ala Ala Lys Ser Ala Glu Lys
        275                 280                 285
Asn Leu Gly Gly Arg Ser Leu Arg Glu Ile Thr Leu Ser Glu Pro Ile
    290                 295                 300
Arg Tyr Ala Pro Gly Asp Ser Val Glu Lys Trp Leu Asn Lys Val Leu
305                 310                 315                 320
Cys Leu Asp Ala Thr Leu Pro Lys Ser Lys Ile Asn Thr Gln Gly Cys
```

```
                325                 330                 335
Pro His Pro Ser Gln Cys Gln Leu Leu Gln Val Asn Arg Asp Thr Leu
            340                 345                 350
Phe Ser Phe His Pro Val Ser Glu Lys Phe Leu Gln Gln Met Met Ala
        355                 360                 365
Leu Tyr Val Ala Ser His Tyr Lys Asn Thr Pro Asn Asp Leu Gln Leu
    370                 375                 380
Met Ser Asp Ala Pro Ala His Gln Leu Phe Val Leu Val Pro Pro Ile
385                 390                 395                 400
Asp Glu Glu Ala Thr Lys Leu Pro Glu Pro Leu Cys Val Ile Gln Val
                405                 410                 415
Ala Leu Glu Gly Arg Ile Ser Arg Gln Ser Val Leu Asn Ser Leu Ser
            420                 425                 430
Arg Gly Gln Arg Ala Gly Gly Asp Leu Ile Pro Trp Leu Val Ser Gln
        435                 440                 445
Gln Tyr Gln Asp Glu Asp Phe Ala Ser Leu Ser Gly Ala Arg Ile Val
    450                 455                 460
Arg Ile Ala Thr Asn Pro Glu Tyr Met Asn Met Gly Tyr Gly Ser Arg
465                 470                 475                 480
Ala Leu Glu Leu Leu Ile Asp Phe Tyr Glu Gly Lys Phe Thr Asp Leu
                485                 490                 495
Ser Glu Lys Ile Pro Asp Val Gln Glu Glu Met Val Arg Val Thr Asp
            500                 505                 510
Glu Glu Leu Ala Asn Ser Ser Leu Leu Asp Asp Asn Ile His Val Arg
        515                 520                 525
Asp Ile Arg Ser Met Pro Pro Leu Phe Gly Lys Leu Ser Glu Arg Arg
    530                 535                 540
Pro Asp Ala Leu Asp Tyr Val Gly Val Ser Tyr Gly Leu Thr Pro Pro
545                 550                 555                 560
Leu His Lys Phe Trp Lys Arg Ala Ser Phe Val Pro Val Tyr Leu Arg
                565                 570                 575
Gln Thr Pro Asn Glu Leu Thr Gly Glu His Ser Cys Val Met Leu Arg
            580                 585                 590
Thr Leu Ala Ser Ala Ala Ser Asp Ala Ser Trp Leu Gly Glu Phe Ala
        595                 600                 605
Arg Asp Phe His Lys Arg Phe Ile Ala Leu Leu Ser Tyr Gln Phe Arg
    610                 615                 620
Glu Phe Pro Ser Val Leu Ser Leu Ser Ile Cys Glu Ser Val Thr Ala
625                 630                 635                 640
Gly Ala Lys Leu Asp Thr Ser Tyr Thr Pro Ser Leu Leu Thr Lys Ser
                645                 650                 655
Asp Leu Asp Ala Ala Phe Ser Pro Phe Asp Leu Lys Arg Leu Asp Ser
            660                 665                 670
Tyr Ala Asn Asn Leu Leu Asp Tyr His Val Ile Leu Asp Met Val Pro
        675                 680                 685
Thr Ile Ala Glu Tyr Tyr Phe Ser Gly Arg Leu Ser Gly Lys Val Asn
    690                 695                 700
Leu Ser Gly Val Gln Gln Ser Ile Leu Leu Ala Ile Gly Leu Gln Arg
705                 710                 715                 720
Lys His Leu Asp Val Phe Thr His Gly Gly Ala Glu Gly Ser Arg Ala
                725                 730                 735
```

<210> 33450
<211> 99
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (99)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33450
Phe Arg Leu Gln Trp Ile Glu Glu Ala Asn Glu Arg Cys Pro Gly Val
1 5 10 15
Pro Ile Ile Leu Val Gly Leu Lys Lys Asp Leu Arg Glu Asp Pro Leu
20 25 30
Ala Ile Glu Glu Met Arg Lys Lys Ser Leu Arg Phe Val Thr Ser Arg
35 40 45
Glu Gly Ser Glu Thr Ala Thr Gln Ile Gly Ala Arg Lys Tyr Leu Glu
50 55 60
Cys Ser Ser Leu Thr Gly Glu Gly Val Asp Asp Val Phe Glu Ala Ala
65 70 75 80
Thr Arg Ala Ala Leu Leu Thr Phe Asp Lys Arg Lys Ser Ser Cys Cys
85 90 95
Ile Val Xaa

<210> 33451
<211> 107
<212> PRT
<213> A.fumigatus

<400> 33451
Pro Tyr His Gln Val Pro Thr Val Phe Glu Asn Tyr Val Thr Asp Cys
1 5 10 15
Arg Val Asp Gly Arg Ser Val Gln Leu Ala Leu Trp Asp Thr Ala Gly
20 25 30
Gln Glu Asp Tyr Glu Arg Leu Arg Pro Leu Ala Tyr Ser Lys Ala His
35 40 45
Val Ile Leu Ile Gly Phe Ala Val Asp Thr Pro Asp Ser Leu Glu Asn
50 55 60
Val Lys His Lys Val Arg Ser Cys Trp Asn Ser Leu Ile Phe Ala Thr
65 70 75 80
Gly Gln Leu Thr Ser Ser Gly Cys Ser Gly Leu Arg Lys Gln Thr Ser
85 90 95
Asp Val Pro Ala Tyr Leu Ser Phe Leu Ser Asp
100 105

<210> 33452
<211> 113
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13),(15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33452
Leu Ile His Ala Arg Ile Arg Arg Ala Arg Gly Glu Xaa His Xaa Thr
1 5 10 15

```
Met Gln His Glu Leu Phe Arg Leu Ser Asn Val Arg Arg Ala Ala Arg
            20                  25                  30
Val Ala Ala Ser Lys Thr Ser Ser Thr Pro Ser Pro Val Asn Asp Glu
        35                  40                  45
His Ser Arg Tyr Phe Leu Ala Pro Ile Cys Val Ala Val Ser Leu Pro
    50                  55                  60
Ser Leu Glu Val Thr Lys Arg Arg Asp Phe Phe Arg Ile Ser Ser Ile
65                  70                  75                  80
Ala Arg Gly Ser Ser Arg Lys Ser Phe Phe Ser Pro Thr Arg Met Ile
                85                  90                  95
Gly Thr Pro Gly His Arg Ser Phe Ala Ser Ser Ile His Cys Ser Arg
            100                 105                 110
Asn
```

<210> 33453
<211> 101
<212> PRT
<213> A.fumigatus

<400> 33453

```
Tyr Phe Ser Arg Ser Pro Pro Cys Asp Ser Gly Ala Thr Asp Leu His
1               5                   10                  15
Pro Leu Arg Ser Ile Phe Phe Cys Arg Leu Thr Trp Thr Leu Pro Ala
            20                  25                  30
Ser Pro Ala Cys Gly Gln Arg Val Leu Phe His Pro Ser Ser Ala Leu
        35                  40                  45
Ile Phe Pro Ile Leu Ser Ala Leu Asp Leu Leu Leu Ser Leu Phe Asn
    50                  55                  60
Ser Pro Pro Pro Ser Ser Gln Val Ser His Ser Cys Glu Gly Leu Leu
65                  70                  75                  80
Ala Leu Asp Ile Leu Phe Val Gln Leu Ser Arg Ser His Phe Thr Pro
                85                  90                  95
Leu Ala Ala Arg Arg
            100
```

<210> 33454
<211> 217
<212> PRT
<213> A.fumigatus

<400> 33454

```
Asn Arg Asn Gly Cys Ala Ser Ser Thr Ala Arg Val Asn Phe Ser Ser
1               5                   10                  15
Ala Leu Ile Lys Gly Phe Gly Phe Asn Gly Ile Tyr Ala Thr Leu Leu
            20                  25                  30
Gln Leu Pro Thr Gly Val Thr Gln Ala Val Val Val Pro Ile Cys Gly
        35                  40                  45
Leu Ile Ala Thr Tyr Val Arg Asp Ser Arg Cys Leu Val Leu Ala Ala
    50                  55                  60
Val Cys Leu Ile Pro Phe Gly Gly Leu Leu Gly Ile Arg Phe Thr Ser
65                  70                  75                  80
Leu Asp His Arg Trp Thr Leu Val Gly Cys Thr Trp Leu Gln Tyr Ile
                85                  90                  95
Ile Gly Ala Pro Ile Ile Val Ser Trp Asn Leu Leu Ala Thr Asn Val
            100                 105                 110
```

```
Ala Gly His Thr Lys Arg Ser Met Ala Asn Gly Met Trp Phe Thr Met
        115                 120                 125
Phe Ala Ala Gly His Val Ala Gly Ala Lys Ile Phe Phe Ala Arg Glu
    130                 135                 140
Ala Pro Arg Tyr His Ser Ala Leu Ala Gly Leu Leu Ile Cys Tyr Ala
145                 150                 155                 160
Gly Met Ile Val Leu Ala Leu Ala Ser Tyr Thr Tyr Met Lys Trp Glu
                165                 170                 175
Asn Leu Arg Arg Asp Arg Lys Pro Ser Pro Asp Asp Asp Val Ser Arg
            180                 185                 190
Arg Glu Glu Ala Ala Ile Leu Asp Gly Phe Lys Asp Leu Thr Asp Met
        195                 200                 205
Lys Ser Lys Asn Phe Arg Tyr Ala Leu
    210                 215
```

<210> 33455
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33455

```
Pro Tyr Leu Asp His Lys Phe Arg Ser Arg Val Ile Pro Leu Gly Gly
1               5                   10                  15
Arg Asn Asp Pro Val Asn Glu Lys Gly Leu Gln His Tyr Val Lys Phe
            20                  25                  30
Val Asp Asp Leu Leu Ala Ala Gly Ile Thr Pro Leu Val Thr Ile Phe
        35                  40                  45
His Trp Asp Leu Pro Asp Ala Leu Asp Lys Arg Tyr Gly Val Phe
    50                  55                  60
```

<210> 33456
<211> 111
<212> PRT
<213> A.fumigatus

<400> 33456

```
Pro Pro Arg Gly Pro Asp Arg Glu Arg Arg Leu Pro Cys Ala Ile Phe
1               5                   10                  15
Pro Arg Val Tyr Arg Cys His Gly Gly Arg Leu His Pro Gly Arg Cys
            20                  25                  30
Glu Cys Pro Arg Leu His Gly Val Glu Leu Asp Gly Val Ser Phe Val
        35                  40                  45
Phe Asp Ser Glu Val Pro Val His Leu Ala Asp Lys Ser Ser Phe Val
    50                  55                  60
Cys Ser Asn Phe Glu Trp Ala Glu Gly Tyr Glu Thr Arg Phe Gly Val
65                  70                  75                  80
Thr Phe Val Asp Tyr Ala Asn Asn Gln Arg Arg Ile Pro Lys Lys Ser
                85                  90                  95
Ala Lys Val Leu Arg Glu Ile Phe Asp Gln Tyr Ile Glu Lys Ala
            100                 105                 110
```

<210> 33457
<211> 83
<212> PRT
<213> A.fumigatus

<400> 33457
Leu Ile Val Ala Val Ile Ser Leu Ser Ser Tyr Gln Ile Glu Gly Ala
1 5 10 15
Val Asp Glu Asp Gly Arg Gly Pro Ser Ile Trp Asp Thr Phe Cys Lys
20 25 30
Ile Pro Gly Lys Ile Ala Gly Gly Ala Ser Gly Glu Val Ala Cys Asp
35 40 45
Ser Tyr His Arg Thr His Glu Asp Ile Ala Leu Leu Lys Glu Cys Gly
50 55 60
Ala Lys Ala Tyr Arg Phe Ser Ile Ser Trp Tyr Ile Phe Cys Thr Ala
65 70 75 80
Ser Gly His

<210> 33458
<211> 222
<212> PRT
<213> A.fumigatus

<400> 33458
Asp Trp His Tyr Leu Glu Trp Tyr Glu Phe Trp Pro Pro Cys Ala Gln
1 5 10 15
Leu Asp Glu Val Val Thr Asp Gln Val Pro Gly Asp Trp Ala Glu Pro
20 25 30
Trp Asp Pro Glu Asn Pro Ala Asp Val Glu Ala Cys Asp Arg Lys Ile
35 40 45
Glu Phe Ala Ile Ser Trp Phe Ala Asp Pro Ile Tyr His Gly Lys Tyr
50 55 60
Pro Asp Ser Met Val Lys Gln Leu Gly Asp Arg Leu Pro Thr Trp Thr
65 70 75 80
Pro Glu Asp Ile Ala Leu Val His Gly Ser Asn Asp Phe Tyr Gly Met
85 90 95
Asn His Tyr Cys Ala Asn Tyr Ile Lys Ala Lys Thr Gly Glu Pro Asp
100 105 110
Pro Asn Asp Val Ala Gly Asn Leu Glu Ile Leu Leu Gln Asn Lys Asn
115 120 125
Gly Glu Trp Ile Gly Pro Glu Thr Gln Ser Pro Trp Leu Arg Pro His
130 135 140
Pro Ile Gly Phe Arg Lys Leu Leu Lys Trp Leu Ser Asp Arg Tyr Asn
145 150 155 160
Gln Pro Lys Ile Tyr Val Thr Glu Asn Gly Thr Ser Leu Lys Gly Glu
165 170 175
Ser Asp Leu Pro Val Asp Gln Ile Val Asn Asp Asp Phe Arg Val Gln
180 185 190
Tyr Phe Arg Glu Tyr Ile Ala Ala Met Ala Asp Ala Tyr Thr Leu Asp
195 200 205
Gly Val Asn Val Arg Ala Tyr Met Ala Trp Ser Leu Met Glu
210 215 220

<210> 33459
<211> 155
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222> (89)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33459
Lys Gly Ser Pro Ala Leu Cys Gln Val Arg Arg Arg Leu Ala Arg Gly
1 5 10 15
Gly Tyr Tyr Ser Ser Arg Tyr His Leu Pro Leu Gly Ser Ser Arg Arg
20 25 30
Pro Arg Gln Ala Val Arg Cys Leu Leu Asn Lys Glu Glu Phe Val Ala
35 40 45
Asp Phe Ala Asn Tyr Ala Arg Val Met Phe Asn Ala Phe Gly Ser Lys
50 55 60
Val Lys Tyr Trp Ile Thr Phe Asn Glu His Trp Cys Ser Ser Val Leu
65 70 75 80
Gly Tyr Asn Val Gly Gln Phe Ala Xaa Gly Arg Thr Ser Asp Ser Thr
85 90 95
Lys Ser Pro Val Gly Asp Gly Ser Arg Glu Arg Trp Ile Val Gly His
100 105 110
Asn Ile Val Val Ala His Gly Ala Ala Val Lys Ile Tyr Arg Glu Glu
115 120 125
Phe Lys Pro Arg Asp Gly Gly Glu Ile Gly Ile Thr Leu Asn Gly Thr
130 135 140
Ser Ser Gly Leu His Val His Ser Leu Met Lys
145 150 155

<210> 33460
<211> 419
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (406)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33460
His Arg Leu Cys Pro Cys Pro Ser His Tyr Ser Pro Gly Leu Pro Leu
1 5 10 15
Pro Pro Asn Phe Asn Tyr Asn Arg Leu His Tyr Tyr Cys Phe His Leu
20 25 30
Asn Ser His Asn Phe Leu Pro Ser Pro Ser Leu Phe His Pro Pro Thr
35 40 45
Gln Ser His Ile Ser Glu Thr Ile Leu Phe Asn Ser Ala His Phe Lys
50 55 60
Ile Tyr Arg Pro His Ile Phe Ile Phe Leu Ser Arg Leu Thr Ala Asp
65 70 75 80
Trp Asn Ser Pro Gly Ala Asn His Phe Ala Pro Gly Ala Phe Leu Trp
85 90 95
Cys Ala His Thr Lys Pro Phe Pro Ser Phe Asn Thr Thr Thr Ile Arg
100 105 110
Ser Ile Tyr Thr Ile Leu His Ser Val Ser Leu Ile His Trp Ile Ser
115 120 125
Lys Tyr Ala Thr Met Leu Leu Pro Ser Ala Leu Pro Cys Asp Met Arg
130 135 140
Arg Ser Ser Thr Arg Ser Arg Phe Thr Pro Asn Arg Leu Phe Ser Thr
145 150 155 160

```
Pro Pro Pro Ser Asp Asn Asp Phe Phe Pro Ser Ser Asn Gly Leu Leu
                165                 170                 175
Gly Thr Cys Arg Ala Leu Gln Ser Leu Leu Ser Gly Ser Pro Ala Pro
            180                 185                 190
Pro Ser Arg Arg Ala Lys Pro Glu Arg Leu Gln Ser Pro Phe His Leu
        195                 200                 205
Ala Ser Ser Thr Thr Ser Ser Ser Ser Thr Arg Pro Arg Lys Pro Lys
    210                 215                 220
Thr Gln Thr Arg Ser Gln Arg Ser Ser Ala Lys Thr Ser Ser Lys Leu
225                 230                 235                 240
Ala Arg Ala Ala Asn Lys Arg Thr Arg Ala Ser Tyr Glu Ala Asp Ser
                245                 250                 255
Asp Ala Asp Ser Glu Asp His Thr Pro Arg Ser Arg Phe Ser Thr Pro
            260                 265                 270
Lys Arg Arg Arg Tyr Val Pro Tyr Asp Leu Pro Leu Gly Leu Ser Gln
        275                 280                 285
Ser Asp Phe Tyr Thr Leu Asn Ser Pro Pro Thr Thr Gln Ser Pro Pro
    290                 295                 300
Ser Pro Val Pro Arg Arg Gln Gln Gly Leu Cys Asp Glu Val Arg Ala
305                 310                 315                 320
Pro Leu Pro Pro Ser Pro Ser Pro Ser Ser Gln Ser Gln Phe Asp Pro
                325                 330                 335
Asp Ala Ala Leu Pro Ser Ile Glu Glu Ile Gly Pro Glu Thr Trp Thr
            340                 345                 350
Ser Glu Asp Asp Gln Gln Leu Val Glu Val Val Leu Glu Lys Phe Gln
        355                 360                 365
Leu Ser Lys Arg Asp Trp Asp Glu Cys Ala Arg Gln Leu Gly Lys Asp
    370                 375                 380
Gln Asp Ser Ile Gly Arg Arg Trp Glu Thr Leu Ile Gly Glu Gly Asn
385                 390                 395                 400
Val Gly Leu Arg Arg Xaa Arg Arg Met Val Arg Gly Arg Ile Asp Glu
                405                 410                 415
Ser Trp Leu
```

<210> 33461
<211> 89
<212> PRT
<213> A.fumigatus

<400> 33461

```
Leu Ile Ala Val Cys Gly Thr Pro His Ser Asp Cys Asp Thr Asp Cys
1               5                   10                  15
Ala His Val Pro Pro Thr Ile Leu Gln Ala Ser Leu Ser Pro Gln Ile
            20                  25                  30
Leu Ile Ile Ile Ala Ser Ile Ile Ile Val Phe Thr Ser Ile Pro Thr
        35                  40                  45
Thr Phe Ser Leu Leu His His Tyr Ser Ile His Gln Leu Ser Arg Ile
    50                  55                  60
Ser Arg Lys Leu Phe Tyr Ser Thr Ala Leu Ile Ser Lys Ser Thr Val
65                  70                  75                  80
His Thr Phe Leu Phe Phe Ser Arg Val
                85
```

<210> 33462
<211> 87

<212> PRT
<213> A.fumigatus

<400> 33462
Trp Ser Phe Gln Pro Arg Gly Glu Asp Leu Thr Ser Met Thr Asn His
1 5 10 15
Lys Ala Trp Ser Arg Pro Pro Leu Ser Leu Ser Phe Ser Leu Leu Met
20 25 30
Phe Thr Ser Ser Gly Leu Leu Val Arg Tyr Leu Lys Val Phe Glu Lys
35 40 45
Ser Asn Tyr Ser Ser Val Lys Trp Val Arg Tyr Met Thr Arg Ala Gly
50 55 60
Ser Tyr Glu Ile Arg Tyr Phe Thr Ser Ser Leu Val Pro Pro Val Tyr
65 70 75 80
Met Arg Leu Ser Glu Arg Asp
85

<210> 33463
<211> 71
<212> PRT
<213> A.fumigatus

<400> 33463
Ser Arg Pro Ser Leu Ala Arg Leu Arg Leu Gly Leu Gly Val Leu Asp
1 5 10 15
Ile Thr Asp Thr Ser Val His Leu Leu Tyr Pro Ala Ala Ile Met Arg
20 25 30
Ser Arg Tyr Ser Val Ser Thr Lys Thr Gly Asn Pro Val Gly Asp Ile
35 40 45
Glu Ser Leu Asp Thr Met Ala Thr Leu Ser Lys Ile Asn Ile Asp Leu
50 55 60
His Thr Arg Ile His Ser Cys
65 70

<210> 33464
<211> 268
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12),(96)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33464
Thr Ile Ser Gly Pro Pro Trp Arg Ser Ser Ala Xaa Ser Gly Ile Ser
1 5 10 15
Pro Arg Pro Thr Ile Thr Leu Trp Gly Tyr Ser Gly Gly Ser Leu Ala
20 25 30
Ser Gly Leu Ala Ala Glu Leu Arg Gly Trp Tyr Ala Pro Glu Leu Asn
35 40 45
Ile Ala Gly Ala Ala Leu Gly Gly Thr Val Pro Lys Ile Met Pro Leu
50 55 60
Phe Asn Thr Val Asn Lys Gly Ile Tyr Ala Gly Leu Leu Pro Ala Gly
65 70 75 80
Met Gln Gly Leu Phe Asn Glu Tyr Pro Ala Ile Glu Lys Ile Leu Xaa

```
                85                  90                  95
Asp His Leu Val Pro Ala Lys Lys Ala Asp Phe Val Lys Thr Lys Asn
            100                 105                 110
Leu Cys Ile Val Glu Asp Leu Leu Thr Tyr Ser Phe Gln Asp Phe Tyr
        115                 120                 125
Arg Tyr Ile Thr Asp Ala Asn Met Leu Lys Asp Pro Glu Val Thr Arg
    130                 135                 140
Val Leu Gly Glu Asn Ala Met Gly Gln His Val Pro Asp Ile Pro Leu
145                 150                 155                 160
Phe Val Tyr Lys Ser Thr Asn Asp Asp Val Ser Pro Val Gly Asp Thr
                165                 170                 175
Asp Ala Leu Val Ser Gly Tyr Cys Ala Ala Gly Gly Lys Val Glu Tyr
            180                 185                 190
Tyr Arg Asp Glu Leu Ser Asn His Ala Thr Met Ala Val Ile Gly Val
        195                 200                 205
Pro Asn Ala Leu Leu Trp Leu Lys Asp Arg Met Asn Gly Val Pro Ala
    210                 215                 220
Arg Ala Gly Cys Lys Thr Gln Thr Ala Leu Thr Gly Leu Leu Asp Pro
225                 230                 235                 240
Arg Thr Leu Ala Val Leu Gly Ile Asp Leu Ile Lys Val Leu Leu Ala
                245                 250                 255
Leu Leu Ser Ala Pro Val Gly Thr Phe Val Ile Gly
            260                 265
```

<210> 33465
<211> 90
<212> PRT
<213> A.fumigatus

<400> 33465

```
Arg Leu Ser Val Arg Leu Ile Lys Pro Cys Lys Gly Ser Met Thr Pro
1               5                   10                  15
Gly Arg Gly Ser Thr Gln Cys Lys Asp Ser Phe Trp Gly Leu Glu Glu
            20                  25                  30
Val Cys Lys Ile Leu Leu Leu Thr Arg Asp Arg Lys Thr Ile Tyr Phe
        35                  40                  45
Gly Asp Ile Gly Arg Asn Ala Asn Thr Ile Lys Glu Phe Phe Gly Cys
    50                  55                  60
His Ile Thr Pro Cys Pro Pro Lys Ala Asn Pro Val Glu His Ile Asn
65                  70                  75                  80
Asp Val Val Thr Gly Met Gly Gly Asp Gly
                85                  90
```

<210> 33466
<211> 126
<212> PRT
<213> A.fumigatus

<400> 33466

```
Val Ser Val Ile His Val Ile Cys Thr Arg Gln Thr Ala Ser Ala Cys
1               5                   10                  15
His Ser Ala Arg Gln Met Leu Thr Pro Leu Ala Leu Gln Val Ser Pro
            20                  25                  30
Ile Gln Asn Ala Val Tyr Leu Met Ser Met Ala Ile Ile Ala Gly Ala
        35                  40                  45
Arg Thr Leu His Gln Val Arg Ala Thr Val Lys Ala Gly Phe Met Pro
```

```
    50                  55                  60
Val Met Lys Val Ser Trp Ile Thr Ser Pro Leu Ala Leu Ala Phe Ala
65                  70                  75                  80
Gln Lys Phe Leu Pro Glu His Thr Trp Val Pro Phe Phe Asn Ile Ile
                85                  90                  95
Gly Phe Phe Ile Gly Thr Tyr Val Asn Thr His Thr Lys Lys Lys Arg
            100                 105                 110
Leu Glu Ala Leu Arg Lys Val Gln Ser Thr Ser Arg Thr Lys
        115                 120                 125
```

<210> 33467
<211> 67
<212> PRT
<213> A.fumigatus

<400> 33467

```
Ser Leu Asp Ala Pro Glu Glu Asn Pro Asp Gly Ile Gly Ile Glu Gly
1               5                   10                  15
Ala Met Arg Phe Leu Gly Asp Ile Gln Val Gln Leu Asp Glu Val Ala
            20                  25                  30
Cys Leu Gly Ile Ala Glu Leu Leu Lys Ser Pro Ser Met Gly Glu Phe
        35                  40                  45
Thr Arg Glu Gly Phe Val Asn Gly Trp Arg Gly Val Gly Ser Val Ser
    50                  55                  60
Ser Gln Ser
65
```

<210> 33468
<211> 530
<212> PRT
<213> A.fumigatus

<400> 33468

```
Ala Asp Ile Thr Thr Pro Cys Thr Met Ser Ser Leu Lys Leu Arg Glu
1               5                   10                  15
Pro Thr Ser Ala Asp Ser Thr Thr Leu Leu Ser Pro Ser Asn Gly Leu
            20                  25                  30
Thr Ala Leu Val Gly Met Gly Asp Leu Thr Ile Gly Pro Thr Gln Thr
        35                  40                  45
Lys Val Phe Asn Leu Thr Ser Val Pro Arg Glu Ala Gly Asp Ser Arg
    50                  55                  60
Val Ala Ser Ile Thr Leu Leu Ile Glu Asp Glu Arg Phe Asp Leu Ala
65                  70                  75                  80
Cys Ala Ile Thr Asp Leu Thr Gln Arg Asp Ser Val Trp Trp Gln Gln
                85                  90                  95
Thr Thr Ser Gly Val Ala Arg Lys Arg Val Gly Lys Asp Arg Asp Thr
            100                 105                 110
Cys Arg Cys Lys Ile Met Pro Lys Pro Pro Lys Ile Arg Ile Ser Thr
        115                 120                 125
Pro Asn Ile Arg Glu Thr Tyr Tyr Thr Asn Glu Arg Val Val Leu Glu
    130                 135                 140
Leu Asp Ile Tyr Asn Glu Glu Asp Glu Ala Ala Asp Val Ser Ala Glu
145                 150                 155                 160
Val Arg Leu Phe Gly His Pro Asp Ser Ala Ala Gln Ile Leu Trp Leu
                165                 170                 175
Asp Glu Glu Gly Glu Ala Ile Ser Pro Arg Ser Gln Asp Ser Ser Pro
```

```
            180                 185                 190
Ile Gln Gly Ala Arg His Val Ala Lys Arg Ser Ile Gly Ile Met Asp
        195                 200                 205
Arg Ser Ser Arg Gln Gln Leu Met Leu Val Leu Thr Asp Thr Leu Glu
    210                 215                 220
Pro Ser Thr His Glu Leu Gln Ile Thr Cys Val Tyr Asn Leu Leu Ser
225                 230                 235                 240
Asp Phe Gln Thr Pro Ile Ile Ala Thr His Arg Leu Gly Leu Ser Ile
                245                 250                 255
Val Arg Pro Phe Glu Ala Asn Tyr Asp Phe Leu Pro Arg Leu His Pro
            260                 265                 270
Glu Pro Trp Pro Asp Phe Phe Ile Ile Asp Asp Asp Leu Val Gly Asp
        275                 280                 285
Glu Thr Leu Ser Lys Pro Arg Gly Leu Arg Gln Arg Trp Cys Leu Asn
    290                 295                 300
Ser Lys Val Val Ser Phe Ala Leu Glu Pro Leu Val Ile Glu Arg Ile
305                 310                 315                 320
Thr Leu Val Leu Leu Ser Leu Gly Gly Gly Ala Val Cys Asp Ile Gly
                325                 330                 335
Ser Glu Ile Val Ala Asp Pro His Ala Leu Glu Ile Arg Pro Glu Glu
            340                 345                 350
Leu Arg Glu Ser Thr Phe Ile Leu Glu Val Gln Lys Leu Val Leu Gly
        355                 360                 365
Asp Arg Arg Pro Thr Ala Leu Asn Leu Ala Leu Glu Ile Gln Trp Arg
    370                 375                 380
Arg Ile Gly Thr Asp Ala Ala Ala Ser Thr Ala Asp Ser Ala Asn Val
385                 390                 395                 400
Thr Thr Thr Thr Leu Pro Ile Pro Arg Phe Val Ile Pro Ala Gly Glu
                405                 410                 415
Pro Arg Val Leu Ala Ser Ala Leu Asn Ser Glu Ala Ile Pro Gly Leu
            420                 425                 430
Ile His Leu Asp Tyr Thr Leu Glu Asn Pro Ser Met His Phe Leu Thr
        435                 440                 445
Phe Asn Leu Ala Met Glu Ala Ser Glu Gln Phe Ala Phe Ser Gly Pro
    450                 455                 460
Lys Thr Ala Val Val Gln Leu Val Pro Leu Ser Arg His Thr Val Arg
465                 470                 475                 480
Tyr Asn Leu Leu Ala Ser Lys Arg Gly Leu Trp Ile Gln Pro Gln Leu
                485                 490                 495
Asn Val Val Asp Thr Tyr Phe Asn Lys Ala Leu Arg Val Gln Pro Thr
            500                 505                 510
Glu Asp Met Arg Ser Asp Lys Lys Gly Ile Leu Ile Trp Val Asp Ala
        515                 520                 525
Asp Asp
    530
```

<210> 33469
<211> 209
<212> PRT
<213> A.fumigatus

<400> 33469

```
Arg His Val Asn Arg His Leu Arg Trp Asn Leu Asn Gln Arg Val Cys
1               5                   10                  15
Ala Thr Tyr Arg Ala Arg Val Val Arg Ser Val Asp Glu Asp Cys Ser
            20                  25                  30
```

```
Arg Leu Asp Leu Leu Asn Glu Ile Leu Ser Ser Arg Asp Ile Leu Arg
        35                  40                  45
Pro Asn Ala Cys Cys Glu Ser Glu Leu Ala Val Val His Glu Leu Asp
    50                  55                  60
Cys Leu Leu Val Ala Leu Asp Leu His His Gly Lys His Arg Ala Lys
65                  70                  75                  80
Ser Leu Leu Arg His Asp Thr His Ile Val Ile Asp Ala Cys Gln Gln
                85                  90                  95
Cys Gly Leu Asp Val Ile Thr Ile Gly Arg Lys Ile Val Glu Arg Leu
            100                 105                 110
Val Gly Arg Gly Phe Val Pro Ser Ala Leu Leu Asp Arg Leu Ser Asp
        115                 120                 125
Met Cys Gln Asn Arg Leu Leu Arg Ala Leu Arg Asp Asp Arg Pro Asn
    130                 135                 140
Leu Cys Ser Leu Leu Arg Arg Ile Pro Asn Thr Ile Phe Ala Gln His
145                 150                 155                 160
Pro Leu His Phe Cys Asp Lys Arg Leu Val Asp Val Leu Val Asp Val
                165                 170                 175
His Pro Leu Asn Arg Ala Pro Ala Leu Thr Thr Val Glu Asp Cys Pro
            180                 185                 190
Ile Asn Asn Leu Pro Pro Pro Ser Thr Pro His Ser Arg Ser Ser Arg
        195                 200                 205
Thr
```

<210> 33470
<211> 60
<212> PRT
<213> A.fumigatus

<400> 33470

```
Cys Gln Glu Leu Gly Pro Tyr Trp Arg Thr Ile Glu Ile Asp Leu Gly
1               5                   10                  15
Asn Asn Asn Ile Thr Gly Asn Ser His Asp Gly Gln Glu Phe Glu Gly
            20                  25                  30
Trp Leu Phe Lys Ile Ser Thr Leu Thr Arg His Ala Arg Pro Leu Ser
        35                  40                  45
Pro Val Thr Gly Arg Leu Arg Ile Ala Arg Gln Arg
    50                  55                  60
```

<210> 33471
<211> 137
<212> PRT
<213> A.fumigatus

<400> 33471

```
Met Trp Arg Gly Arg Arg Arg Lys Ile Val Asp Gly Ala Ile Phe Asn
1               5                   10                  15
Ser Gly Gln Ser Trp Cys Ala Ile Glu Arg Val Tyr Val His Lys Asn
            20                  25                  30
Ile Tyr Glu Thr Phe Val Ala Glu Val Lys Arg Val Leu Ser Lys Tyr
        35                  40                  45
Cys Val Gly Asp Pro Ser Glu Lys Thr Thr Gln Ile Gly Pro Val Ile
    50                  55                  60
Ser Lys Arg Ala Lys Glu Thr Ile Leu Ala His Ile Ala Glu Ala Val
65                  70                  75                  80
```

```
Glu Lys Gly Ala Arg Asp Glu Thr Pro Ala Asn Glu Thr Phe Asp Asn
                85                  90                  95
Leu Pro Ala Asp Gly Asn Tyr Val Lys Pro Thr Leu Leu Thr Gly Val
            100                 105                 110
Asn His Asn Met Arg Val Met Thr Glu Glu Thr Phe Gly Pro Val Leu
        115                 120                 125
Pro Val Met Lys Val Glu Ser Asp Glu
    130                 135
```

<210> 33472
<211> 131
<212> PRT
<213> A.fumigatus

<400> 33472

```
Ala Val Lys Leu Met Asn Asp Ser Glu Phe Gly Leu Thr Ala Ser Ile
1               5                  10                  15
Trp Thr Lys Asp Val Pro Arg Ala Glu Asp Leu Ile Glu Gln Val Glu
            20                  25                  30
Ala Gly Thr Val Phe Ile Asn Arg Ser Asp Tyr Pro Ser Pro Val Ser
        35                  40                  45
Ser Ala His Ser Leu Val Gln Val Pro Thr Lys Met Thr Ile Asn Met
    50                  55                  60
Ser Leu Gly Pro Cys Met Asp Arg Leu Glu Glu Leu Trp Ser Trp Cys
65                  70                  75                  80
His Val Glu Gln Val Arg Val Arg Ala Ile Arg Gln Ala Gln Glu Leu
                85                  90                  95
Ser Cys Gln Gly Leu Ser Glu Val Asp Cys Ser Tyr Val Thr Cys Tyr
            100                 105                 110
Pro Leu Thr Thr Ile Thr Ile Val Met Pro Arg Val Arg Pro Leu Leu
        115                 120                 125
Ala Asn Tyr
    130
```

<210> 33473
<211> 427
<212> PRT
<213> A.fumigatus

<400> 33473

```
Gly Leu Leu Arg Gly Pro Phe Gln Pro Arg Val Lys Thr Ile Leu Lys
1               5                  10                  15
Arg His Leu Val Pro Cys Thr Arg His Ala Ser Ser Arg Lys Ile Ser
            20                  25                  30
Phe Asn Met Arg Phe Ser Gln Ala Met Ser Lys Ala Ala Ser Ile Val
        35                  40                  45
Gly Gln Tyr Thr Gly Arg Tyr Ile Tyr Pro Ala Glu Thr Ser Arg His
    50                  55                  60
Leu Ala Thr Leu Leu Gly Phe Pro Ser Arg His Ser Ile Ser Ser Ala
65                  70                  75                  80
Tyr Tyr Asp Asn Ala Cys Thr Asp Ile Ala Asn Leu Ala Ser Ala Ile
                85                  90                  95
Ser Ala Phe Glu Pro Val Arg Leu Tyr Ser Arg Pro Glu Asp Leu Pro
            100                 105                 110
Arg Ala Gln Ser Met Val Asn Gln Ala Ile Pro Lys Tyr Thr Gly Asn
        115                 120                 125
```

```
Thr Ser Asn Ile Ser Phe Ile Pro Phe Pro Thr Asn His Leu Trp Val
    130                 135                 140
Arg Asp Thr Gly Pro Val Tyr Val Leu Gly Thr Gly Asp Ala Arg Ser
145                 150                 155                 160
Arg Arg Phe Ala Ile Asn Phe Arg Phe Arg Glu Trp Gly Lys Arg Asp
                165                 170                 175
Glu Met Glu Ser Gln Glu Arg Ala Ala Asp Glu Gln Asp Trp Pro Ile
            180                 185                 190
Met Thr Thr Ala Gln Leu Asp Glu Asn Ala Thr Phe Ala Arg Arg Val
        195                 200                 205
Ile Glu Thr Asp Val Ser Pro Ser Pro Val Thr Leu Val Glu Ser Arg
    210                 215                 220
Val Cys Leu Glu Gly Gly Ala Leu Val Val Asp Gly Glu Gly Thr Leu
225                 230                 235                 240
Leu Ala Thr Glu Ser Ser Ile Ile Asn Asp Asn Arg Asn Ala Gly Leu
                245                 250                 255
Ser Arg Ser Glu Ile Glu Ala Glu Leu Gln Arg Leu Leu Gly Val Glu
            260                 265                 270
Lys Ile Ile Trp Phe Pro Gly Arg Lys Gly Leu Asp Ile Thr Asp Val
        275                 280                 285
His Ala Asp Ala Glu Val Gly Phe Ile Arg Pro Gly Val Val Val Leu
    290                 295                 300
Ser Arg Pro His Ala Ser Val Pro Arg Ala Trp Leu Asp Val Tyr Glu
305                 310                 315                 320
Glu Ile Arg Glu Ile Leu Thr Arg Ser Val Asp Ala Lys Gly Arg Pro
                325                 330                 335
Phe Glu Ile His Thr Val Asp Glu Pro Asp Pro Ala Leu Leu Gly Asp
            340                 345                 350
Leu Ser Tyr Asp Glu Pro Ala Thr Asn Tyr Val Asn Phe Tyr Phe Val
        355                 360                 365
Asn Gly Gly Leu Ile Leu Pro Gln Phe Gly Asp Glu Val Thr Asp Lys
    370                 375                 380
Ala Ala Val Glu Thr Phe Gln Lys Leu Cys Pro Gly Arg Val Ile Gln
385                 390                 395                 400
Pro Val Tyr Val His Ala Leu Pro Leu Ala Gly Gly Val Ile His Cys
                405                 410                 415
Ala Thr Gln Pro Val Ile Ala Val Pro Gln Asp
            420                 425
```

<210> 33474
<211> 165
<212> PRT
<213> A.fumigatus

<400> 33474

```
Ile Leu Pro Phe Arg Arg Pro Tyr Thr Ile Arg Asn Lys Met Leu Ser
1               5                   10                  15
Leu Ile Leu Thr Ile Phe Phe Val His Val Ala Ile Tyr Leu Val Asn
            20                  25                  30
Thr Val Gly Ala Thr Thr Ile Asp Thr Leu Val Cys Ser Cys Leu Val
        35                  40                  45
Pro Tyr Arg His Ser Thr Ala Ala Ser Leu Pro Arg Pro Gln Thr Glu
    50                  55                  60
Arg Ser Thr Ile Leu Asn Asp Met Phe Leu Gln Leu Trp Ile Leu Tyr
65                  70                  75                  80
Leu Lys Leu Pro Thr Ser Thr Ser Arg Asn Ala Arg Gln Gln Ser Arg
```

```
                85                  90                  95
Leu Lys Arg Glu Val Val Gln Leu Lys Arg Glu Met Asn Asn Thr Ser
            100                 105                 110
Ser Gln Asp Glu Phe Ala Lys Trp Ala Lys Leu Arg Arg Lys His Asp
        115                 120                 125
Lys Ala Met Asp Glu Tyr Glu Ala Met Ser Ser Tyr Pro Ala Leu Cys
    130                 135                 140
Thr Glu Ile Leu Cys Phe Leu Leu His Ile Val Glu Val Gln Ile Gln
145                 150                 155                 160
Leu Ile Asp Arg Phe
                165
```

<210> 33475
<211> 147
<212> PRT
<213> A.fumigatus

<400> 33475

```
Trp Ser Trp Arg Arg Tyr His Gly Phe Arg Leu Phe Ile Ser Thr Ile
1               5                   10                  15
Ser Gly Glu Ser Arg Arg Val Gly Arg Val His Arg Cys Thr Glu Pro
            20                  25                  30
Arg Pro Thr Glu Ser Arg Gly Ser Arg Gly Ile Leu Asn Gln Ser Tyr
        35                  40                  45
Cys Tyr Ser Ser Ser His Gln Lys Pro Ser Pro Ser Leu Pro Ala Asp
    50                  55                  60
Leu Gln Thr Leu Ser Tyr Ser Ser Ile Gln His Asp Pro Val Leu Ala
65                  70                  75                  80
Asp Lys Tyr Ala Ala Phe Pro Val Pro Arg Phe Leu Leu Glu Ser Thr
                85                  90                  95
Thr Ala Thr Ile Pro Val Ala Val Ser Glu Ser Leu Ser Val Tyr Gly
            100                 105                 110
Leu Val Pro Asp Pro Phe Asp Val Pro Asp Phe Phe Leu Pro Val Leu
        115                 120                 125
Ser Glu Tyr Val Thr Gln Cys Asp Ser Pro Ala Ala Gly Met Gly Asp
    130                 135                 140
Asp Ala His
145
```

<210> 33476
<211> 323
<212> PRT
<213> A.fumigatus

<400> 33476

```
Ile Glu His Arg Leu Gly Gly Thr Ala Asn Ile Gly Leu Asp Asp Glu
1               5                   10                  15
Met His Arg Phe Gly Ser Gly Cys Ile Leu Val Thr Lys Ser Phe Arg
            20                  25                  30
Tyr Leu Val Leu Leu Leu Pro Ser Leu Phe Leu Leu Phe Ser Ala Cys
        35                  40                  45
Phe Val Asp Gly Arg Cys Val Leu Thr Gln Ser Leu Ser Leu Arg Phe
    50                  55                  60
Leu Leu Ala Val Leu His Asp Val Leu Gly Met Leu Leu Val Leu Arg
65                  70                  75                  80
Leu Gln Asn Leu Gly Thr Gly Gly Arg Leu Phe Pro Pro Thr Ile Asn
```

```
                85                  90                  95
Phe His Arg His Ala Gly Ser Ser Phe Gly Asp Gly Asp Thr Gly Phe
            100                 105                 110
Ile Ala Lys Arg Thr Asn Thr Ser Pro Arg Cys Thr Cys Asn Glu Asp
        115                 120                 125
Ile Ser Trp Ser Gln Gly Thr Thr Ser Asp Glu Ser Arg Arg Asn Thr
    130                 135                 140
Ser Ile Ala Leu Arg Cys Ser Phe Asn His Pro Ser Leu His Arg Thr
145                 150                 155                 160
Val Phe Val Gly Pro Met Val Lys Asn Phe Arg Glu Cys Asn Asp Ser
                165                 170                 175
Leu Leu Glu Phe Gln His Ala Leu Thr Gly Phe Ser Ala His Pro Asp
            180                 185                 190
Ser Leu Asp Ile Ala Ser Val Val Leu His Met Asn Thr Met Tyr Arg
        195                 200                 205
Lys Val Leu Leu Asp Leu Phe Trp Val Asp Thr Phe Phe Val Asp Phe
    210                 215                 220
Ala Asp Ser Asp Asn Asp Arg Asn Leu Gly Phe Gly Cys Val Leu Asp
225                 230                 235                 240
Gly Leu Asn Ser Leu Arg Phe Asp Thr Val Val Arg Ser Asn His Gln
                245                 250                 255
His Asn Asn Val Ser Tyr Ile Gly Thr Ala Thr Thr His Ile Gln Glu
            260                 265                 270
Gly Cys Val Ala Arg Ser Val Gln Glu Gly Asp Ser Leu Ala Arg Arg
        275                 280                 285
His Ser Tyr Gly Asp Cys Thr His Val Leu Cys Glu Thr Pro Gly Ala
    290                 295                 300
Pro Lys Arg Ala Gln His Asp Phe Arg Ser Arg Pro Gln Asn Gly Gly
305                 310                 315                 320
Leu Gly Pro
```

<210> 33477
<211> 85
<212> PRT
<213> A.fumigatus

<400> 33477

```
Val Ser Asp Phe Ser Trp Arg Tyr Ser Thr Thr Ser Leu Ala Cys Cys
1               5                   10                  15
Ser Ser Ser Ala Cys Arg Ile Ser Val Pro Ala Val Gly Cys Ser Leu
            20                  25                  30
Gln Pro Ser Ile Ser Thr Gly Met Pro Gly Val Ala Ser Glu Thr Ala
        35                  40                  45
Thr Pro Ala Ser Leu Arg Ser Ala Arg Thr Arg Ala His Val Val Pro
    50                  55                  60
Ala Thr Arg Ile Ser Pro Gly Arg Arg Val Pro Arg Arg Met Arg Ala
65                  70                  75                  80
Val Ala Thr Arg Pro
                85
```

<210> 33478
<211> 489
<212> PRT
<213> A.fumigatus

<400> 33478
Gly Gln Leu Val Asn Asp Pro Leu Arg Val His Val Arg Ser Trp Ala
1 5 10 15
Lys Thr Thr Ile Leu Gly Thr Ala Pro Lys Val Val Leu Cys Pro Leu
20 25 30
Arg Ser Thr Gly Gly Phe Thr Gln His Met Gly Ala Val Ser Val Ala
35 40 45
Met Pro Ser Gly Lys Thr Ile Thr Phe Leu Asp Thr Pro Gly His Ala
50 55 60
Ala Phe Leu Asp Met Arg Arg Arg Gly Ala Asn Val Thr Asp Ile Val
65 70 75 80
Val Leu Val Val Ala Ala Asp Asp Ser Val Lys Pro Gln Thr Ile Glu
85 90 95
Ala Ile Lys His Ala Thr Glu Ser Lys Val Pro Ile Ile Val Ala Ile
100 105 110
Ser Lys Ile Asp Lys Glu Gly Ile Asn Pro Glu Lys Val Lys Gln Asp
115 120 125
Leu Ser Val His Gly Val His Val Glu Asp Tyr Gly Gly Asp Val Gln
130 135 140
Ala Ile Gly Val Ser Gly Lys Thr Gly Gln Gly Met Leu Glu Leu Glu
145 150 155 160
Glu Ala Ile Val Thr Leu Ser Glu Val Leu Asp His Arg Ala Asp Lys
165 170 175
Asp Gly Ala Val Glu Gly Trp Val Ile Glu Ala Thr Thr Lys Ser Tyr
180 185 190
Gly Arg Val Ala Thr Ala Leu Ile Arg Arg Gly Thr Leu Arg Pro Gly
195 200 205
Asp Ile Leu Val Ala Gly Thr Thr Trp Ala Arg Val Arg Ala Leu Arg
210 215 220
Asn Glu Ala Gly Val Ala Val Ser Glu Ala Thr Pro Gly Met Pro Val
225 230 235 240
Glu Ile Asp Gly Trp Arg Glu Gln Pro Thr Ala Gly Thr Glu Ile Leu
245 250 255
Gln Ala Glu Asp Glu Gln His Ala Lys Asp Val Val Glu Tyr Arg Gln
260 265 270
Glu Lys Ser Glu Thr Gln Arg Leu Ser Glu Asp Thr Ser Ala Ile Asn
275 280 285
Glu Ala Arg Arg Glu Gln Gln Glu Lys Arg Arg Gln Glu Glu Asn Glu
290 295 300
Val Ala Glu Ala Leu Gly Asp Gln Asp Ala Ser Gly Pro Lys Pro Val
305 310 315 320
His Phe Ile Ile Lys Ala Asp Val Gly Gly Ser Ala Glu Ala Val Leu
325 330 335
Asn Ser Val Thr Ala Ile Gly Asn Asn Glu Val Tyr Ala Asn Val Leu
340 345 350
Arg Ser Glu Val Gly Pro Ile Ser Glu Phe Asp Ile Glu His Ala Ala
355 360 365
Thr Ala Ser Gly Asn Ile Ile Ser Phe Asn Met Pro Ile Asp Pro Ala
370 375 380
Met Ser Arg Met Ala Glu Ser Arg Gly Val Arg Ile Met Asp His Asn
385 390 395 400
Ile Ile Tyr Lys Leu Ile Asp Asp Val Lys Ala Ala Leu Ser Glu His
405 410 415
Leu Ala Pro Ser Val Thr Gln Arg Val Thr Gly Glu Ala Glu Val Gly
420 425 430
Gln Ile Phe Glu Ile Thr Leu Lys Gly Arg Glu Lys Val Ala Ile Ala

```
        435                 440                 445
Gly Cys Arg Val Arg Asn Gly Ile Ile His Arg Ala Lys Lys Val Arg
    450                 455                 460
Val Leu Arg Gly Gln Asp Thr Ile Tyr Asp Gly Thr Leu Ile His Phe
465                 470                 475                 480
Trp Ala Thr Pro His Leu Arg His Arg
                485
```

<210> 33479
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33479

```
Arg Leu Ala Val Asp Thr Val Ser Phe Pro Leu Asn Ser Pro Val Leu
1               5                  10                  15
Trp Ser Phe Val Cys Phe Ser Glu Ser Val Gly Asp Leu Ala Ala Ile
            20                  25                  30
Thr Val Lys Trp Leu Leu Trp Gly Leu Asp Ile Glu Leu Leu Leu Asn
        35                  40                  45
Gly Gly Ala Thr Val Arg Ser Ser Pro Ser Ser Ser Ala Lys
    50                  55                  60
```

<210> 33480
<211> 526
<212> PRT
<213> A.fumigatus

<400> 33480

```
Phe Gly Ala Leu Phe Cys Gln Gly Lys Ser Leu Ala Phe Leu Phe Val
1               5                  10                  15
Ser Ile Ser Pro His Pro Thr Phe Leu Ile Arg His Asn Thr Ile Met
            20                  25                  30
Pro Arg Pro Pro Thr Lys Arg Asn Arg Leu Thr Ser Arg His Val Gln
        35                  40                  45
Ala Ser Pro Lys Val Ser Gln Lys Thr Lys Asp Pro Glu Thr Lys Ala
    50                  55                  60
Thr Ala Asn Asn Ser Ser Pro Leu His Gly Thr Glu Asn Asp Lys Gly
65                  70                  75                  80
Leu Glu Ala Gln Pro Ala Pro Ser Val Asp Asp Ile Lys Phe Ala Arg
                85                  90                  95
Gln Leu Arg Gly Gln Thr Pro Met Asn Asn Lys Gln Glu Gln Ala Ile
            100                 105                 110
Ala Ser Ser Pro Met Gly Glu Arg Gly Ala Thr Gly Ser Arg Pro Pro
        115                 120                 125
Thr Arg Ala Arg Gly Tyr Ser Ser Thr Leu Ser Val Gly Arg Arg Gly
    130                 135                 140
Ala Asp Met Ser Ser Lys Ile Pro Gly Thr Pro Val Phe Glu Ser Ser
145                 150                 155                 160
Ile Leu Ser Asn Phe Arg Arg Arg Pro Arg Gln Ala Ser Ile Leu Gln
                165                 170                 175
Met Met Gln Ala Asp Asp Gly Ser Ser Asp Phe Gly Asp Leu Asp Asp
            180                 185                 190
Asp Asp Phe Leu Gly Gly Leu Ser Pro Glu Asp Glu Ser Thr Pro Leu
        195                 200                 205
Asn Val Ser Arg Arg Lys Ser Leu Val Ile Arg His Pro Ser Ser Ser
```

```
    210                 215                 220
Pro Leu Ser Asp Cys Ser His Pro Ser Asn Gly Gly Ser Arg Lys Arg
225                 230                 235                 240
Lys Arg Thr Gly Glu Glu Leu Gln Val Pro Gln Ser Pro Leu Ala Val
                245                 250                 255
Val Glu Tyr Ser Pro Ala Gly Ser Ile Ser Pro Glu Arg Gly Asp Glu
            260                 265                 270
Glu His Gly Val Pro Arg Glu Ile Leu His His Leu Ala Asp Glu Glu
        275                 280                 285
Gly Leu Asp Arg Thr Val Ala Pro Pro Leu Ser Ser Ser Ser Met Ser
    290                 295                 300
Ser Pro Gln Ser Ser His Leu Thr Val Ile Ala Ala Lys Ser Pro Thr
305                 310                 315                 320
Asp Ser Leu Lys His Thr Lys Asp His Asn Thr Gly Glu Phe Ser Gly
                325                 330                 335
Lys Leu Thr Val Ser Thr Ala Ser Leu Gln Asp Arg Leu Leu Pro Arg
            340                 345                 350
Arg His Lys Asn His Arg Arg Asn Gly Val Pro Gly Asp Leu Ile Leu
        355                 360                 365
Asp Gly Glu Ser Glu Val Asp Tyr Ser Val Asp Gln Asp Glu Asp Glu
    370                 375                 380
Leu Ser Tyr Leu Pro Thr Arg Lys Pro Ala Gln Pro Arg Arg Arg Lys
385                 390                 395                 400
Asn Lys Pro Lys Pro Leu Glu Val Val Arg Ala Lys His Arg Lys Gln
                405                 410                 415
Gly Ala Thr Lys Ala Leu Ser Gly Glu Leu Ile Ser Gln Thr Glu Ser
            420                 425                 430
Ala Gly Met Lys Asp Thr Arg Gln Lys Arg Val Asn Gly Pro Arg Ser
        435                 440                 445
Asn Gln Thr Ala Asp Ala Asp Lys Glu Asn Gln Ala Ile Glu Val Ser
    450                 455                 460
Ser Pro Leu Ser Ser Pro Leu Asp Thr Asp Ala Phe Asp Leu Glu Ser
465                 470                 475                 480
Ser Pro Val Pro Ile Pro Ala Lys Asn Tyr Leu Ser Glu Glu Leu Arg
                485                 490                 495
Leu Gln Ala Lys Lys Phe Glu Glu Ile Asp Arg Trp Glu Met Asp Phe
            500                 505                 510
Glu Asp Val Val Thr Thr Gly Ser Gln Thr Ser Pro Cys Arg
        515                 520                 525
```

<210> 33481
<211> 285
<212> PRT
<213> A.fumigatus

<400> 33481

```
Thr Ser Arg Ala Lys Gln Pro Ser Pro His Gly Ala Thr Ser Ser Pro
1               5                   10                  15
Ser Phe Ser Ala Pro Ser Ser Pro Pro Ser Pro Ala Ser Ser Met Gly
            20                  25                  30
Cys Thr Gly Leu Ala Leu Gln Pro Thr Ser Ser Arg Lys Trp Ser Pro
        35                  40                  45
Ala Gln Ser Ile Pro Ala Asp Pro Ser Pro Thr Ser Thr Ser Pro Gly
    50                  55                  60
Trp Ser His Gln Val Ile Leu Leu Ser Val Asn Leu Ala Asn Trp Leu
65                  70                  75                  80
```

```
Lys Val Gly Gln Tyr Thr Lys Val Pro His Arg Ile Met Phe Ala Thr
                85                  90                  95
Gln Ile Tyr Gly Thr Leu Leu Gly Ala Gly Leu Asn Tyr Ala Val Met
            100                 105                 110
Thr Thr Ile Val Thr Asn Gln Arg Glu Ile Leu Leu Asp Pro Ala Gly
        115                 120                 125
Asn Ser Val Trp Ser Gly Ser Thr Val Gln Ser Leu Asn Ser Gln Ala
    130                 135                 140
Ile Thr Trp Ala Leu Ala Arg Asp Val Tyr Gly Val Asn Gly Arg Tyr
145                 150                 155                 160
Leu Ile Val Pro Leu Gly Leu Val Ile Gly Leu Ala Leu Pro Val Val
                165                 170                 175
His Trp Gly Leu Asn Arg Val Phe Pro Arg Met Arg Ser Trp Pro Leu
            180                 185                 190
Asn Thr Ala Ile Ile Ala Ser Tyr Ala Gly Gln Thr Tyr Tyr Gly Ile
        195                 200                 205
Thr Ser Trp Ile Trp Ser Ser Val Ala Val Gly Val Phe Ser Gln Val
    210                 215                 220
Trp Leu Arg Arg Arg Leu Pro Arg Ile Tyr Asn Glu Tyr Asn Tyr Leu
225                 230                 235                 240
Ile Gly Ala Ala Leu Asp Gly Gly Ser Gln Ile Val Ile Phe Ile Leu
                245                 250                 255
Ser Phe Ala Val Phe Gly Ala Ser Gly Lys Glu His Pro Phe Pro Thr
            260                 265                 270
Trp Trp Gly Asn Pro Ala Gly Asn Pro Asp His Cys Ile
        275                 280                 285
```

<210> 33482
<211> 498
<212> PRT
<213> A.fumigatus

<400> 33482

```
Lys Glu His Val Val Ala Ser Leu Ile Ala Ser Ser Gly Asn Asn Gly
1               5                  10                  15
Leu Ser Gly Val Glu Val Tyr Ala Val Glu Arg Leu Phe Tyr Asn Ile
            20                  25                  30
Ser Val Ser Ala Thr Thr Ala Val Leu Gly Thr Phe Ser Ile Ser Leu
        35                  40                  45
Cys Gly Phe Val Leu Ala Gly Val Leu Arg Pro Leu Ile Val Tyr Pro
    50                  55                  60
Ala Glu Met Val Tyr Trp Ser Thr Leu Pro Gln Val Val Leu Tyr Gln
65                  70                  75                  80
Thr Leu His Phe Asp Gln Arg Ala Asn Arg Gly Arg Leu Ile Lys Phe
                85                  90                  95
Gly Cys Ala Leu Gly Leu Ala Ala Val Trp Glu Ile Phe Pro Ala Tyr
            100                 105                 110
Ile Ile Thr Trp Phe Gly Gly Phe Ser Ile Phe Cys Leu Ala Ser Met
        115                 120                 125
Gly Ala Pro Gln His Thr Arg Lys Ile Phe Ser Arg Val Phe Gly Gly
    130                 135                 140
Ser Ser Ser Asn Glu Gly Leu Gly Leu Leu Asn Phe Gly Phe Asp Trp
145                 150                 155                 160
Gln Tyr Ile Gln Ser Ser Tyr Leu Ser Leu Pro Leu Lys Gln Gln Leu
                165                 170                 175
Asn Ser Trp Ile Gly Tyr Val Ile Phe Tyr Pro Ala Met Leu Gly Leu
```

```
            180                 185                 190
Tyr Tyr Arg Asn Thr Trp Ser Ala Lys Ser Phe Pro Phe Met Ser Thr
        195                 200                 205
Ser Leu Phe Thr Ser Asn Gly Lys Gln Phe Ser Thr Thr Ser Ile Leu
    210                 215                 220
Ser Asp Arg Cys Thr Val Asp Tyr Asn Lys Leu Lys Glu Val Gly Ile
225                 230                 235                 240
Pro Tyr Leu Thr Ser Ser Thr Val Trp Gly Tyr Leu Thr Gln Asn Leu
                245                 250                 255
Ala Ile Gly Ala Leu Ile Thr His Val Leu Ile Phe Tyr Gly Lys Asp
            260                 265                 270
Met Tyr Thr Ala Trp Lys Gln Ala Arg Ser Arg Thr Gln Pro Asp Pro
        275                 280                 285
His Phe Gln Ala Met Leu Lys Tyr Lys Glu Val Pro Met Trp Trp Tyr
    290                 295                 300
Leu Ala Leu Phe Val Leu Ala Phe Phe Ala Gly Leu Ile Val Asn Ile
305                 310                 315                 320
Lys Gly Glu Thr Thr Leu Pro Ala Trp Gly Tyr Ile Val Ser Leu Leu
                325                 330                 335
Leu Gly Ala Phe Ile Ala Pro Phe Ser Cys Ile Leu Tyr Gly Leu Tyr
            340                 345                 350
Gly Thr Gly Val Ala Thr Asn Gln Leu Ser Lys Met Val Ala Gly Ala
        355                 360                 365
Val His Pro Gly Arg Pro Leu Ala Asn Leu Tyr Phe Ala Arg Leu Val
    370                 375                 380
Pro Pro Gly His Ser Ala Phe Arg Gln Ser Arg Gln Leu Ala Gln Gly
385                 390                 395                 400
Arg Ala Val His Gln Gly Pro Ala Pro His Tyr Val Arg His Pro Asp
                405                 410                 415
Ile Arg His Phe Ala Arg Gly Trp Ser Gln Leu Arg Arg His Asp Tyr
            420                 425                 430
His Arg His Gln Pro Ala Arg Asp Pro Pro Arg Pro Ser Gly Gln Gln
        435                 440                 445
Arg Leu Glu Arg Val His Arg Ala Glu Ser Gln Leu Ala Gly Asp His
    450                 455                 460
Leu Gly Pro Ser Ala Gly Arg Leu Arg Arg Glu Trp Thr Val Ser His
465                 470                 475                 480
Cys Ala Pro Arg Ser Gly His Trp Ser Gly Leu Ala Gly Cys Ala Leu
                485                 490                 495
Gly Ala
```

<210> 33483
<211> 312
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9),(47)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33483

```
Ile Gly Arg Phe Phe Gly Gly Phe Xaa Gly Ser Cys Pro Ile Ala Val
1               5                   10                  15
Val Ala Ala Val Ser Leu Asp Ile Tyr Asp Asn Arg His Arg Gly Leu
```

```
            20                  25                  30
Ala Ile Thr Val Phe Thr Met Thr Val Phe Thr Gly Pro Leu Xaa Ala
        35                  40                  45
Pro Phe Ile Gly Gly Phe Ile Val Glu Ser Tyr Leu Gly Trp Arg Trp
    50                  55                  60
Thr Glu Tyr Leu Thr Gly Ile Met Gly Ala Ser Ala Phe Val Leu Asp
65                  70                  75                  80
Leu Phe Phe Leu Glu Glu Thr Tyr Pro Pro Val Val Leu Val Gly Lys
                85                  90                  95
Ala Ala Glu Leu Arg Arg Arg Thr Arg Asn Trp Gly Ile His Ala Lys
            100                 105                 110
Gln Glu Glu Ile Glu Val Glu Phe Gly Glu Leu Ile Arg Lys Asn Phe
        115                 120                 125
Ser Arg Pro Leu Arg Ile Leu Phe Thr Glu Pro Ile Val Leu Leu Leu
    130                 135                 140
Ser Ile Tyr Met Ala Phe Leu Tyr Gly Leu Leu Tyr Leu Phe Leu Thr
145                 150                 155                 160
Ala Tyr Pro Ile Val Phe Gln Arg Ile His Gly Phe Asn Lys Gly Val
                165                 170                 175
Gly Gly Leu Pro Tyr Phe Gly Ile Ile Ile Gly Glu Phe Leu Gly Gly
            180                 185                 190
Ile Phe Ile Met Leu Leu Gln Pro Trp Tyr Asn Arg Gln Leu Ser Ala
        195                 200                 205
Tyr Lys Asp Ile Pro Ile Pro Glu Trp Arg Leu Pro Pro Ala Ile Ile
    210                 215                 220
Gly Gly Val Ala Phe Ser Gly Gly Leu Phe Trp Phe Gly Trp Ser Gly
225                 230                 235                 240
Tyr Arg Ser Asp Ile His Trp Ile Val Pro Thr Leu Ser Gly Leu Leu
                245                 250                 255
Thr Ser Phe Gly Leu Phe Cys Ile Phe Leu Gln Cys Leu Asn Tyr Ile
            260                 265                 270
Val Asp Ala Tyr Leu Val Leu Tyr Val Ser Pro Ser His Ile Ser Pro
        275                 280                 285
Ser Gly Ala Met Leu Met Ser Cys His Val Val Leu Leu Gln Pro Trp
    290                 295                 300
Leu Gln Thr Val Phe Cys Val Leu
305                 310
```

<210> 33484
<211> 106
<212> PRT
<213> A.fumigatus

<400> 33484

```
Cys Cys Phe Ser Pro Gly Cys Lys Gln Cys Phe Ala Phe Tyr Ser Trp
1               5                   10                  15
Cys Arg Ile Pro Thr Phe Phe Asn Leu Tyr Gly Thr Phe Gly Pro Pro
            20                  25                  30
Cys Tyr Ser Arg Leu Leu Asn Ala Ser Phe Arg Trp Leu Thr Arg Ala
        35                  40                  45
Gln Phe Asn Ala Leu Gly Val Asn Trp Thr Gly Thr Leu Leu Gly Cys
    50                  55                  60
Val Ala Ala Ile Met Met Pro Ile Pro Leu Leu Phe Tyr Leu Tyr Gly
65                  70                  75                  80
Pro Lys Ile Arg Glu Lys Ser Lys Phe Ala Met Glu Tyr Ile Val Ala
                85                  90                  95
```

Ala Gln Ala His Asn Asp Glu Arg Ala Glu
100 105

<210> 33485
<211> 386
<212> PRT
<213> A.fumigatus

<400> 33485
Ile Leu Thr Asp Phe Lys Thr Tyr Arg Gly Leu Trp Val Ser Pro Asn
1 5 10 15
Gly Leu Pro Tyr Gln Ala Arg Cys Val Ala Val Ile Val Asn Leu Val
20 25 30
Phe Cys Gln Pro Ser Asp Leu Gly Leu Phe Pro Pro Val Thr His Leu
35 40 45
Glu Ser Ala Lys Ile Val Ala Phe Gln Ser Glu Ser Asn Ser Arg Leu
50 55 60
Arg Ala Ile Ile Thr Thr Arg Asn Arg Met Ser Arg Ile Thr Pro Arg
65 70 75 80
Thr His Gln Thr Tyr Asp Tyr Glu Pro Leu Pro Ser Pro Ala Ser Ile
85 90 95
Arg Leu Leu Arg Val Asp His Lys Asp Pro Asp Gly Leu Leu His Cys
100 105 110
Thr Ile Lys Asn Val Asp Leu Arg Asp Glu Pro Leu Tyr His Ala Met
115 120 125
Ser Tyr Thr Trp Gly Asn Pro His Ser Glu Leu Ala Gln Val Gln Glu
130 135 140
Thr Arg Asp Arg Tyr Ser Asp Asn Tyr Pro Pro Glu His Arg Glu Cys
145 150 155 160
Val Ser Val Lys Gly Lys Leu Leu Tyr Ile Thr Arg Asn Ala Tyr Asp
165 170 175
Ala Leu Leu Ser Val Pro Arg Asp Ala Trp Ala Gln Cys Cys Asn Arg
180 185 190
Gly Asp Arg Arg Lys Leu Leu Arg Thr Ser Leu His Trp Ala Ser Ile
195 200 205
Ala Gly Lys Glu Asp Leu Ile Glu Pro Leu Leu Cys Ser Gly Val Asp
210 215 220
Val Asn Val Arg Asp Glu Trp Gly Val Thr Pro Leu Ser Tyr Ala Ala
225 230 235 240
Gln Val Gly Ser Arg Glu Gly Val Glu Leu Leu Leu Ser Ala Gly Ala
245 250 255
Asp Ala Gly Ile Val Asp Asn Arg Gly Asn Thr Pro Leu Asp Tyr Ala
260 265 270
Arg Gln Gly Asn Tyr Gln Gly Ile Ile Gln Ser Leu Glu Glu Val Met
275 280 285
Gln Lys Gly Gly Arg Leu Glu Pro Arg Val Asp Trp Pro Glu Gly Pro
290 295 300
Glu Arg Trp Cys Trp Ile Asp Gln Ile Cys Ile Asn Gln Asp Asp Ile
305 310 315 320
Ala Glu Arg Gly Ala Gln Val Ala Ile Met Asp Gln Ile Tyr Asn Asn
325 330 335
Ala Ala Phe Thr Leu Val Trp Leu Gly Pro Glu Asp Ala Tyr Thr Asp
340 345 350
Thr Ala Ile Lys Thr Ile Glu Lys Leu Asp Thr Ala Ala Gly Asp Phe
355 360 365
Ile Gln Ser Lys Glu Ile His Pro Tyr Arg Glu Gln Pro Glu Glu Ile

370 375 380
Tyr Ala
385

<210> 33486
<211> 89
<212> PRT
<213> A.fumigatus

<400> 33486
Pro Arg Cys Asn Gln His Arg Leu His Pro Glu Glu Asp Leu Pro Ser
1 5 10 15
Asn Val Pro Thr Thr Ala Gln Leu Arg His His Pro Thr Ile Val Thr
20 25 30
Arg Ser Val Pro Arg Leu Glu Arg Leu Thr Thr Met Arg Val Leu Glu
35 40 45
Arg Lys Val Lys Ser Thr Phe Leu Leu Arg Leu Leu Ala Asn Leu Ala
50 55 60
Ser Pro Ile Gly Arg Thr Leu Val Ile Ile Pro Met His Ala Pro Arg
65 70 75 80
Leu Glu Leu Ser Phe Trp Thr Lys Thr
85

<210> 33487
<211> 188
<212> PRT
<213> A.fumigatus

<400> 33487
Pro Leu Glu Val Ala Asp Arg Leu Tyr Leu Ala Ser Tyr Asp Ser Pro
1 5 10 15
Pro Asp Pro Lys Ala Pro Phe Pro Phe Pro Leu Glu Gln Ala Lys Ser
20 25 30
Pro Ser Lys Arg Ser Thr Arg Gly Gln Pro Gln Thr Pro Ser Lys Lys
35 40 45
Arg Tyr Pro Val Tyr Phe Thr Ala Asp Asp Thr Leu Phe Tyr Asn Ser
50 55 60
Phe His Ala Asp Phe Gly Pro Leu His Ile Gly His Leu Tyr Arg Phe
65 70 75 80
Ala Val His Phe His Glu Ile Leu Gly Glu Pro Ala Asn Lys Asp Arg
85 90 95
Ala Val Val Phe Tyr Ser Lys Ser Asp Ser Arg Ser Arg Ala Asn Ala
100 105 110
Ala Cys Leu Val Ala Cys Tyr Met Val Leu Ile Gln Ser Trp Pro Pro
115 120 125
His Leu Ala Leu Ala Pro Ile Ala Gln Ala Asp Pro Pro Tyr Met Pro
130 135 140
Phe Arg Asp Ala Gly Tyr Ser Gln Ala Asp Phe Thr Leu Thr Ile Gln
145 150 155 160
Asp Val Val Tyr Gly Val Trp Lys Ala Lys Glu Gln Ser Leu Cys Ser
165 170 175
Leu Ser Ser Phe Ser Leu Glu Glu Tyr Val Tyr Gly
180 185

<210> 33488
<211> 429

<212> PRT
<213> A.fumigatus

<400> 33488

```
Pro Phe Asp-Pro Ala Leu Thr Gly Leu Ala Arg Tyr Glu Lys Phe Glu
1               5                  10                  15
Arg Val Asp Met Gly Asp Phe Asn Trp Ile Thr Pro Gln Phe Leu Ala
            20                  25                  30
Phe Ala Ser Pro Gln His Glu Pro Val Ala Leu Ile Pro Ser Asn Thr
        35                  40                  45
Pro Glu Tyr Ala Ala Leu Pro Ser Thr Val Ser Gln Val Ile Ser Ser
    50                  55                  60
Lys Leu Pro Leu Pro Phe Lys Asn Val Leu Ala His Phe Ala Thr Arg
65                  70                  75                  80
Asn Val Gly Leu Val Val Arg Leu Asn Ser Glu Leu Tyr Ser Pro Ser
                85                  90                  95
Tyr Phe Thr Ala Leu Gly Ile Asn His Ile Asp Met Ile Phe Glu Asp
            100                 105                 110
Gly Thr Cys Pro Pro Leu Pro Leu Val Arg Arg Phe Ile Lys Met Ala
        115                 120                 125
His Glu Met Ile Thr Val Lys Asn Lys Gly Ile Ala Val His Cys Lys
    130                 135                 140
Ala Gly Leu Gly Arg Thr Gly Cys Leu Ile Gly Ala Tyr Leu Ile Tyr
145                 150                 155                 160
Arg Tyr Gly Phe Thr Ala Asn Glu Ile Ile Ala Phe Met Arg Phe Met
                165                 170                 175
Arg Pro Gly Met Val Val Gly Pro Gln Gln His Trp Leu His Leu Asn
            180                 185                 190
Gln Gly Ser Phe Arg Glu Trp Trp Phe Glu Asp Ser Met Lys Glu Lys
        195                 200                 205
Leu Ala Gln Met Gln Pro Ala Pro Ile Thr Pro Gly Arg Gly Ser Thr
    210                 215                 220
Lys Gln Arg Ala Asn Asn Gly Pro Ile Ala Thr Pro Pro Asn Asn Ser
225                 230                 235                 240
His Ser Lys Arg Ser Ala Leu Gly Glu Ile Asp His Asn Glu Gly Ala
                245                 250                 255
Gly Thr Gln Ser Glu Glu Tyr Leu Pro Ala Pro Thr Pro Gly Gln Pro
            260                 265                 270
Arg Lys Ser His Arg Lys Asp Ser Arg His His Pro Tyr Ala Arg Thr
        275                 280                 285
Thr Ser Gly Thr Leu Leu Leu Asp Lys Asp Met Asn Lys Thr Glu Glu
    290                 295                 300
Gln Thr Arg Gln Arg Ser Ser Arg Leu Ser Asn Asp Ser Ser Glu Ser
305                 310                 315                 320
Glu Glu Glu Ile Gln Leu Arg Met Leu Ala Lys Arg Ser Ser Arg Ser
                325                 330                 335
Pro Val Ala Ser Pro Ser Gln Arg Ser Val Ser Tyr Ser Ala Thr Val
            340                 345                 350
Thr Ala Ser Tyr Thr Leu Thr Asp Asp Ile His Glu Asp Arg Glu Asn
        355                 360                 365
Trp Gly Glu Ala Gly His Ala Ala Pro Lys Thr Pro Leu Ser Ser Lys
    370                 375                 380
Ser Gly Ser Gly Ala Ile Ser Val Thr Lys Val Arg Thr Ser Pro Arg
385                 390                 395                 400
Arg Val Thr Asp Ser Arg Ser Ala Ser Lys Gly Val Arg Lys Ile Ser
                405                 410                 415
```

Gly Arg Ile Gly Ser Thr Gly Ser Pro Thr Arg Val Lys
420 425

<210> 33489
<211> 68
<212> PRT
<213> A.fumigatus

<400> 33489
Arg Tyr Ala Gly Tyr Ser Thr Cys Tyr Arg Lys Glu Ala Gly Ala His
1 5 10 15
Gly Lys Asp Ala Trp Gly Ile Phe Arg Val His Gln Phe Glu Lys Val
20 25 30
Thr Ser Asp Asn Pro Val Ile Val Arg Leu Leu Ala Cys Ser Cys Ile
35 40 45
Pro Arg Leu Asn Asn Ser Phe Leu Pro Ser Leu Lys Thr His Gly Lys
50 55 60
Phe Leu Arg Arg
65

<210> 33490
<211> 149
<212> PRT
<213> A.fumigatus

<400> 33490
His Phe Ser Asn Ile Lys Phe Thr Leu Glu Pro Phe Leu Ser Ser Phe
1 5 10 15
Asn Cys Ser Ile Pro Leu Ser Ser Leu Asn Tyr Leu Leu Phe Asn Cys
20 25 30
Phe Leu Ser Val Ile Val Lys Met Ala Thr Ser Ala Arg Glu Ile Asn
35 40 45
Ile Arg Arg Asp Leu Asn Val Ser Gln Asn Pro Asn Leu Ser Thr Ser
50 55 60
Pro Thr Ala Ser Phe Gln Ser Ala Pro Ser Ser His Gly Gly Ser Ala
65 70 75 80
Phe Ala Gly Arg Ala Ile Pro Leu Ala Asn Ala Lys His Leu Lys Pro
85 90 95
Phe Ala Thr Glu Asp Ile Lys Val Leu Leu Leu Glu Asn Val Asn Gln
100 105 110
Thr Gly Arg Asp Ile Leu Thr Gly Gln Gly Tyr Gln Val Glu Phe Leu
115 120 125
Lys Ser Ser Leu Pro Glu Asp Gln Leu Ile Glu Lys Ile Arg Phe Val
130 135 140
Trp Pro Asn Leu Leu
145

<210> 33491
<211> 134
<212> PRT
<213> A.fumigatus

<400> 33491
Val Glu Gln Phe Val Leu Thr Lys Pro Glu Asn Ser Trp Gln Val Phe
1 5 10 15
Glu Glu Met Met Ala Thr Ser Glu Glu Phe Tyr Gln Ser Leu Gly Leu

```
            20                  25                  30
Pro Tyr Gln Val Val Ala Ile Val Ser Gly Ala Leu Asn Asn Ala Ala
        35                  40                  45
Ser Lys Lys Tyr Asp Leu Glu Ala Trp Phe Pro Phe Gln Gly Glu Tyr
    50                  55                  60
Lys Glu Leu Val Ser Cys Ser Asn Cys Thr Asp Tyr Gln Ala Arg Ala
65                  70                  75                  80
Leu Glu Ile Arg Tyr Gly Thr Lys Lys Ala Thr Asp Val Lys Lys Ser
                85                  90                  95
Tyr Val His Ala Leu Asn Ala Thr Leu Cys Ala Thr Glu Arg Thr Leu
            100                 105                 110
Cys Cys Ile Leu Glu Asn Tyr Gln Thr Asp Asp Val Cys Val Glu Thr
        115                 120                 125
Ser His Leu Ile Trp His
    130
```

<210> 33492
<211> 81
<212> PRT
<213> A.fumigatus

<400> 33492

```
Ile Ser Asp Val His Val Ile Gly Ile Arg Ser Lys Thr Lys Leu Thr
1               5                   10                  15
Ser Arg Val Leu Lys Glu Ala Arg Asn Leu Ile Val Ile Gly Cys Phe
            20                  25                  30
Cys Ile Gly Thr Asn Gln Val Asp Leu Gln Tyr Ala Ala Glu His Gly
        35                  40                  45
Ile Ala Val Phe Asn Ser Pro Phe Ser Asn Ser Arg Ser Val Ala Glu
    50                  55                  60
Leu Val Ile Ala Glu Ile Met Ser Ser His Arg Gly Pro Ala Ile Arg
65                  70                  75                  80
Ala
```

<210> 33493
<211> 318
<212> PRT
<213> A.fumigatus

<400> 33493

```
Leu Gly Ser Arg Pro Ala Trp Ile Arg Ser Tyr Glu Val Ala Asn Asp
1               5                   10                  15
Glu Ala Glu Ala Ser Gly Thr Ala Arg Leu Leu Pro Pro Gln Pro Gly
            20                  25                  30
Asp Ala Leu Val Ala Gln His Asn His Ser Pro Tyr Thr Thr Thr Arg
        35                  40                  45
Pro Asp Tyr Thr Gly Glu Gln Gly Phe Asp Glu Glu Thr Gly Leu Gly
    50                  55                  60
Pro Arg Arg Glu Ser Arg Trp Lys Ser Phe Ser Lys Ala Ile Ala Tyr
65                  70                  75                  80
Pro Leu Glu Pro Gly Leu Glu Glu Lys Leu Val Thr Pro Glu Trp Leu
                85                  90                  95
Asn Gln Asn His Thr Asp Phe Ser Gln Pro Trp Arg Gly Gln Leu Glu
            100                 105                 110
Pro Ser Glu Asp Thr Glu Asp Pro Leu Lys Met Lys Arg Arg Arg Gln
```

```
        115                 120                 125
Ile Trp Phe Lys Arg Phe His Arg Thr Leu Leu Lys Ser Pro Ile Val
    130                 135                 140
Pro Leu Ile Phe Arg Leu Thr Ile Trp Cys Phe Ser Leu Thr Ala Leu
145                 150                 155                 160
Ala Leu Gly Gly Ser Ile Gln His Leu Ser Asp Lys Tyr Gln His Pro
                165                 170                 175
Gln Gly Pro Ser Ala Leu Met Ala Ile Ile Val Asp Ala Val Ala Leu
            180                 185                 190
Val Tyr Leu Ile Tyr Ile Thr Trp Asp Glu Tyr Thr Ala Lys Pro Leu
        195                 200                 205
Gly Leu Arg Ser Pro Ala Ala Lys Ala Arg Leu Ile Leu Leu Asp Ile
    210                 215                 220
Phe Phe Ile Val Phe Asp Ser Ala Asn Leu Ser Ile Ala Phe Glu Ser
225                 230                 235                 240
Leu Ser Thr Val Ser Gly Ala Cys Thr Leu Ala Glu Ile Asn Gln Gln
                245                 250                 255
Ile Ser Lys Lys Asn Asn Ala Ile Cys Asp Arg Gln Ile Ala Leu Ala
            260                 265                 270
Cys Val Leu Leu Val Ala Leu Leu Ala Trp Leu Ile Thr Phe Ser Ile
        275                 280                 285
Ser Val Leu Arg Tyr Asp Thr Pro Tyr Ser Asn Lys Cys Ala Val Leu
    290                 295                 300
Thr Val Phe Leu Asp Asn Arg Leu Val Glu Arg Val Ala Gln
305                 310                 315
```

<210> 33494
<211> 65
<212> PRT
<213> A.fumigatus

<400> 33494

```
Gly Leu Leu Ala Met Val Ile Thr Ala Tyr Ile Phe Pro Asp Tyr Leu
1               5                   10                  15
Asn Asn Phe Gly Asn Ser Ser Thr Leu Thr Leu Pro Ser Arg Ile Pro
            20                  25                  30
Val Leu Val Ser Thr Val Phe Ser Ser His Ala Thr Ile Asp Leu Lys
        35                  40                  45
Leu Thr Ile Asp Cys Ile Glu Gln Trp Lys Ile Val Gln Leu Ala Met
    50                  55                  60
Arg
65
```

<210> 33495
<211> 161
<212> PRT
<213> A.fumigatus

<400> 33495

```
Asn Leu Arg Leu Thr Ala Leu Asn Asn Gly Lys Ser Ser Ser Leu Pro
1               5                   10                  15
Cys Val Asp Arg Lys Ser His Thr Ala Arg Val Val Asp Val Pro Cys
            20                  25                  30
Asn Phe Cys Pro Phe Ser Ser Asp Cys Ser Ser Ser Ser Thr Leu Thr
        35                  40                  45
Pro Phe Ser Thr Glu Cys Phe Ala Asp Arg Lys Leu Arg Pro Ala Glu
```

```
    50                  55                  60
His Glu Ala Ile Arg Ser Ala Thr Pro Ala Leu Ser Ser Val Lys Val
65                  70                  75                  80
Phe Trp Phe Thr Glu Ser Gly Asn Gln Lys Arg Pro Lys Arg Ile Ile
                85                  90                  95
Ser Ile Met Pro Ile Arg Met Met Ala Ala Leu Glu Leu Ser Pro Gln
            100                 105                 110
Pro Leu Pro Ala Thr Lys Pro Ala Ala Ser Ala Thr Met Phe Phe Arg
        115                 120                 125
Ala Pro His Ser Ala Thr Pro Ala Thr Ser Ala Thr Thr Cys Thr Trp
    130                 135                 140
Lys Tyr Gly Arg Ser Lys Arg Arg Arg Ser Ser Leu Ser Ser Thr Gln
145                 150                 155                 160
Gly
```

<210> 33496
<211> 155
<212> PRT
<213> A.fumigatus

<400> 33496

```
Met Pro Ser Cys Ser Met Met Ser Ser Glu Lys Ser Val Thr Arg Pro
1               5                   10                  15
Phe Ala Thr Ser Thr Pro Leu Thr His Glu Thr Ala Arg Ala Tyr Gly
            20                  25                  30
Arg Trp Trp Pro Phe Ile Cys Ser Ser Val Leu Ser Met Asn Trp Cys
        35                  40                  45
Gly Arg Leu Lys Thr Arg Ile Val Ala Ser Leu Thr Ala Ala Arg Arg
    50                  55                  60
Ser Gly Leu Ala Thr Thr Leu Leu Gly Ser Ala Val Pro Gly Arg Tyr
65                  70                  75                  80
Leu Thr Phe Ser Trp Thr Trp Leu Met Met Ser Val Asn Leu Cys Val
                85                  90                  95
Trp Ser Pro Arg Ala Ser Arg Cys Gly Glu Ser Leu Gly Ile Val Thr
            100                 105                 110
Pro Phe Ser Asn Thr His Ile Cys Thr Ser Ser Ser Lys Thr Ser Gly
        115                 120                 125
Cys Ser Arg Val Phe Ser Ala Arg Ile Leu Ala Ile Val Asp Pro Leu
    130                 135                 140
Ser Ser Ser Ala Thr Ala Ile Ile Tyr Lys Thr
145                 150                 155
```

<210> 33497
<211> 104
<212> PRT
<213> A.fumigatus

<400> 33497

```
Ala Ser Thr Ala Gly Arg Cys Pro Ala Pro Thr Ser Pro Arg Arg Ser
1               5                   10                  15
Pro Pro Arg Ser Ser Ala Arg Pro Pro Ser Ala Thr Ala Arg Arg Pro
            20                  25                  30
Trp Thr Ser Thr Arg Arg Thr Ser Ser Pro Pro Ile Thr Ala Thr Ser
        35                  40                  45
Ser Thr Ser Ser Ala Ser Ala Arg Ser His Leu Pro Leu Leu Ser Cys
```

```
    50                  55                  60
Ser Ala Cys Arg Met Thr Thr Pro Ala Ser Thr Arg Gly Cys Cys Ala
65                  70                  75                  80
Ala Ser Ser Ser Ala Arg Thr Ser Met Cys Arg Ser Leu Pro Thr Trp
                85                  90                  95
Arg Ala Trp Arg Cys Ala Ala Pro
            100
```

<210> 33498
<211> 199
<212> PRT
<213> A.fumigatus

<400> 33498

```
Pro Arg Gln Thr Asn Leu Arg Thr Asp Ala Tyr Gly Gly Ser Ala Glu
1               5                  10                  15
Lys Arg Ala Lys Phe Val Leu Asp Ile Leu Ser Gln Thr Arg Lys Val
            20                  25                  30
Val Pro Ala Thr Phe Cys Ile Gly Ile Lys Phe Asn Ser Ala Asp His
        35                  40                  45
Ser Ser Ala Ser Phe Glu Asp Thr Met Thr Gln Ile Gly Leu Leu Val
    50                  55                  60
Asp Ala Gly Ile Asp Phe Leu Glu Val Ser Gly Gly Ser Tyr Glu Asp
65                  70                  75                  80
Pro Lys Val Arg Pro Thr Pro Leu Ser Pro His Pro Thr Thr Arg Asn
                85                  90                  95
Thr Thr Leu Thr Arg Asn Thr Asp Asp Gly His Gln Leu Pro Thr Pro
            100                 105                 110
Ala Gly Lys Glu Pro Ala His Ala Arg Ala Arg Ser Leu Leu Pro Arg
        115                 120                 125
Ile Arg Pro Arg Asn Pro Gln Ala Phe Pro Asp Pro His Pro His Ala
    130                 135                 140
His Arg Arg Ile Pro Gln Pro Arg Arg Arg Arg Ala Arg Pro Ala Arg
145                 150                 155                 160
Glu Arg Met Arg Ser Asp Arg His Arg Pro Ala Arg Arg Cys Gly Thr
                165                 170                 175
Gly Phe Arg Glu Pro Ala Ala Gly Arg Glu Cys Ala Cys Arg Arg Gly
            180                 185                 190
Arg Asp Ala Pro Gly Gln Gly
        195
```

<210> 33499
<211> 71
<212> PRT
<213> A.fumigatus

<400> 33499

```
Lys Ala Lys Trp Met Trp Ala Asn Val Ser Met Thr Ser Ile Leu Asn
1               5                  10                  15
Thr Ala Ala Ala Asp Asn Leu Thr His Pro Val Leu Asn Val Thr Gly
            20                  25                  30
Lys Val Ile Ser Ser Ile Val Thr Leu Lys Phe Tyr Cys Leu Tyr Ile
        35                  40                  45
Tyr Arg Arg Val Cys Pro Arg Cys Val Phe Leu Gly Cys Asn Ser Ser
    50                  55                  60
Asn Asp Ser Ser Tyr Ala Lys
```

65 70

<210> 33500
<211> 67
<212> PRT
<213> A.fumigatus

<400> 33500
Thr Gly Leu Ser Ala Gly Trp Gly Ser Pro Ala Pro Arg Glu Met Thr
1 5 10 15
Gln Gln Asp Ile Asp Thr Val Thr Arg Gln Phe Val Asp Thr Ala Arg
20 25 30
Met Met Ala Asp Ala Gly Phe Ser Gly Ile Glu Leu His Gly Ala His
35 40 45
Gly Tyr Leu Ile Gly Met Phe Cys Ser Ala Val Leu Pro Phe Leu Arg
50 55 60
His Cys Asn
65

<210> 33501
<211> 137
<212> PRT
<213> A.fumigatus

<400> 33501
Gln Glu Thr Gln Met Met Gly Thr Asn Ser Gln Pro Gln Pro Glu Lys
1 5 10 15
Ser Gln Arg Thr Leu Ala Arg Glu Ala Phe Phe Leu Glu Phe Ala Arg
20 25 30
Glu Thr Arg Lys Arg Phe Pro Thr Leu Ile Leu Met Leu Thr Gly Gly
35 40 45
Phe Arg Ser Arg Ala Gly Ala Glu His Ala Leu Arg Glu Asn Ala Cys
50 55 60
Asp Leu Ile Gly Ile Gly Arg Pro Ala Ala Val Glu Pro Ala Phe Ala
65 70 75 80
Asn Arg Leu Leu Asp Glu Ser Val Pro Ala Asp Glu Ala Glu Met His
85 90 95
Leu Gly Lys Val Lys Pro Pro Phe Leu Leu Arg Leu Leu Pro Ile Lys
100 105 110
Ala Val Gly Ala Gly Leu Glu Ser Val Ser Phe Val Ser Leu Ser Gly
115 120 125
Cys Ser Asp Ala Asn Val Gly Trp Leu
130 135

<210> 33502
<211> 382
<212> PRT
<213> A.fumigatus

<400> 33502
Met Ile Ala Val Ala Asp Asp Glu Arg Gly Ser Thr Ile Ala Lys Ile
1 5 10 15
Leu Ala Glu Asn Thr Arg Glu His Pro Asp Val Phe Glu Glu Glu Val
20 25 30
Gln Met Trp Val Phe Glu Lys Gly Val Thr Ile Pro Lys Asp Ser Pro
35 40 45

```
His Arg Glu Ala Leu Gly Asp Gln Thr His Lys Leu Thr Asp Ile Ile
    50                  55                  60
Asn His Val His Glu Asn Val Lys Tyr Leu Pro Gly Thr Ala Leu Pro
65                  70                  75                  80
Ser Asn Val Val Ala Asn Pro Asp Leu Arg Ala Ala Val Lys Asp Ala
                85                  90                  95
Thr Ile Leu Val Phe Asn Leu Pro His Gln Phe Ile Asp Lys Thr Leu
            100                 105                 110
Glu Gln Met Lys Gly His His Leu Pro Tyr Ala Arg Ala Val Ser Cys
        115                 120                 125
Val Lys Gly Val Glu Val Ala Asn Gly Arg Val Thr Leu Phe Ser Glu
    130                 135                 140
Leu Ile Met Glu Gln Leu Gly Ile Tyr Cys Gly Ser Leu Ser Gly Ala
145                 150                 155                 160
Asn Ile Ala Pro Glu Val Ala Ala Glu Glu Phe Cys Glu Thr Thr Ile
                165                 170                 175
Gly Tyr Ser Pro Pro Pro Met Asp Leu Asp Ala Lys Asp Glu Leu Ser
            180                 185                 190
Pro Asp Asn Arg His Val Ile Asn Lys Gln Arg Gln Arg Lys Ile Ser
        195                 200                 205
Ser Thr Ser Ala Glu Leu Gln Arg Val Pro Asp Asp Tyr Pro Cys Val
    210                 215                 220
Asp Glu Arg Leu Leu Arg Arg Leu Phe Glu Arg Pro Tyr Phe His Val
225                 230                 235                 240
Gln Val Val Ala Asp Val Ala Gly Val Ala Leu Cys Gly Ala Leu Lys
                245                 250                 255
Asn Ile Val Ala Leu Ala Ala Gly Phe Val Ala Gly Lys Gly Trp Gly
            260                 265                 270
Glu Ser Ser Lys Ala Ala Ile Ile Arg Ile Gly Met Met Glu Met Ile
        275                 280                 285
Arg Phe Gly Arg Phe Trp Phe Pro Asp Ser Val Asn Gln Lys Thr Phe
    290                 295                 300
Thr Glu Glu Ser Ala Gly Val Ala Asp Leu Ile Ala Ser Cys Ser Ala
305                 310                 315                 320
Gly Arg Asn Phe Arg Ser Ala Lys His Ser Val Glu Lys Gly Val Ser
                325                 330                 335
Val Asp Glu Leu Glu Gln Ser Glu Leu Asn Gly Gln Lys Leu Gln Gly
            340                 345                 350
Thr Ser Thr Thr Arg Ala Val Cys Asp Phe Leu Ser Thr His Gly Lys
        355                 360                 365
Leu Asp Asp Phe Pro Leu Phe Asn Ala Val Asn Arg Lys Phe
    370                 375                 380
```

<210> 33503
<211> 70
<212> PRT
<213> A.fumigatus

<400> 33503

```
Arg Pro Arg Val Asp Phe Gly Lys Gly Asp Asn Pro Gly Tyr Arg Lys
1               5                   10                  15
Glu Ser Asn Glu Pro Cys Glu Thr Leu Asp Thr Asp Phe Asp Ser Ile
            20                  25                  30
Thr Glu Ser Lys Pro Met Met Leu Asp Asp Arg Asp Val Val Cys Ser
        35                  40                  45
Glu Gly Leu Leu Cys Cys Asp Ser Gly Pro Gly Phe Gly Arg Ile Ala
```

```
    50                  55                  60
Gly Ile Asp Ser Val Cys
65                  70

<210> 33504
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33504
Asn Arg Lys Lys Lys Arg Lys Lys Lys Ile Val Met Lys Ile Lys Lys
1               5                   10                  15
Gly Asp Thr Pro Tyr Tyr Lys Glu Asn Val Leu Glu Ser Ala Leu Leu
            20                  25                  30
Thr Leu Tyr Lys Ile Ile Gln Thr Ile Tyr Pro Gly Lys Leu Ser Ala
        35                  40                  45
Asn Phe Phe Ser Asp Phe Ser Phe Ala Pro Thr Val Ser Pro
    50                  55                  60

<210> 33505
<211> 93
<212> PRT
<213> A.fumigatus

<400> 33505
His Val Leu Ala Ser Arg Gln Ala Phe Glu Thr Gln Leu Ser Gln Leu
1               5                   10                  15
Asp Ser Ser Leu Phe Thr Tyr Ile Leu Ser Arg Leu Ser Phe Ser Asp
            20                  25                  30
Pro Arg Pro His Ser Ala Gly Asp Ala Arg Ser Leu Ser Ala Ala Lys
        35                  40                  45
Ala Pro Arg Tyr Gln Arg Val Thr Thr Pro Phe Asn Ser Ser Leu Val
    50                  55                  60
Thr Ser Ser Tyr Thr Arg Leu Gly Ser Asn Gly Thr Thr Ala Arg Arg
65                  70                  75                  80
Thr Gln Leu Leu Gln Ser Tyr Ser Ala Pro Cys Gly Ser
                85                  90

<210> 33506
<211> 413
<212> PRT
<213> A.fumigatus

<400> 33506
Val Lys Arg His Met Pro Pro Pro Ala Ser Ser Met Gly Phe Ser Asp
1               5                   10                  15
Leu Leu Asn Pro Gln Asn Pro Glu Ser Thr Pro Ser Thr Pro Ala Ser
            20                  25                  30
Lys Ser Ser Ala Pro Ser Thr Pro Ser Thr Glu Gln Ser Asn Ser Asn
        35                  40                  45
Met Ala Ser Ser Val Ser Leu Leu Pro Pro Leu Met Lys Gly Ala Arg
    50                  55                  60
Pro Ala Asn Glu Glu Pro Arg Gln Asp Leu Pro Arg Pro Tyr Lys Cys
65                  70                  75                  80
Pro Leu Cys Asp Arg Ala Phe His Arg Leu Glu His Gln Thr Arg His
                85                  90                  95
```

```
Ile Arg Thr His Thr Gly Glu Lys Pro His Ala Cys Gln Phe Pro Gly
            100                 105                 110
Cys Thr Lys Arg Phe Ser Arg Ser Asp Glu Leu Thr Arg His Ser Arg
        115                 120                 125
Ile His Asn Asn Pro Asn Ser Arg Arg Asn Asn Lys Ala Gln His Leu
    130                 135                 140
Ala Ala Ala Ala Ala Ala Ala Ala Ala Asn Gln Asp Asn Ala Leu Ala
145                 150                 155                 160
Ser Asn Ala Ala Ser Met Met Arg Pro Pro Ser Lys Pro Ile Thr Arg
                165                 170                 175
Ser Ala Pro Val Ser Gln Val Gly Ser Pro Asp Ile Ser Pro Pro His
            180                 185                 190
Ser Phe Ser Asn Tyr Ala Gly His Met Arg Ser Asn Leu Gly Ser Tyr
        195                 200                 205
Ala Arg Asn Ser Asp Arg Ala Ser Ser Gly Met Asp Ile Asn Leu Leu
    210                 215                 220
Ala Thr Ala Ala Ser Gln Val Glu Arg Asp Glu His Tyr Gly Phe His
225                 230                 235                 240
Asn Gly Pro Arg Gly His His Ile Phe Gly Ser Arg His His Asn Asn
                245                 250                 255
Asn Arg Leu Pro Ser Leu Ser Ala Tyr Ala Ile Ser Gln Asn Met Ser
            260                 265                 270
Arg Ser His Ser His Asp Glu Asp Asp Met Tyr Ser His Arg Val Lys
        275                 280                 285
Arg Ser Arg Pro Asn Ser Pro Asn Ser Thr Ala Pro Ser Ser Pro Thr
    290                 295                 300
Phe Ser His Asp Ser Leu Ser Pro Thr Pro Asp His Thr Pro Leu Ala
305                 310                 315                 320
Thr Pro Ala His Ser Pro Arg Leu Arg Pro Leu Gly Thr Ser Glu Leu
                325                 330                 335
Gln Leu Pro Ser Ile Arg His Leu Ser Leu His His Thr Pro Ala Leu
            340                 345                 350
Ala Pro Met Glu Pro Gln Pro Glu Gly Pro Asn Tyr Tyr Ser Pro Thr
        355                 360                 365
Gln Pro His Val Gly Pro Ser Ile Ile Asp Ile Met Ser Lys Pro Gly
    370                 375                 380
Leu Glu Ala Ala Gln Thr Pro Arg Ser Pro Ser Tyr Gln Met Trp Pro
385                 390                 395                 400
Val Gln Val Pro Ile Glu Phe Leu Gly Phe Pro Ile Cys
                405                 410
```

<210> 33507
<211> 172
<212> PRT
<213> A.fumigatus

<400> 33507

```
Tyr Gly Val Ser Pro Phe Leu Ile Phe Ile Thr Ile Phe Phe Phe Leu
1               5                   10                  15
Phe Phe Phe Arg Phe Tyr Pro Phe His Phe Leu Pro Pro Arg Ile Phe
            20                  25                  30
Thr Pro His Thr Thr Gln Ser Thr Ser Ser Phe Phe Phe Leu Phe Phe
        35                  40                  45
Phe Ser Phe Phe Phe Leu Cys Phe Phe Phe Phe Phe Thr Leu Val Ser
    50                  55                  60
Asp Ser Asp Lys Pro Pro Pro Phe Tyr Thr Pro Phe Cys Phe Phe Ser
```

65 70 75 80
Pro Pro Glu Ser Pro Phe Leu Ser Ser Ser Pro Pro Phe Leu Ile Ile
85 90 95
Leu Phe Arg Leu Phe Leu Phe Ile Pro Leu Leu Ser Pro Pro Asp Gln
100 105 110
Leu Leu Gln Thr Phe Ser Leu Ile Phe Leu Ser Thr Leu Val Ser Leu
115 120 125
Thr Ser Pro Thr Arg Leu Asn Thr His Cys Gln Ser Arg Leu Ser Phe
130 135 140
Arg Ile Arg Val Arg Tyr His Asn Thr Thr Asp Leu His Tyr Ile Gln
145 150 155 160
His Pro Tyr Arg Arg Ala Ser Leu Val Leu Ile Leu
165 170

<210> 33508
<211> 109
<212> PRT
<213> A.fumigatus

<400> 33508
Ala Thr Ala Ile Lys Tyr Ile His Thr His Thr His Thr Tyr Leu Val
1 5 10 15
Asp Cys Trp Tyr Phe Tyr Asn Asp Asp Gly Ala His Ala Ala Thr Pro
20 25 30
Thr Ala Pro Lys Ser Cys Pro His Cys Ala Ile Pro Ser Ile Val Asn
35 40 45
Leu Lys Tyr Ser Ile Glu Asp Gly Val Tyr Arg Pro Ile Tyr Ser Glu
50 55 60
Tyr Ile Ile Val Ser Tyr Arg Ile Lys Leu Asn Asn Lys Leu Arg Ser
65 70 75 80
Leu Lys Tyr Val Asp Tyr Ser Lys Val Tyr Ser Arg Gly Thr Leu Asn
85 90 95
Gly Glu Ser His His Val Ile Asp Asn Cys Arg Pro Gly
100 105

<210> 33509
<211> 234
<212> PRT
<213> A.fumigatus

<400> 33509
Gln Ala Cys Val Arg Phe His Ile Ser Ser Ser Ala Leu Pro Leu Leu
1 5 10 15
Leu Ser Ser Ala Leu Ser His Ser Arg Gly Ser Met Ser Asn Asn Thr
20 25 30
Met Val Asn Met Ser Ile Glu Met Lys Tyr Asp Asn Asp Asp Thr Thr
35 40 45
Ser Pro Asp Gln Lys Leu Pro Gly Leu Glu Ala Leu Glu Met Val Lys
50 55 60
Gly Ala Ala Ser Val Val Ala Glu Ile Glu Pro Ser Ser Ser Ala Ser
65 70 75 80
Ser Ile Met Gly Ser Arg Glu His His Glu Arg Met Leu Gly Pro Leu
85 90 95
Glu Val Cys Val His Asp Leu Val Gln Glu Gln Ser Arg Gln His Gly
100 105 110
Gln Thr Ile Ala Val His Ser Ile Glu Lys Asp Leu Thr Tyr Ala Glu

```
        115                 120                 125
Leu Glu Arg Tyr Ala Asp Trp Met Ala Lys Tyr Leu Met Val Lys Arg
    130                 135                 140
Asp Ile Gln Ala Gly His Ile Ile Pro Phe Cys Leu Lys Lys Ser Val
145                 150                 155                 160
Trp Thr Val Val Ala Met Leu Ala Ile Met Lys Thr Gly Ala Ala Cys
                165                 170                 175
Ala Ala Leu Asp Pro Ser Gln Pro Val Ser Arg Ile Lys Arg Ile Leu
            180                 185                 190
Asp Asp Thr Glu Ala Pro Leu Val Ile Val His Arg Asp Tyr Leu Gly
        195                 200                 205
Leu Ala Glu Thr Leu Asp Val Pro Ser Ile Val Leu Gly Pro Asp Leu
    210                 215                 220
Trp Glu Gly Thr Ser Ser Gly Asp Thr Asp
225                 230
```

<210> 33510
<211> 175
<212> PRT
<213> A.fumigatus

<400> 33510

```
Pro Leu Pro Val Val Asp Ala Thr Gln Pro Ala Tyr Ile Ala Phe Thr
1               5                   10                  15
Ser Gly Ser Thr Gly Glu Pro Lys Gly Ile Val Val Pro His Arg Ser
            20                  25                  30
Ile Ala Thr Ser Met Arg Glu His Gly Pro Ala Thr Arg Val Asp Thr
        35                  40                  45
Glu Thr Arg Ala Leu Gln Phe Ala Ser Tyr Thr Phe Asp Met Ser Phe
    50                  55                  60
Gln Glu Met Phe Thr Thr Leu Thr His Gly Gly Cys Val Cys Val Pro
65                  70                  75                  80
Ser Glu Ala Glu Arg Trp Asn Asp Leu Ala Gly Ala Met Glu Arg Leu
                85                  90                  95
Gly Val Asn Trp Ala Gln Leu Thr Pro Thr Val Leu Gly Leu Leu His
            100                 105                 110
Pro Glu Gln Val Pro Ser Pro Arg Asp Leu Gly Pro Ser Ala Gly Asp
        115                 120                 125
Pro Ile Thr Gln Val Asn Tyr Ser Asn Val Gly Gly His Gly Val Gly
    130                 135                 140
Pro Asp Arg Leu Gly Arg Gly Gln Gln Lys Ala Ser Ile Leu Gly Arg
145                 150                 155                 160
Arg Pro Leu Asn Pro Leu Gly Pro Pro Leu Val Leu Pro Pro Gly
                165                 170                 175
```

<210> 33511
<211> 134
<212> PRT
<213> A.fumigatus

<400> 33511

```
Tyr Gly Ser Thr His Tyr Phe Val Arg Ser Ser Ile Asp Leu Asn Met
1               5                   10                  15
Gly Trp Arg Leu Val Gly Ser Leu Leu Ala Phe Phe Ala Ala Thr Ser
            20                  25                  30
Ile Ala Trp Pro Tyr Asp Glu Ala Leu Val Asp Tyr Asn Leu Asn Thr
```

```
        35                  40                  45
Asn Lys Gln Ala Ser Asn Pro Ala Glu Tyr Ser Thr Asp Gly Pro Gly
    50                  55                  60
His Lys Tyr Thr Pro Ser Pro Asp Asn Trp Arg Phe Pro Met Tyr Thr
65                  70                  75                  80
Leu Phe Leu Asp Arg Phe Val Asn Gly Asp Pro Thr Asn Asp Asn Ile
                85                  90                  95
Asn Gly Thr Leu Phe Glu His Asp Leu Asn Ser Asn Gln Met Arg His
            100                 105                 110
Gly Gly Asp Val Val Gly Leu Ile Asp Thr Leu Asp Tyr Leu Gln Gly
        115                 120                 125
Met Gly Ile Lys Leu Arg
    130
```

<210> 33512
<211> 84
<212> PRT
<213> A.fumigatus

<400> 33512

```
Ile Leu Leu Leu Ser Asn Phe Ile Leu Ser Val Leu Met Ile Asp Gln
1               5                   10                  15
Thr Glu Val Ala His His Tyr Gln Pro Pro Tyr Ser Tyr Met Glu Tyr
            20                  25                  30
Asp Ile Val Ser Glu Asp Thr Val Tyr Ser Val Ala Phe Asn Asn Leu
        35                  40                  45
Met His His Val Asn Val Ile Arg Gln Val Phe Asn Ile Gln Cys Lys
    50                  55                  60
Gly Glu Gly Gly Lys Gly Lys Gln Lys Gln Lys Ile Pro Ala Cys Ile
65                  70                  75                  80
Arg Ala Ser Ala
```

<210> 33513
<211> 286
<212> PRT
<213> A.fumigatus

<400> 33513

```
Glu Pro Ala Gly Lys Gly Val Ser Ala Ala Trp Ala Arg Glu Thr Ala
1               5                   10                  15
Thr Arg Leu Arg Cys Lys Val Cys Val Gly Tyr Pro Glu Ile Glu Val
            20                  25                  30
Thr Ala Asp Glu Glu Ser Ser Ala Gln Pro Gln Glu Lys Tyr Tyr Asn
        35                  40                  45
Ser Leu Leu Val Val Ser Glu Glu Gly Glu Val Leu Val Asn Tyr Arg
    50                  55                  60
Lys Thr Phe Leu Phe Phe Thr Asp Glu Thr Trp Ala Ser Glu Gly Ser
65                  70                  75                  80
Ala Asp Arg Gly Phe His Glu Leu Val Phe Asn Asn Cys Ser Ala Glu
                85                  90                  95
Gln Gly Tyr Val Leu Ser Ser Arg Val Ala Thr Ser Phe Gly Ile Cys
            100                 105                 110
Met Asp Ile Asn Pro Tyr Lys Phe Glu Ala Pro Phe Thr Ala Trp Glu
        115                 120                 125
Phe Ala Asn Arg Val Leu Asp Ser Lys Ser Gln Leu Val Ile Leu Ser
```

```
    130                 135                 140
Met Ala Trp Thr Thr Phe Met Ser Arg Glu Glu Leu Asp Ala Leu Ala
145                 150                 155                 160
Asp Lys Pro Asp Leu Asp Thr Phe Asn Tyr Trp Ile Gln Arg Phe Trp
                165                 170                 175
Pro Leu Val Arg Gln Lys Met Arg His Asp Val Asp Leu Gly Ala Asp
            180                 185                 190
Gly His Asp Ala Glu Gly Ala Lys Glu Lys Lys Ile Val Ile Val Phe
        195                 200                 205
Gly Asn Arg Cys Gly Glu Glu Gly Ser Val Arg Tyr Ala Gly Thr Ser
    210                 215                 220
Ala Ile Ile Ala Ile Thr Gln Arg Pro Gly Leu Val Gln Glu Gly Asp
225                 230                 235                 240
Thr Ser Gly Glu Glu Leu Pro Phe Asp Val Lys Ile Leu Cys Trp Asp
                245                 250                 255
Ile Leu Gly Ala Thr Thr Glu Gly Ile Cys Phe Ala Asp Thr Thr Ala
            260                 265                 270
Asp Pro Lys Thr Val Phe Gly Leu Val Lys Arg Ser Gln Ala
        275                 280                 285
```

<210> 33514
<211> 75
<212> PRT
<213> A.fumigatus

<400> 33514

```
Glu Trp Gln Pro Leu Leu Leu Tyr Asn Leu Gly His Leu Pro Val Tyr
1               5                   10                  15
Leu Met Arg His Leu Leu Leu Asn Ile Gly Glu Lys Asp Phe His Ile
            20                  25                  30
Gly Lys Thr Leu Ser Thr Leu Met Cys Ser Ile Cys Trp Asn Thr Ser
        35                  40                  45
Tyr Asp Ile Lys Thr Val Glu Phe Tyr Thr Leu Ile Phe Ala Tyr Leu
    50                  55                  60
Asp Leu Phe Asp Val Lys Leu Ser Arg Ser Arg
65                  70                  75
```

<210> 33515
<211> 60
<212> PRT
<213> A.fumigatus

<400> 33515

```
Thr Thr Asn Met Arg Ile Tyr Cys Ser Arg Arg Pro Ile Gln Ala Ser
1               5                   10                  15
Met Arg Glu Arg Phe Ile Tyr Ala Asp Pro Leu Ser Glu Gln Ile Asn
            20                  25                  30
Ala Thr Tyr Arg Cys Lys Thr Gly Ile His Thr Leu Leu Gly Arg Thr
        35                  40                  45
Arg Met Ala Ala Met Met Ala Tyr Leu Met Thr Asn
    50                  55                  60
```

<210> 33516
<211> 68
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (21)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33516
Arg Val Gly Phe Gly His Leu Met His Thr Ile Met Ala Asp Ala Asp
1 5 10 15
Trp Ala Lys Leu Xaa Gly Asp His Thr Thr Phe Tyr Ile Met Ser Asp
20 25 30
Pro Ile Val Gly Ala Ser Asp Ser Asn Ile Thr Asn Lys Arg Lys Arg
35 40 45
Glu Gly Asp Asp Ser Ala Gly Pro Glu Pro Gln Arg Pro Glu Pro Leu
50 55 60
Phe Pro Trp Lys
65

<210> 33517
<211> 457
<212> PRT
<213> A.fumigatus

<400> 33517
Arg Leu Phe Thr Pro Lys Pro Ser Phe Leu Leu Asn Pro Lys Ala Tyr
1 5 10 15
Thr Lys Leu Thr Ser Pro Ala Glu Ile Gln Trp Met Val Arg Ala Leu
20 25 30
Val Ala Val Ser Ser Gly Ser Lys Phe Glu Gly Thr Glu Val Ala Ala
35 40 45
Lys Ile Ala Trp Ala His Ala Phe Ile Tyr Ala Val Thr Ala Pro Gly
50 55 60
Leu Arg Thr Asn Leu Arg Glu Glu Ala Ala His Ala Leu Met Gly Ile
65 70 75 80
Tyr Leu Arg Arg Ser Glu Leu Met Gly Arg Val Val Thr Glu Ala Leu
85 90 95
Trp Thr Trp Ile Leu Ala Leu Arg Thr Ala Glu Lys Glu Ser Ala Ala
100 105 110
Ser Ser Ala Gly Pro Ala Ser Glu Lys Leu Leu His Leu Val Ala Lys
115 120 125
Ala Ile Cys Pro Ser Ala Ala Asn Ile Gln Ser Asp Lys Ile Arg Ser
130 135 140
Asp Leu Lys Arg Gln Leu Val Gln Leu Leu Val Leu Cys Arg Pro Glu
145 150 155 160
Leu Ile Pro Asn Val Ser Trp Ile Ala Leu Cys Leu Arg Thr Gly Thr
165 170 175
Asp Pro Gly Asp Leu Val Arg Glu Tyr Pro Asp Asp Phe Met Lys Gln
180 185 190
Leu Thr Gln Ala His Glu Val Gly Leu Leu Val Phe Ile Gln Ser Arg
195 200 205
Ile Gln Gln Ala Asp Leu Ala Gln Asp Pro Ile Gln Ser Lys Val Pro
210 215 220
Gly Ile Asp Gly Ala Ile Trp Asn Ala Ala Gly Asp Leu Ala Phe Val
225 230 235 240
Ala Pro Asn Thr Met Val Pro Arg Leu Ile Arg Gln Ile Arg Asp Asp
245 250 255

```
Leu Asp Ala Ser Arg Leu Ser Arg Phe Thr Pro Thr Asp Ala Ala Ile
            260                 265                 270
Ala Arg Thr Pro Glu Gly Thr Met Phe Val Asp Val Leu Asn Thr Lys
        275                 280                 285
Ser Lys Gln Pro Ala Phe Asp Lys Asn Thr Lys Asp Tyr Asp Thr Leu
    290                 295                 300
Lys Trp Glu Glu Glu Leu Arg Ala Gln Leu Ala Gln Lys Lys Gly Gln
305                 310                 315                 320
Thr Gln Lys Lys Leu Ser Ala Asp Glu Gln Ala Lys Val Lys Ala Gln
                325                 330                 335
Leu Ala Lys Glu Ser Lys Ile Arg Asp Glu Val Leu Gln Glu Val Lys
            340                 345                 350
Arg Ile Glu Arg Gly Ala Gly Ile Ile Gln Gly Leu Ala Ser Gly Pro
        355                 360                 365
Ala Val Asp Ala Asp Gly Trp Ile Asn Pro Ala Val Ser Ser Leu Leu
    370                 375                 380
Ser Leu Ala Arg Ala Gly Val Gly Leu Phe Ala Gly Asp Val Val Ser
385                 390                 395                 400
Lys Ala Tyr Val Lys Cys Ser Glu Lys Val Ser Ser Arg Leu Gly Pro
                405                 410                 415
Leu Arg Pro Phe Val Gly Val Ala Thr Leu Arg Ala Ile Gly Arg Ser
            420                 425                 430
His Leu Pro Pro Glu Met Glu Ala Glu Pro Leu Gly Gly Glu Phe Ser
        435                 440                 445
His Ile Ile Ser Ser Ser Gly Ile Tyr
    450                 455
```

<210> 33518
<211> 125
<212> PRT
<213> A.fumigatus

<400> 33518

```
Asn Ala Leu Arg Lys Ser Pro Arg Ala Trp Val Leu Phe Ala Pro Ser
1               5                   10                  15
Leu Val Leu Arg His Tyr Glu Gln Leu Ala Gly Pro Ile Cys Arg Leu
            20                  25                  30
Arg Trp Lys Pro Ser His Leu Val Val Ser Phe His Ile Ser Leu Ala
        35                  40                  45
Val Gln Ala Ser Ile Asp His Val Thr Gly Leu Val Thr Arg Ile Leu
    50                  55                  60
Tyr Arg Leu Arg Ile Ala Ser Glu Gln Arg Pro Phe Asp Met Thr Ser
65                  70                  75                  80
Leu Ala Tyr Ile Leu Pro Leu Ile Phe Met Val Leu Thr Arg Asn Gly
                85                  90                  95
Ile Glu Glu Val Lys Gly Glu Glu Glu Gly Glu Gln Leu Leu Leu Ala
            100                 105                 110
Leu Glu Phe Leu Ser Phe His Ser Gly Ser Cys Glu Phe
        115                 120                 125
```

<210> 33519
<211> 546
<212> PRT
<213> A.fumigatus

<400> 33519

```
Leu Gly Leu Arg Ile Ala Asn Thr Ser Cys Thr Val Thr Asp Asn Arg
1               5                  10                  15
Leu Pro Arg Val Glu Val Leu Asn His Leu Leu Thr Ala Met Gln Lys
            20                  25                  30
Phe Thr Gln His Tyr Lys Leu Ile Lys Asp Thr Leu Phe Asp Phe Cys
        35                  40                  45
Arg Cys Ile Ser Ser Asn Ile Thr Asn Glu Glu Leu Thr Val Leu Leu
    50                  55                  60
Gln Gly Thr Ile Ile Pro Asp Thr Ser Val Arg Thr Ser Val Leu Gln
65                  70                  75                  80
Val Ile Glu Ser Glu Ile Asp Leu Thr Asp Leu Asp Phe Ser Glu His
                85                  90                  95
Ile Trp Leu Gly Cys His Asp Gln Val Glu Glu Asn Ala Glu Ile Ala
            100                 105                 110
Glu Asn Ile Trp Glu Glu Asn Ala Leu Glu Val Asp Glu Thr Ser Tyr
        115                 120                 125
Gly Lys Leu Ile Pro Tyr Leu Ser Ser Lys Asp Ser Gln Leu Arg Gly
    130                 135                 140
Ala Ala Ala Arg Ala Leu Gly His Ala Val Glu Leu Asn Pro Ser Val
145                 150                 155                 160
Phe Gly Asp Ile Val Gln Gln Leu Gln Ser Met Tyr Glu Glu Glu Val
                165                 170                 175
Lys Pro Lys Glu Pro Ala Lys Asp Lys Tyr Gly Met Pro Leu Lys Val
            180                 185                 190
Asp Thr Thr Asp His Trp Glu Cys Arg Ser Gly Ile Ala Leu Ala Phe
        195                 200                 205
Gly Ala Met Thr Asn Ser Phe Glu Gly Asp Gln Ile Val Ser Phe Leu
    210                 215                 220
Arg Phe Leu Ile Glu Arg Gly Pro Leu Ile Asp Arg Asn Ser Val Val
225                 230                 235                 240
Arg Ser Gln Met Ala Asp Gly Gly Arg Ser Val Val Val Ser Arg Gly
                245                 250                 255
Gln Gln Arg Val Glu Glu Leu Met Glu Ile Leu Glu Thr Thr Leu Glu
            260                 265                 270
Thr Ser Asp Lys Gly Ser Lys Thr Ser Asp Leu Leu Asn Glu Ala Val
        275                 280                 285
Val Val Leu Tyr Gly Ser Leu Ala Gln His Leu Lys Ala Asp Asp Pro
    290                 295                 300
Arg Leu Gln Thr Val Ile Lys Arg Leu Leu Ala Thr Leu Pro Thr Pro
305                 310                 315                 320
Ser Glu Thr Val Gln Ser Ala Val Ser Gly Cys Leu Pro Pro Leu Ile
                325                 330                 335
Arg Leu Cys Gly Pro Lys Ser Gly Glu Tyr Val Gln Glu Met Leu Asp
            340                 345                 350
Gln Leu Leu Gln Thr Lys Asn Tyr Ala Thr Gln Arg Gly Ala Ala Tyr
        355                 360                 365
Gly Leu Ala Gly Ile Val Arg Gly Arg Gly Ile Phe Thr Leu Arg Glu
    370                 375                 380
Tyr Gln Val Met Ser His Leu Lys Asp Ala Ile Glu Asn Lys Lys Glu
385                 390                 395                 400
Ala His Gln Arg Leu Gly Ala Leu Leu Ala Phe Glu Leu Phe Ala Thr
                405                 410                 415
Ile Leu Gly Arg Thr Phe Glu Pro Tyr Val Ile Gln Ile Val Pro Gln
            420                 425                 430
Leu Leu Ala Gly Phe Gly Asp Pro Ser Ile Asp Val Arg Asp Ala Cys
        435                 440                 445
```

```
Leu Asp Ala Ala Lys Ala Cys Phe Ser Asn Leu Ser Ser Tyr Gly Val
    450                 455                 460
Lys Lys Ile Leu Pro Thr Leu Leu Asp Gly Leu Asp Asp Thr Gln Trp
465                 470                 475                 480
Arg Ser Gln Lys Gly Ala Cys Asp Leu Leu Gly Ala Met Ala Tyr Leu
                485                 490                 495
Asp Pro Gln Gln Leu Ala Ala Ser Leu Pro Asp Ile Ile Pro Pro Leu
            500                 505                 510
Thr Val Val Leu Asn Asn Thr His Lys Glu Val Arg Asn Ala Ala Asn
        515                 520                 525
Arg Ser Leu Gln Arg Phe Gly Asp Leu His His Gly Gly Arg Arg Ile
    530                 535                 540
Arg Ala
545
```

<210> 33520
<211> 140
<212> PRT
<213> A.fumigatus

<400> 33520

```
Ile Arg Ala Pro Pro Ser Gly Val Pro Ala Pro Gly Ser Arg Asp Trp
1               5                   10                  15
Arg Cys Ala Thr Asp Pro Trp Pro Gly Cys Asn Ala Ala Gly Glu Asp
            20                  25                  30
Asp Gly Ala Asp Ala Ala Ala Cys Asp Ala Val Gln Glu Ala Gly Asp
        35                  40                  45
Asp Arg Pro Arg Ile Pro Asp Thr Asn Pro Arg Thr Arg Gly Ser Asp
    50                  55                  60
Arg Ser Ala Ala Asn Pro Thr Trp Ala Pro Tyr Pro Ala Pro Ser Asp
65                  70                  75                  80
Pro Pro Ala Ser Gly Ser His Pro Ala Ser Arg Arg His Arg Ser Val
                85                  90                  95
Thr Pro Arg Gly Ser Arg Gly Arg Arg Gly Arg Arg Ala Ala Pro Arg
            100                 105                 110
Thr Gly Thr Cys Thr Lys Asp Trp Gly Gly Glu Gly Thr Gly Gly Ala
        115                 120                 125
Arg Arg Arg Arg Arg Arg Arg Arg Arg Pro Asp Val
    130                 135                 140
```

<210> 33521
<211> 78
<212> PRT
<213> A.fumigatus

<400> 33521

```
Arg Glu Gln Ser Ser Gln Leu Ser Asp Ala Ser Asp Phe Phe Phe Phe
1               5                   10                  15
Phe Phe Phe Phe Phe Pro Asp Gly Thr Val Asp Ile Tyr Leu Asn Gly
            20                  25                  30
Thr Val His Pro Ala Ala Thr Met Ala Thr Gly Arg Gln Gly Ile Val
        35                  40                  45
Trp Val Ser Ser Arg Thr Thr Arg Ile Lys Met Thr Ser Trp Lys Lys
    50                  55                  60
Lys Val Gly Pro His Arg Ser Ser Leu Ala Gly Gly Asn Glu
65                  70                  75
```

<210> 33522
<211> 100
<212> PRT
<213> A.fumigatus

<400> 33522
Leu Ile Phe Ser Thr Arg Ser Glu Gly Cys Gly Leu Gly Ile Leu Ser
1 5 10 15
Ala Arg Met Glu Pro Thr Thr Gln Thr Asp Pro Met Thr Val Thr Pro
20 25 30
Lys His Glu Leu Glu Asn Gly Ala Ala Val Ala Ala Asn Asp Glu Glu
35 40 45
His Pro Ser Lys Lys Gln Arg Leu Glu Ser Ile Ser Ile Thr Glu Gln
50 55 60
Glu Val Ser Asp Gly Ala Pro Lys Arg Ile Lys Gly Val Ala Pro Ile
65 70 75 80
Lys Ala Glu Tyr Ala Cys Pro Cys Leu Pro Ser Ile Val Thr Pro Leu
85 90 95
Ile Val Thr Lys
100

<210> 33523
<211> 138
<212> PRT
<213> A.fumigatus

<400> 33523
Asn Asp Met Met Ser Glu Ile Gly Leu Ser Asp Asn His His Asp Ser
1 5 10 15
Ala Ser Thr Cys Gln Leu Ser Met Pro Asp Glu Asp Gln Ser His Ser
20 25 30
Ala Ala Pro Leu Leu Pro Lys Pro Glu Asp Tyr Glu Thr Ala Pro Ala
35 40 45
Asp Gly Met Lys Glu Leu Glu Met Gly Asp Ile Lys Asn Pro Ser Leu
50 55 60
Ser Pro Ser Pro Arg Pro Gly Ser Ile Phe Thr Val Asp Asp Asp Glu
65 70 75 80
Trp Thr Pro Arg Phe Lys Arg Ser His Thr Arg Ala Arg Arg Ala Arg
85 90 95
Arg Ala Cys Leu Leu Phe Leu Leu Lys Ala Val Leu Ala Val Trp Phe
100 105 110
Ser Ala Val Leu Tyr Asn Val Ile Arg Tyr Cys Ala Lys Val Ser Leu
115 120 125
Pro Ala Ser Met Met Val Asn Thr Thr Asp
130 135

<210> 33524
<211> 348
<212> PRT
<213> A.fumigatus

<400> 33524
Leu Gln Gln Ser Pro Lys Thr Gly Asp Leu Pro Asp Thr Ser Thr Asn
1 5 10 15
Thr Ser Asp Gly Gly Ser Pro Ala Ser Thr Pro Thr Ser Asn Asp Arg

```
            20                  25                  30
Arg Met Lys Ile Asp Ser Asn Ala Gly Asn Ile His Gly Val Tyr Pro
        35                  40                  45
Leu Tyr Asp Ser Leu Thr Leu Thr Thr Thr Thr Gly Asn Ile Thr Val
    50                  55                  60
Ala Ile Ala Pro Gln Pro Ala His Pro Asp His Pro Phe Glu Pro Ala
65                  70                  75                  80
Arg Leu His Ile Arg Ser Leu Ser Gly Thr Val Thr Ile Ser Phe Thr
                85                  90                  95
Ala Pro Glu Ala Ala Val Leu Pro Asp Leu Glu Leu Ala Met Glu Leu
            100                 105                 110
Glu Leu Glu Leu His Gln Asp Gly Asn Asp Ser Leu Pro His Asp Glu
        115                 120                 125
Ile Met Lys Thr Cys Asp Leu Pro Ala Arg Pro Tyr Glu Leu Asp Ile
    130                 135                 140
Gln Thr Asp Ser Gly Pro Ile Ala Gly Arg Met Val Phe Ser Arg Ser
145                 150                 155                 160
Ala Arg Leu Val Ser Gly Ser Gly Asp Ile Thr Ala Met Leu Ile Pro
                165                 170                 175
Val Ile Gly Gly Val Gly Glu Asp Cys Ser Arg Glu Met Trp Arg Asn
            180                 185                 190
Val Ser Ile Val Thr Gly Thr Gly Thr Gly Ala Gln Arg Val His Val
        195                 200                 205
Thr Glu Pro Tyr Ile Leu Arg Ser Lys Ala Gly Leu Arg Ser Lys Ala
    210                 215                 220
Gly Asp Asp Ala Val Ala Asn Tyr Phe Val Ala Gly Cys His Val Gly
225                 230                 235                 240
Gly His Gly Ser Met Glu Val Ala Tyr Pro Ala Ala Trp Ala Gly Asn
                245                 250                 255
Val His Val Arg Thr Glu Gly Gly Ser Val Arg Leu Gly Gly Glu Gly
            260                 265                 270
Val Glu Val Val Glu Ser Gly Glu Gly Met Val Asp Ala Thr Val Gly
        275                 280                 285
Thr Arg Arg Ile Asn Gly Asp Glu Glu Asp Asp Asp Asp Asp Asp Asp
    290                 295                 300
Glu Glu Ser Asp Asp Asp Glu Asp Glu Asp Asp Asp Asp Ile Glu Glu
305                 310                 315                 320
Asp Asp Asn Asp Lys Arg Arg Leu Gly Gly Trp Met Asp Val Ser Phe
                325                 330                 335
Arg Ser Lys Glu Gly Ser Ile Leu Phe Tyr Val Gly
            340                 345
```

<210> 33525
<211> 76
<212> PRT
<213> A.fumigatus

<400> 33525

```
Gln Arg Leu Cys Asn Val Thr Lys Val Pro Gln Gln Arg Pro Ala Phe
1               5                   10                  15
Ile Ser Gly His Ala Gln His Ala Gln Cys Ser Gly Leu Cys Ala Phe
            20                  25                  30
Ala Gln Thr Leu Gln Ala His Gly His Leu Pro Pro Phe Ser Leu Leu
        35                  40                  45
Gln Asn Glu Asp Val Thr Ala Thr Phe Leu Val Ala Asp Ala Gly Pro
    50                  55                  60
```

```
Glu Asp Met Gln Pro Ser Ile Phe Leu Arg Val Arg
65                  70                  75

<210> 33526
<211> 71
<212> PRT
<213> A.fumigatus

<400> 33526
Val Pro Gly Lys Ala Ala Phe Leu Pro Trp Lys Ala Cys Ile Ala Ala
1               5                  10                  15
Asn Met Cys Asn Cys Gln Ile Leu Glu Ala Ile Gly Val Glu Tyr Ile
            20                  25                  30
Asp Glu Phe Glu Val Phe Thr Pro Ala Asp Asp Val Tyr His Val Lys
        35                  40                  45
Lys His Glu Leu Gln Gly Pro Phe Val Cys Gly Cys Arg Asn Leu Cys
    50                  55                  60
Asp Ala Phe Arg Arg Ile Ala
65                  70

<210> 33527
<211> 293
<212> PRT
<213> A.fumigatus

<400> 33527
Arg His Gly Ser Lys Arg Gln Leu Leu Asn Asn Phe Ala Asp Trp Leu
1               5                  10                  15
Tyr Gln Arg His Gly Ala Ser Pro Pro Ser Val Val Val Val Asn Gly
            20                  25                  30
His Thr Ala Asn Leu Ser Ile Arg Ser Ile Phe Ala Thr Ile Val Thr
        35                  40                  45
Ala Val Leu Gly Ala Asp Ile Pro Ser Lys Met Gly Ser Gln Pro Leu
    50                  55                  60
Glu Val Leu Glu Leu Leu Gln Ser Ser Leu Lys Ser Arg Pro Ser Gln
65                  70                  75                  80
Lys Pro Ile Thr Val Leu Ile Asn Ala Ile Asp Ala Pro Leu Leu Arg
                85                  90                  95
Arg Ala Thr Asn Gln Ala Leu Leu Ala Arg Leu Ala Ala Thr Pro Lys
            100                 105                 110
Ile His Leu Leu Ala Thr Ala Asp Thr Pro Asn Phe Leu Leu Met Trp
        115                 120                 125
Asp Ile Ser Leu Arg Asp His Phe Asn Phe Val Phe His Asp Cys Thr
    130                 135                 140
Thr Phe Ala Ala Phe Asp Thr Glu Phe Asp Val Val Glu Glu Val His
145                 150                 155                 160
Asn Leu Leu Gly Arg Lys Gly Arg Arg Ile Gly Gly Lys Asp Gly Val
                165                 170                 175
Gly Phe Val Leu Lys Ser Leu Pro Glu Asn Ala Arg Asn Leu Tyr Arg
            180                 185                 190
Leu Leu Leu Thr Glu Leu Leu Cys Met Met Asp Glu Asp His Asn Ser
        195                 200                 205
Asp Asp Glu Met Asn Gly His Ala Gly Arg Glu Asn Gly Val Asn Asp
    210                 215                 220
Glu Met Gly Ile Glu Phe Arg Met Leu Tyr Gln Lys Ala Ala Glu Glu
225                 230                 235                 240
```

```
Phe Ile Ala Ser Ser Glu Met Met Phe Arg Thr Leu Leu Lys Glu Phe
                245                 250                 255
His Asp His Gln Met Ile Thr Ser Arg Met Asp Ser Gly Gly Met Glu
            260                 265                 270
Ile Leu Arg Val Pro Leu Ser Arg Glu Glu Met Glu Gly Leu Leu Glu
        275                 280                 285
Asp Leu Val Leu Gly
    290
```

<210> 33528
<211> 109
<212> PRT
<213> A.fumigatus

<400> 33528

```
Leu Leu Gln Gln Ala Arg Ile Ala Glu Glu Ala Gly Ala Ala Ala Val
1               5                   10                  15
Met Ala Leu Glu Arg Val Pro Ala Asp Ile Arg Ala Gln Cys Gly Val
            20                  25                  30
Ala Arg Met Ser Asp Pro Ser Met Ile Lys Glu Ile Met Ala Ala Val
        35                  40                  45
Asn Ile Pro Val Met Ala Lys Ala Arg Ile Gly His Phe Val Glu Cys
    50                  55                  60
Gln Val Arg Leu Pro Phe Ser Arg Gly Lys Pro Ala Leu Gln Leu Thr
65                  70                  75                  80
Cys Val Ile Val Arg Ser Ser Lys Pro Leu Ala Leu Asn Thr Ser Thr
                85                  90                  95
Ser Ser Lys Ser Leu Pro Leu Pro Met Met Ser Thr Thr
            100                 105
```

<210> 33529
<211> 74
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (63)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33529

```
Ser Pro Gly Ser Gly Ala Pro Asp Thr Leu Leu Leu Asn Cys Ser Asp
1               5                   10                  15
Asp Arg Ser Ser Leu Ala Gly Gly Ser Ala Leu Leu Arg Pro Asn Pro
            20                  25                  30
Ser His Ile Ala Lys Leu Ala Val Pro Ala Ala Glu Ile Asn Pro Asn
        35                  40                  45
Val His Asn Val Pro Ser Gly Ala Leu Leu Gly Ala Asp Asn Xaa Tyr
    50                  55                  60
Thr Ser Thr Met Glu Gly Val Asn Pro Gly
65                  70
```

<210> 33530
<211> 298
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33530
Thr Arg Val Tyr Ser Phe His Arg Ala Cys Ile Xaa Ile Val Ser Thr
1 5 10 15
Glu Glu Gly Thr Thr Arg Asp Ile Val Asp Val Gly Val Asp Leu Gly
20 25 30
Gly Trp Tyr Cys Lys Leu Gly Asp Met Ala Gly Ile Arg Ser Glu Lys
35 40 45
Ser Thr Ser Thr Gly Gln Gly Thr Ala Ile Ile Gly Ala Val Glu Lys
50 55 60
Glu Gly Ile Arg Arg Ala Arg Ala Arg Ala Leu Glu Ser Asp Val Val
65 70 75 80
Val Leu Val Ile Ser Leu Glu Glu Gly Thr Asn Gly Ser Pro Tyr Arg
85 90 95
Leu Ser Val Asp Gln Glu Val Ile Asp Ala Val Asn Asp Cys Val Gln
100 105 110
Ala Gly Lys Cys Ile Val Val Ala Ile Asn Lys Cys Asp Arg Leu Pro
115 120 125
Ala Ala Asp Arg Phe Gly Gln Ser Leu His Asp Leu Arg Thr Lys Ile
130 135 140
Arg Thr Leu Phe Pro Ala Val Pro Glu Lys Arg Ile Phe Asp Ile Ser
145 150 155 160
Cys Asn Glu Ala Ser Glu Glu Thr Leu Ser Glu Gln Ser Asp Pro Gly
165 170 175
Asn Leu Gln Arg Phe Leu Arg Gly Leu Ile Ser Thr Phe Glu Glu Ile
180 185 190
Ala Ser Pro Ala Arg Met Asp Gly Asp Glu Asn Gly Gln Tyr Asp Leu
195 200 205
Ser Tyr Trp Glu Asp Ser Leu Gly Val Thr His Arg Gln Ser Ser Asn
210 215 220
Leu Gln Arg Cys Met Gln His Leu Asp Asp Phe Leu Asn Glu Thr Thr
225 230 235 240
Gln Ala Gln Thr Leu Gln Thr Pro Gly Tyr Ala Asp Asp Arg Asn Ile
245 250 255
Glu Thr Glu Ile Asp Val Val Met Ala Ala Glu His Leu Arg Phe Ala
260 265 270
Ala Asp Thr Leu Ala Lys Ile Thr Gly Lys Gly Glu Ser Gly Asp Val
275 280 285
Glu Asp Val Leu Gly Val Val Phe Glu Lys
290 295

<210> 33531
<211> 186
<212> PRT
<213> A.fumigatus

<400> 33531
Thr Arg Pro Phe Ser Ser His Asn Leu Thr Ser Asp Ser Pro Tyr Phe
1 5 10 15
Asn Met Asp Thr Asp Ser Pro Thr Glu Thr Arg Ser Thr Glu Pro Ser
20 25 30

```
Thr Leu Leu Lys Ile Leu His Trp Asp Lys Leu Phe Glu Ser Asp Thr
        35                  40                  45
Pro Pro Arg Leu Gly Ile Glu Val Gly Lys Arg Leu Pro Phe Thr Ala
    50                  55                  60
Leu Ser Ala Phe Ser Val Gly Met Ala Ile Gly Ser Ser His Gly Ser
65                  70                  75                  80
Lys Lys Ala Ala Tyr Arg Phe Arg Ala Glu Asn Ala His Arg Phe Pro
                85                  90                  95
Thr Thr Ser Thr Gly Trp Phe Gln Tyr His Lys Thr Lys Asn Tyr Ile
            100                 105                 110
Ala Ile Val Gly Gly Val Lys Glu Gly Met Lys Met Gly Phe Lys Leu
        115                 120                 125
Ser Ala Gly Ala Leu Ala Phe Cys Ile Phe Glu Glu Thr Val Asp Tyr
    130                 135                 140
Ala Arg His Asp Arg Arg Asp Phe Leu Ser Thr Val Thr Ala Gly Leu
145                 150                 155                 160
Ser Phe Ser Gly Ile Tyr Ser Leu Leu Gly Ile Ile Pro Phe Gly Ala
                165                 170                 175
Val Tyr Pro Tyr Asn Lys Ile Thr Ala Asn
            180                 185

<210> 33532
<211> 76
<212> PRT
<213> A.fumigatus

<400> 33532
Leu Thr Thr Val Glu Tyr Tyr Ile Val Thr Lys Ile Ser Arg Ser Tyr
1               5                   10                  15
Val Ile Ala Ala Val Leu Asn Arg Arg Ser Asp Phe Val Arg Arg Glu
            20                  25                  30
Gly Arg Ser Ser Ala Glu Asp Asn Gly Arg Arg Thr Trp Glu Thr Lys
        35                  40                  45
Lys Tyr Ser Asp Lys Ile Phe Cys Thr Ile His Val Glu Leu Gly Asn
    50                  55                  60
Asn Lys Gly Ser Trp Leu Trp Leu Asp Ser Val Phe
65                  70                  75

<210> 33533
<211> 279
<212> PRT
<213> A.fumigatus

<400> 33533
Val Pro Glu Pro Ile Thr Ser Val Tyr Leu Leu Leu Lys Leu Ser Leu
1               5                   10                  15
Leu Ser Thr Asp Glu Thr Val Val Asn Gly Ala Gln Ile Phe Tyr Lys
            20                  25                  30
Thr Gln Phe Gly Ile Asp Asp Glu Thr Ser Arg Ser Arg Trp Leu Leu
        35                  40                  45
Gly Leu Val Asn Ala Ala Pro Tyr Leu Cys Cys Ala Val Leu Gly Cys
    50                  55                  60
Trp Leu Ala Val Pro Phe Asn Ala Trp Phe Gly Arg Arg Gly Thr Ile
65                  70                  75                  80
Phe Ile Thr Cys Cys Phe Ser Ala Ile Ala Cys Leu Trp Gln Gly Phe
                85                  90                  95
```

```
Val Asn Thr Trp Trp His Met Phe Ile Ser Arg Phe Val Leu Gly Phe
            100                 105                 110
Gly Ile Gly Pro Lys Ser Ala Thr Val Pro Ile Tyr Ala Ala Glu Thr
        115                 120                 125
Ala Pro Pro Ala Ile Arg Gly Ala Leu Val Met Gln Trp Gln Met Trp
    130                 135                 140
Thr Ala Phe Gly Ile Met Leu Gly Tyr Ala Ala Asp Leu Ala Phe Phe
145                 150                 155                 160
Glu Val Pro Asp Pro Pro Asn Ile Val Gly Leu Asn Trp Arg Ile Met
                165                 170                 175
Met Ala Ser Ala Met Phe Pro Ala Ile Leu Val Cys Leu Phe Val Phe
            180                 185                 190
Ser Cys Pro Glu Ser Pro Arg Trp Tyr Met Ser Gln Asn Arg Tyr Tyr
        195                 200                 205
Lys Ala Tyr Glu Ser Met Cys Ser Leu Arg Thr His Lys Ile Gln Ala
    210                 215                 220
Ala Arg Asp Leu Tyr Tyr Met His Thr Leu Leu Glu Ala Glu Lys Gly
225                 230                 235                 240
Met Lys Leu Gly Gln Asn Lys Met Ile Glu Leu Ile Ala Val Pro Arg
                245                 250                 255
Asn Arg Arg Ala Leu Ile Ala Ser Glu Ile Val Met Phe Leu Gln Gln
            260                 265                 270
Val Ile Asn Leu Pro Arg Ser
        275

<210> 33534
<211> 250
<212> PRT
<213> A.fumigatus

<400> 33534
Leu Cys Gly Val Asn Val Ile Ala Tyr Tyr Ser Ser Glu Ile Phe Ile
1               5                   10                  15
Lys Val Thr Ser Ala Arg Asn Ala Leu Ala Thr Ser Phe Gly Trp Gly
            20                  25                  30
Val Val Asn Trp Leu Phe Ala Ile Pro Ala Val Tyr Thr Ile Asp Thr
        35                  40                  45
Phe Gly Arg Arg Asn Leu Leu Leu Thr Thr Phe Pro Leu Met Ala Leu
    50                  55                  60
Ala Trp Phe Phe Thr Gly Phe Ser Phe Tyr Ile Pro Ala Ser Glu His
65                  70                  75                  80
Asn Asn Ala Gln Leu Ala Cys Val Ala Leu Gly Leu Tyr Leu Phe Gly
                85                  90                  95
Val Val Tyr Ser Val Gly Glu Gly Pro Val Pro Phe Thr Tyr Ser Ala
            100                 105                 110
Glu Ala Tyr Pro Leu Tyr Val Arg Ser Tyr Gly Met Ala Leu Ala Thr
        115                 120                 125
Ala Thr Thr Trp Leu Phe Asn Phe Leu Leu Ala Ile Thr Trp Pro Ser
    130                 135                 140
Leu His Asp Ser Phe Lys Asp Gln Gly Ala Phe Cys Trp Tyr Ala Ala
145                 150                 155                 160
Trp Asn Leu Ile Gly Phe Val Leu Val Leu Leu Phe Met Pro Glu Thr
                165                 170                 175
Lys Gly Lys Thr Leu Glu Glu Leu Asp Gln Val Phe Ser Val Pro Thr
            180                 185                 190
Arg Phe His Ala Ala Tyr Gly Leu Arg Gln Ile Pro Tyr Phe Phe Lys
```

```
        195                 200                 205
Arg Tyr Ile Leu Arg Gln Gln Val Lys Pro Glu Ile Leu Tyr Glu Arg
    210                 215                 220
Glu Asp Pro Val Gly Tyr Ser Ser Asp Phe Val Phe Asn Thr Ala Asp
225                 230                 235                 240
Trp Ser Arg Thr Arg Tyr Val Arg Gly His
                245                 250

<210> 33535
<211> 174
<212> PRT
<213> A.fumigatus

<400> 33535
Ala Asp Gln Asp Arg Trp Glu His Gly Arg Gly His His Asp Ala Pro
1               5                   10                  15
Val Glu Pro Asp Asn Val Trp Arg Val Trp Asp Leu Glu Glu Ser Lys
            20                  25                  30
Val Arg Cys Ile Ala Gln His Asp Ala Lys Cys Ser Pro His Leu Pro
        35                  40                  45
Leu His Asp Gln Cys Thr Thr Asn Gly Gly Arg Ser Ser Phe Gly Cys
    50                  55                  60
Val Asp Gly Asn Ser Cys Arg Leu Gly Ala Asp Ala Glu Ala Gln Asp
65                  70                  75                  80
Glu Pro Gly Asp Glu His Met Pro Pro Ser Val Asp Glu Pro Leu Pro
                85                  90                  95
Gln Ala Ser Asp Gly Gly Glu Thr Ala Cys Asn Glu Asp Gly Pro Thr
            100                 105                 110
Ala Thr Lys Pro Arg Val Glu Arg Asp Cys Gln Pro Ala Thr Lys Asp
        115                 120                 125
Gly Ala Ala Gln Ile Trp Cys Gly Val His Gln Pro Gln Gln Pro Ala
    130                 135                 140
Arg Pro Arg Gly Phe Ile Val Asn Ala Glu Leu Arg Leu Val Glu Asp
145                 150                 155                 160
Leu Ser Ala Ile Asp Asn Arg Phe Ile Cys Arg Lys Gln Thr
                165                 170

<210> 33536
<211> 145
<212> PRT
<213> A.fumigatus

<400> 33536
Met Val His Ile Trp Tyr Ile Pro Ala Gln Ser Pro Thr Glu Asn Gln
1               5                   10                  15
Pro Ala Thr Gly Gln Trp Gln Pro Ser Arg Leu Asn Tyr Lys Lys Asn
            20                  25                  30
Asn Asn Thr Asn Glu Ile Glu Asn Ser Phe Tyr Pro Thr Ala Thr Tyr
        35                  40                  45
Lys Glu Gly Gln Arg Glu Gln Ser Asp Ala Ile Ser Ser Thr Lys Pro
    50                  55                  60
Ile Ser Phe Ser Asp Pro Gly Thr Gly Asn Leu Gln Trp Thr Val Thr
65                  70                  75                  80
Thr Gly Val Val Ser Leu Pro Ile Arg Cys Arg Thr Asp Phe Val Gly
                85                  90                  95
Trp Thr Val Val Phe Leu Ser Gly Asn Leu Ser Arg Tyr Leu Arg Ala
```

```
            100                 105                 110
Ile Ser Val Glu Val Gln Tyr Arg Gln Ser Ser Gly Asn Ser Leu Arg
        115                 120                 125
Ser Ser Gln Asn Pro Val Ile Val Pro Val Ile Ile Met Leu Phe Ile
    130                 135                 140
Tyr
145

<210> 33537
<211> 70
<212> PRT
<213> A.fumigatus

<400> 33537
Leu Phe Ser Ala Ile Gln Met Tyr Ser Lys Leu Val Gln Arg Cys Phe
1               5                   10                  15
Asp Asn Cys Val Asn Asp Phe Thr Thr Lys Ser Leu Ile Ser Arg Glu
            20                  25                  30
Glu Gly Cys Ile Met Arg Cys Val Asp Lys Tyr Met Lys Ala Ser Ser
        35                  40                  45
Arg Leu Asn Glu Arg Phe Gln Glu Gln Asn Ala Ala Met Met Gln Gly
    50                  55                  60
Gly Gln Leu Pro Gly Arg
65                  70

<210> 33538
<211> 73
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (49),(55)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33538
Pro Gln Ala Ile Thr Val Leu Ser Pro Glu Arg Ala Trp Ser Thr Ser
1               5                   10                  15
Leu Asp Tyr Glu Met Ile Arg His Cys Ala Asp Phe Glu Gln Ser Glu
            20                  25                  30
Gln Leu Ile Tyr Gln Tyr Ile Asp Phe Met Arg Ser Phe Lys Asn Arg
        35                  40                  45
Xaa Asn Gln Gly Cys Ser Xaa Phe Tyr Phe Thr Ser Asn Arg Arg Lys
    50                  55                  60
Gln Ser Thr His Gly His Asn Pro Ala
65                  70

<210> 33539
<211> 81
<212> PRT
<213> A.fumigatus

<400> 33539
Arg Ala Cys Ser Val Gln His His Arg Ile Ile Leu Ser Tyr Arg Val
1               5                   10                  15
His Cys Cys Ala Val Leu Cys Val Arg His Leu Ala Thr Arg Ser Ser
```

```
            20                  25                  30
Gly Pro Lys Gly Leu Gly Leu Leu Gly Gly Gly Asp Tyr Phe Ile Ala
        35                  40                  45
Phe Pro Leu Pro Glu Asp Leu Val Arg Thr Arg Tyr Leu Ser Ile Tyr
    50                  55                  60
His Leu Trp Phe Ser Ala Thr Phe Tyr Leu Val Glu Thr Ser His Thr
65                  70                  75                  80
Cys
```

<210> 33540
<211> 111
<212> PRT
<213> A.fumigatus

<400> 33540

```
Leu Cys Ile Tyr Cys Ala Cys Tyr Ile His Ser Ala Cys Asn Cys Tyr
1               5                   10                  15
Val Pro Ile Pro Lys Ala Ala Leu Leu Asp Ala Trp Ile Leu Ser Glu
            20                  25                  30
Thr Cys Ser Leu Arg Glu Ala Asn Pro Pro Cys Leu Thr Thr Glu Lys
        35                  40                  45
Pro Gln Gly Ile Phe Gly Val Pro Leu Asn Val Ser Ile Lys Tyr Ala
    50                  55                  60
Asn Val Ala Ile Ser Leu Thr Asn Asp Asn Gly Glu Ser Phe Ile Tyr
65                  70                  75                  80
Gly Tyr Val Pro Ile Val Val Ala Lys Cys Gly Val Phe Leu Lys Glu
                85                  90                  95
Lys Gly Thr Asn Lys Gln Pro Ser Ser Pro Arg Arg Ser Ala Tyr
            100                 105                 110
```

<210> 33541
<211> 279
<212> PRT
<213> A.fumigatus

<400> 33541

```
Val His Phe Asp Val Leu Pro Ile Leu His Leu Gln Ala Lys Val Ala
1               5                   10                  15
Arg Gly Lys Ile Gly Thr Ser Arg Leu Met Glu Ala Gln Asp Phe Trp
            20                  25                  30
Arg Val Ile Trp Glu Gln Asp Val Arg Ile Val Val Ser Leu Thr Ala
        35                  40                  45
Glu Ile Glu Arg Gly Gln Val Lys Cys His Arg Tyr Trp Glu Ser Gly
    50                  55                  60
Asn Tyr Gly Pro Phe Arg Val Asn Asn Phe Ser Glu Arg Arg Ile Pro
65                  70                  75                  80
Met Lys Ala Ser Gly Ser Arg Gln Asn Gln Gly Gln Ser Thr Thr Ser
                85                  90                  95
Leu Ser Asp Ser Ser Glu Glu Pro Ser Glu Pro Cys Ile Ile Val Arg
            100                 105                 110
His Phe Gly Leu Ser His Ser Ala Phe Pro Phe Gln Pro Leu Arg Glu
        115                 120                 125
Val Thr Gln Leu Gln Tyr Pro Tyr Trp Pro Asp Phe Gly Thr Thr Ser
    130                 135                 140
Gln Pro Ser His Leu Leu Gln Leu Val Asp Glu Cys Asn Ala Ile Ile
```

```
145                 150                 155                 160
Arg Ala Thr Ser Asn Thr Cys Phe Asp Thr Arg Lys Ala Met Pro Thr
                165                 170                 175
Glu His Arg Pro Val Leu Val His Cys Ser Ala Gly Cys Gly Arg Thr
            180                 185                 190
Gly Thr Phe Cys Thr Val Asp Ser Val Leu Asp Met Leu Lys Arg Gln
        195                 200                 205
His Ser Ala Arg Lys Thr Glu Pro Arg Glu Ile Ser Glu Arg Pro Asp
    210                 215                 220
Thr Gly Trp Ile Tyr Asn Asp Asn Val Asp Leu Ile Ala Lys Ala Val
225                 230                 235                 240
Ala Asp Phe Arg Thr Gln Arg Pro Ser Met Ile Gln Asn Leu Ser Gln
                245                 250                 255
Phe Val Leu Cys Tyr Glu Ser Val Leu Glu Trp Met Val Val Gln Met
            260                 265                 270
Asp Glu Gly Cys Glu Asn Pro
        275

<210> 33542
<211> 73
<212> PRT
<213> A.fumigatus

<400> 33542
Asp Gly Ser Asp Ala Arg Leu Met Arg Thr Ile Ile Leu Phe Pro Lys
1               5                   10                  15
Arg Gln Leu Leu Ala Ala Ser Ser Asn Phe Cys His Gly Leu Phe Tyr
            20                  25                  30
Leu Asn Thr Asn Gln Ala Leu Ser His Val Ala Gln Ser Ser Thr Gly
        35                  40                  45
Ala Asn Pro Ala Arg Pro Ser Lys Phe Asp Tyr Ala Phe Leu Ser Thr
    50                  55                  60
Ser Gly Ile Phe Leu Ser Asn Phe Val
65                  70

<210> 33543
<211> 278
<212> PRT
<213> A.fumigatus

<400> 33543
Arg Ser Phe Asp Thr Arg Lys Leu Ala Asn Thr Phe Thr Ser Asp Ile
1               5                   10                  15
Asp Arg Arg Ser Phe Ser Arg Trp Lys Gln Cys Arg Tyr Ile Ile Val
            20                  25                  30
Tyr Asp Ala Ala Thr Leu Asp Met Lys Asp Ala Val Pro Met Ile Asn
        35                  40                  45
Met Leu Asn Lys Phe Thr Ala Glu Gly Trp Asn Gly Glu Gly Ser Ile
    50                  55                  60
Leu Arg Gly Gly Phe Lys Val Phe Cys Asn Gln Phe Asn Ala Leu Val
65                  70                  75                  80
Gln Gln Pro Glu Ser Ser Asn Pro Gly Ile Ser Ser Asn Lys Pro Asn
                85                  90                  95
Ser Met Gln Ile Ser Leu Pro Pro Phe Ala Pro Ile Ala Gly Gly Cys
            100                 105                 110
Ala Leu Pro Glu Ser Ser Ser Ala Ala Ile Pro Phe Phe Gly Asn Ile
```

```
        115                 120                 125
Arg Gln His Met Asp Leu Met Gly Gly Val Gly Gln Ile Pro Leu Gln
    130                 135                 140
Leu Pro Gln Asn Leu Thr Asp Ser Lys Arg Arg Leu Leu Pro Arg Trp
145                 150                 155                 160
Leu Arg Asp Ala Ser Asp Val Glu Asp Gly Gly Gln Lys Val Ser Glu
                165                 170                 175
Lys Phe Leu Glu Leu Glu Lys Lys Glu Leu Asp Arg Met Lys Gln Ala
            180                 185                 190
Leu Ser Tyr Glu Met Thr Gly Val Phe Thr Ser Ala Gln Ala Pro Ser
        195                 200                 205
Lys Lys Tyr Arg Val Ala Gly Ile Glu Lys Gly Asn Lys Asn Arg Tyr
    210                 215                 220
Asn Asn Ile Tyr Pro Phe Asp His Ser Arg Val Arg Leu Gln Asp Val
225                 230                 235                 240
Pro Ser Gly Gly Cys Asp Tyr Val Asn Ala Asn Tyr Met Lys Ala Glu
                245                 250                 255
Tyr Ser Asn Lys Arg Tyr Ile Ala Thr Gln Ala Pro Val Pro Glu Thr
            260                 265                 270
Phe Asp Val Ser Ser Phe
        275

<210> 33544
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33544
Arg Tyr Arg Pro Leu Pro Ser Phe Phe Met Lys Ser Thr Ser Thr Ala
1               5                   10                  15
Thr Gly Pro Asp Asn Ser Leu Ile Tyr Pro Phe Leu Asn Ile Leu Leu
            20                  25                  30
Arg Tyr Leu Tyr Arg Ala Ser Asn Ser Ser Tyr Asn Ile Val Asn Arg
        35                  40                  45
Gly Leu Tyr Ser Ser Asn Phe Leu Leu Ser Ser Tyr Ile Leu
    50                  55                  60

<210> 33545
<211> 167
<212> PRT
<213> A.fumigatus

<400> 33545
Thr Ile Ser Asp Ser Arg Gln Glu Glu Asp Phe Val Thr Gln Leu Tyr
1               5                   10                  15
Asn Arg Ser Leu Leu Ser Gln Phe Asp Val Thr His Phe Gln Asn Leu
            20                  25                  30
Leu Asp Glu Ala Val Ser Trp Thr Glu Gly Thr Ala Asp Ala Leu Asp
        35                  40                  45
Gln Asn Leu Arg Asp Ala Ile Thr Ser Arg Leu Ser Phe Arg Arg Glu
    50                  55                  60
Phe Leu Leu Ala Leu Ala His Asp Ala Asp Ile Leu Gln Asn Lys Ser
65                  70                  75                  80
Thr Gly Tyr Phe Ala Ser Cys Leu Ser Gln Leu Ser Ser Leu Thr Lys
                85                  90                  95
Ser Val Ser Leu Gly Lys Pro Val Pro Asp Ala Phe Ser Val Lys Ile
```

```
            100                 105                 110
Gln Arg Arg Leu Ala Ser Thr Val Pro Pro Arg Pro Met Val Lys Ile
        115                 120                 125
Ser Phe Glu Asn Ala Leu Ala His Leu Arg Arg Leu Cys Gln Asp Ala
    130                 135                 140
Ile Asp Leu Gln Glu Leu Val Glu Tyr Gly Gly Pro Tyr Asn Phe Lys
145                 150                 155                 160
Val Phe Gln Ala Phe Pro Thr
                165
```

<210> 33546
<211> 131
<212> PRT
<213> A.fumigatus

<400> 33546

```
Arg Ile Gln Val Ala Val Trp Thr Leu Leu Ser Arg Lys Pro Gln Pro
1               5                   10                  15
Ser Val Tyr Ile Arg Ser Leu Thr Gln Thr Phe Ile Leu Ser Asn Met
            20                  25                  30
Thr Val Leu Gly Lys Val Ser Leu Lys Gly Leu Leu Tyr Asp Glu Leu
        35                  40                  45
Ser Glu Phe Val Leu Ala Ser Ser Val Leu Leu Asp Ala Asn Met Asp
    50                  55                  60
Asn Thr Glu Val Pro Ser Asp Pro Arg Phe Gln Ile Ala Gln Arg Met
65                  70                  75                  80
Asp Ala Phe Val Lys Arg Phe Ala Gln Val Thr Ser Cys Arg Phe Phe
                85                  90                  95
Arg Val Val Arg Ile Ser Asp His Tyr Ile Ala Leu Cys Arg His Phe
            100                 105                 110
Ser Lys Cys Val Pro Glu Pro Leu Ser His Ser Ser Asp Thr Leu Pro
        115                 120                 125
Tyr Asn Tyr
    130
```

<210> 33547
<211> 67
<212> PRT
<213> A.fumigatus

<400> 33547

```
Glu Pro Ser Asp Ile Lys Asp Pro Tyr Ile Lys Ser Gln Pro Leu Gly
1               5                   10                  15
Arg Phe Gly Ser Val Arg Asp Ile Ala Asp Ala Thr Val Tyr Leu Phe
            20                  25                  30
Ser Asn Thr Gly Ser Tyr Val Ser Gly Gln Ile Leu Val Gly Lys Leu
        35                  40                  45
Ser Asp Leu Leu Met Arg Ile Lys Ile Asn Ser Arg Thr Leu Arg Leu
    50                  55                  60
Thr Gln Trp
65
```

<210> 33548
<211> 415
<212> PRT
<213> A.fumigatus

<400> 33548

```
Glu Pro Glu Pro Ile Leu Asp Arg Asn Phe Asp Ser Ile Phe Ile Phe
1               5                  10                  15
Pro Ala Arg Pro Thr Leu Ser Arg Phe Gln Ser Asn Leu Gly Tyr Thr
            20                  25                  30
Ser Ile Tyr Tyr Cys Ile Leu Lys Thr Pro Lys Gln Thr Thr Met Glu
        35                  40                  45
Pro Leu Asp Gln Leu Ala Asp Phe Glu Phe Leu Leu Glu Gln Val Arg
    50                  55                  60
Gln Val Lys Asn Asp Arg Asn Val Pro Ile Gln Asp Gln Ala Glu Tyr
65                  70                  75                  80
Phe Gln Lys Thr Leu Val His Gln Ile Glu Ser Phe Ser Glu Ile Glu
                85                  90                  95
Lys Lys His Leu Tyr Arg Tyr Leu Lys Leu Ser Arg Asp Asn Asp Glu
            100                 105                 110
Leu Arg Ala Ser Tyr Asp Glu Leu Asn Glu Ala Leu Ser Glu Glu Leu
        115                 120                 125
Arg Asn Val Glu Arg Lys Asn Ala Glu Leu Gln Glu Val Lys Thr Ala
    130                 135                 140
Leu Arg Glu Thr Gln Lys Asp Cys Glu Ala Lys Glu Glu Tyr Ile Arg
145                 150                 155                 160
Asp Ala Glu Ala Ala Asn Ala Ala Leu Asn Glu Lys Asn Asn Glu Gln
                165                 170                 175
Arg Ser Leu Ile Arg Ser Tyr Lys Gln Asp Trp Lys Ala Met Lys Ala
            180                 185                 190
Glu Leu Glu Leu Arg Asp Lys Thr Ile Asp Asp Leu Gln Thr Thr Leu
        195                 200                 205
Arg Ser Lys Gly Ala Leu Val Asp Lys Tyr Glu Arg Glu Ile Glu Gln
    210                 215                 220
Tyr Arg Lys Gln Arg Lys Glu Trp Glu Arg Gln Val Asp Glu Ala Ala
225                 230                 235                 240
Gln Tyr Leu Asn Asp Lys Ser Glu Ile Leu Lys Trp Leu Asn Glu Val
                245                 250                 255
Ser Arg Pro Leu Lys Ala Lys Pro Lys Ala Pro Ala Ser Gln Val Ser
            260                 265                 270
Gly Ser Gly Ser Ser Ser Ser Glu Ala Ser Ser Ser Asp Ile Arg Lys
        275                 280                 285
Val Ser Asp Ser Val Met Arg Ser Thr Lys Asp Asp Gly Ala Asp Asp
    290                 295                 300
Glu Thr Gln Cys Thr Thr Asp Ser Gln Glu Gly Lys Ala Pro Ser Ala
305                 310                 315                 320
Thr Gly Ser Pro Lys Asp Arg Gln Pro Asp Leu Gln Gly Ser Ala Met
                325                 330                 335
Asp Cys Ser Asn Glu Ala Ile Ser Glu Asp Glu Met Ser Ser Ile Arg
            340                 345                 350
Gly Ala Thr Leu Glu Glu Glu Met Met Cys Leu Ser Asp Ser Leu Ser
        355                 360                 365
Ala Leu Ser Ile Glu Arg Gly Gly Ile Ser Ser Gly Met Leu Tyr Asp
    370                 375                 380
Arg Leu Ser Arg Asp Thr Ile Ser Arg Lys His Val Arg Phe Ala Phe
385                 390                 395                 400
Ser Thr Ala Thr Ala Lys Ala Thr Lys Ala Ala Arg Lys Gly Ser
                405                 410                 415
```

<210> 33549

<211> 87
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (76)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33549
Pro His Gly Tyr Arg Tyr Asn Glu Gly Thr Ala Asp Leu Cys Val Phe
1 5 10 15
Ser His His His Gly Thr Lys Val Val Ala Thr Leu Arg Asp Asp Val
20 25 30
Gly Pro Phe Ala Val His Ser Leu His Thr Leu Ser Arg Arg Ser Val
35 40 45
Ser Ile Val Glu Tyr Cys Gln Tyr Asp Ala Thr Arg Ser Ser Asp Lys
50 55 60
Ile Thr Gln Leu Cys Thr Leu Ala Met Tyr Ile Xaa Asn Thr Ala Ala
65 70 75 80
Ala Gly Arg Phe Ile Glu Thr
85

<210> 33550
<211> 75
<212> PRT
<213> A.fumigatus

<400> 33550
Gly Gln Arg Ser Glu Pro Gly Gly Gly Pro Ser Val Trp Ser Ser Ala
1 5 10 15
Gly Ser Ser Lys Thr Met Leu Thr Pro Cys Ser Met Leu Arg Leu Glu
20 25 30
Glu Val Tyr Asp Val Thr Val Val Lys Asp Gly Gln Glu Ala Tyr Asp
35 40 45
Thr Val Lys Ala Asn Met Glu Glu Gly Lys Val Phe Asp Val Ile Phe
50 55 60
Met Asp Ile Gln Val Tyr Ala Thr Val Thr Met
65 70 75

<210> 33551
<211> 180
<212> PRT
<213> A.fumigatus

<400> 33551
Glu Pro Phe Val Gln Gly Asn Leu Gly Met Asn Arg Lys Tyr Gly Gly
1 5 10 15
Thr Gly Leu Gly Leu Ser Ile Cys Ala Gln Phe Ser Arg Leu Met Asn
20 25 30
Gly Lys Ile Thr Phe Glu Ser Glu Pro Gly Lys Gly Ala Leu Phe Thr
35 40 45
Val Glu Ile Pro Leu Lys Phe Val Lys Glu Ala Ala Pro Ser Thr Pro
50 55 60
Ser Ser Ser Ala Ala Gly Ser Arg Thr Pro Ser Val Phe Ser Leu Asp
65 70 75 80

```
Asp Leu Pro Gly Leu Ala Arg Pro Pro Ser Asn Asn Gly Ser Val Arg
                  85                  90                  95
Ser Asp Pro Leu Thr Asn Phe Glu Lys Gln Asp Leu Gln Pro Arg Leu
             100                 105                 110
Val Gly Leu Ser Gln Pro Phe Phe Thr Leu Thr Pro Ser Ser Pro Ala
         115                 120                 125
Pro Ser Thr Pro Arg Ala Thr Pro Ala Asp Gly Ala Lys Pro Glu Val
     130                 135                 140
Lys Asp Asn Thr Ser Gly Lys Val Arg Val Leu Val Ala Glu Asp Asn
145                 150                 155                 160
Val Val Asn Gln Glu Val Val Leu Arg Tyr Gly His Pro Leu Asp Leu
                 165                 170                 175
Pro Arg Gln Cys
             180
```

<210> 33552
<211> 61
<212> PRT
<213> A.fumigatus

<400> 33552

```
His Arg Gln Met Pro Asn Leu Asp Gly Leu Glu Ser Thr Arg Leu Ile
1               5                  10                  15
Arg Gly Met Gly Tyr Ser Ala Pro Ile Val Ala Leu Ser Ala Phe Ser
            20                  25                  30
Glu Glu Ser Asn Ile Lys Asp Cys Met Asp Ser Gly Met Asp Met Phe
        35                  40                  45
Ile Arg Tyr Val Tyr Arg Ile Ser Ala Lys Met Leu Tyr
    50                  55                  60
```

<210> 33553
<211> 207
<212> PRT
<213> A.fumigatus

<400> 33553

```
Cys Leu Lys Cys Val Ile Val Trp Asn Ile Asn Thr Thr Leu Leu Ala
1               5                  10                  15
Glu Glu Asn Gln Phe Thr Lys Ser Phe Tyr Ser Pro Tyr Leu Leu His
            20                  25                  30
Arg Leu Tyr Ser Ile Cys His Ile Lys Met Ser Asn Phe Asn His Ala
        35                  40                  45
Pro Asn Tyr Asn Pro Asn Ser Leu Pro Thr Ile Asn Asn Gly Met Asp
    50                  55                  60
Glu Ser Phe Tyr Thr Asn Met Asp His Thr Met Asn Asn Ala His Asn
65                  70                  75                  80
Leu Gly Met His Tyr Leu Ala Ala Ala Pro Pro Thr Asn Thr Ser His
                85                  90                  95
Thr Ala Ile Asp His Pro Leu Tyr Thr Ser Phe Asn Tyr Cys Met Val
            100                 105                 110
Phe Ser Asn Val Pro Asp Gln Pro Trp Pro Ser Tyr Asn Leu Leu Gln
        115                 120                 125
Gln Cys Leu Asp Lys Val Arg Ala Arg Asp Ala Lys Val Tyr Ser Ser
    130                 135                 140
Ile Asp Ala Ile Leu Arg Tyr Asp Gly Ala Lys Thr Gly Asp Leu Ile
145                 150                 155                 160
```

```
Leu Ser Phe Thr Ala Ala Ala Leu Thr Asp Gly Val Ile Trp Thr Ser
                165                 170                 175
Ala Glu Gly Val Ile Leu Arg Gln Met Arg Asn Trp Asp Arg Asp Ser
            180                 185                 190
Arg Met Glu Gly Trp Thr Leu Val Gly Glu Phe Gly Leu Ala Gln
        195                 200                 205
```

<210> 33554
<211> 200
<212> PRT
<213> A.fumigatus

<400> 33554

```
Thr Gly Leu Thr Ala Tyr Arg Glu Val Thr Gly Ala Arg Gly Phe Gln
1               5                   10                  15
Ile Val Lys Tyr Pro Trp Pro Tyr Thr Met Ile Glu Gln Val Asp Pro
            20                  25                  30
Arg Gln Tyr Ala Ala Asn Asp Arg Asn His Ile Gly Asn Pro Thr Thr
        35                  40                  45
Thr Asp Ile Ile Gly Asp Ala His Thr Ser Asp Phe Lys Thr Phe Thr
    50                  55                  60
Lys Pro Gln Thr Tyr Ile Asp His Glu Thr Ser Thr Ile Ile Asp Val
65                  70                  75                  80
Ser Ile Leu Arg Val Asp Asp Asp Thr Phe Val Arg Phe Tyr Val Ser
                85                  90                  95
Gly Lys Val Ser Gly Pro Val Val Glu Val Ser Arg Asn Gly Leu Phe
            100                 105                 110
Gly Asp Trp Val Thr Pro Ser Gly Thr Met Gln Asp Ser Thr His Phe
        115                 120                 125
Gly Gly Pro Tyr Pro Phe Trp Asp Asn Val Gln Pro Gly Lys Ala Tyr
    130                 135                 140
Leu Leu Cys Asp Lys Val Gly Ser Val Thr Gly Leu Ser Pro Trp Val
145                 150                 155                 160
Ser Thr Asp Val Thr Ser Gly Thr Phe Thr Pro Ala Ser Gly Gly Asn
                165                 170                 175
Leu Gly Ala Leu Arg His Gly Ser Val Leu Ser Val Thr Lys Gln Gln
            180                 185                 190
Tyr Asp Ala Leu Ala Ala Leu Gly
        195                 200
```

<210> 33555
<211> 72
<212> PRT
<213> A.fumigatus

<400> 33555

```
Arg Pro Leu His His Ile Leu Leu Leu Thr Glu Ala Cys Cys Lys Val
1               5                   10                  15
Leu Ala Leu Ser Trp Lys Ile Gln Arg Met Thr Ile Pro Lys Asp His
            20                  25                  30
Leu Leu Val His Tyr Val Val Leu Ser Tyr Gln Tyr Ala His Leu Ala
        35                  40                  45
Arg Arg Val Ile Phe His Phe Trp Leu Gly Ser Ile Gly Arg Ser Ser
    50                  55                  60
Ser Gly Ser Arg Arg Cys Gly Gly
65                  70
```

<210> 33556
<211> 404
<212> PRT
<213> A.fumigatus

<400> 33556
Asn Gly Gly Arg Lys Thr His Trp Arg Phe Ala Pro Leu Pro Arg Pro
1 5 10 15
Arg Gly Gln His Gln Thr Trp His His Pro Gly Pro Gly Arg Ala Arg
20 25 30
Ser Pro Gly Arg Thr Ile Gln Asp His Arg Ala Arg Thr Glu Lys Pro
35 40 45
Ser Cys Ala Ala Asp Gly Thr Gly Trp His His Arg Asp Gly Ser Val
50 55 60
Cys Arg Val Gly Thr Gly Ala Arg His Arg Trp Ser Ala Val Ala Ala
65 70 75 80
Ala Arg Val Arg Leu Tyr Phe Arg Ala Gly Val Cys Ala Gly Asp Gly
85 90 95
Asp Gly Arg Asp Trp Arg Val Ser Ala Gly Pro Trp Arg His His Glu
100 105 110
Leu Pro Arg Val Ser Leu Cys Val Ala Gln His Gly Phe Arg His Gly
115 120 125
Leu Ser Leu Leu Val Phe Ala Gly Asp Pro Gly Ala Val Arg Asp Cys
130 135 140
Arg Arg Val His Gly His Arg Leu Leu Ala Pro Arg Arg Ala His Arg
145 150 155 160
Arg Leu Asp Leu His His Ala Gly His His Cys Ala Ala Gln Leu His
165 170 175
Ala Arg Gln Ser Leu Arg Arg Asp Arg Val Leu Val Arg Arg Asp Gln
180 185 190
Asp His His Ala Asp Arg Pro Ala Leu Pro Leu Leu His Pro Leu Leu
195 200 205
Gly Arg Arg Pro Gln Pro Pro Ala Pro Gly Leu Pro Leu Leu Glu Gly
210 215 220
Pro Gly Pro His Glu Arg Val Ser Gly Ala Arg Arg Arg Arg Pro Leu
225 230 235 240
Arg Arg Pro Ala Ala Val His Arg Gln Glu Arg His Arg Leu His Leu
245 250 255
Arg Pro Gly Thr Asp His His Leu Arg Arg Arg Asp Gly Val Pro Pro
260 265 270
Pro Gln Arg Pro His Arg Arg Pro Pro Leu His Leu Pro Thr Gly Leu
275 280 285
Leu Leu His Leu Arg Arg Pro Arg His Arg Arg His Leu Leu Leu Pro
290 295 300
Gly Gln Ala Asp His Leu Arg Gln Arg Arg Arg Leu Leu Leu Ala Leu
305 310 315 320
Gly Arg Gly His Pro Gln Arg Arg His Pro Arg Ala Arg Gln His Arg
325 330 335
Gln Arg Arg His Pro His Leu Gly Leu Val Arg Arg Gln Phe Val Pro
340 345 350
Val His Val Leu Pro Leu Ala Leu Leu Pro Arg Arg Leu Arg Gln Arg
355 360 365
Pro Gln Arg Leu Gln Gly Leu Gln Pro Leu Gly Arg Pro Leu His Gly
370 375 380
Arg Arg Arg Leu Arg Pro Leu Leu Ala Pro Ser Ser Pro Gly Ala Lys

385 390 395 400
Gly Leu Arg Leu

<210> 33557
<211> 448
<212> PRT
<213> A.fumigatus

<400> 33557
Pro Thr Ser Gly Arg Gln Lys Lys Ser Leu Leu Asn Leu Pro Ser Pro
1 5 10 15
Pro Gly Leu Ser Ser Ser Leu Val Ser Cys Arg Leu His Phe Leu Cys
20 25 30
Lys Cys Asn Thr Met Asn Gln Glu Ser Ser Asn Lys Met Ala Glu Glu
35 40 45
Lys Pro Thr Gly Ala Ser Pro Pro Tyr His Asp Pro Glu Ala Asn Ile
50 55 60
Lys His Gly Thr Ile Gln Ala Leu Val Glu Arg Asp Leu Leu Asp Glu
65 70 75 80
Arg Tyr Lys Ile Thr Glu Arg Gly Leu Lys Asn Arg His Val Gln Leu
85 90 95
Met Ala Leu Gly Gly Thr Ile Gly Thr Gly Leu Phe Val Gly Ser Gly
100 105 110
Gln Ala Leu Ala Ile Gly Gly Pro Leu Ser Leu Leu Leu Gly Tyr Val
115 120 125
Phe Ile Ser Ala Leu Val Tyr Ala Leu Val Thr Gly Met Ala Glu Ile
130 135 140
Gly Ala Tyr Leu Pro Val His Gly Gly Thr Met Ser Tyr His Gly Phe
145 150 155 160
Arg Tyr Val Ser Arg Ser Met Gly Phe Ala Met Gly Tyr Leu Tyr Trp
165 170 175
Tyr Ser Leu Gly Ile Leu Val Pro Tyr Glu Ile Val Ala Ala Ser Met
180 185 190
Val Ile Asp Tyr Trp His Pro Gly Val His Ile Ala Val Trp Ile Ser
195 200 205
Ile Met Leu Val Ile Ile Val Leu Leu Asn Phe Met Pro Val Lys Ala
210 215 220
Tyr Gly Glu Thr Glu Phe Trp Phe Ala Gly Ile Lys Ile Ile Thr Leu
225 230 235 240
Ile Gly Leu Leu Phe Leu Ser Phe Ile Leu Phe Trp Gly Gly Gly Pro
245 250 255
Asn Arg Gln Arg Leu Gly Phe His Tyr Trp Lys Asp Pro Gly Pro Met
260 265 270
Asn Glu Tyr Leu Ala His Gly Ala Ala Gly Arg Phe Val Gly Leu Leu
275 280 285
Gln Cys Ile Val Lys Ser Ala Ile Ala Phe Ile Phe Ala Pro Glu Leu
290 295 300
Ile Ile Ile Ser Gly Gly Glu Met Glu Ser Pro Arg Arg Asn Val Pro
305 310 315 320
Thr Ala Ala Arg Arg Tyr Ile Tyr Arg Leu Val Phe Phe Tyr Ile Phe
325 330 335
Gly Ala Leu Ala Ile Gly Val Ile Cys Ser Ser Gln Ala Lys Gln Ile
340 345 350
Ile Ser Gly Asn Gly Asp Ala Ser Ser Ser Pro Trp Val Val Ala Ile
355 360 365

```
His Asn Ala Gly Ile Pro Val Leu Asp Ser Ile Val Asn Ala Ala Ile
    370                 375                 380
Leu Thr Ser Ala Trp Ser Ala Gly Asn Ser Phe Leu Tyr Met Ser Ser
385                 390                 395                 400
Arg Ser Leu Tyr Ser Leu Ala Val Ser Gly Asn Ala Pro Ser Val Phe
                405                 410                 415
Lys Ala Cys Asn Arg Trp Gly Val Pro Tyr Met Ala Val Gly Val Ser
            420                 425                 430
Ala Leu Tyr Ser Leu Arg His His Pro Gly Gln Lys Val Tyr Asp Ser
        435                 440                 445
```

<210> 33558
<211> 143
<212> PRT
<213> A.fumigatus

<400> 33558

```
Ser Ser Ser Pro Ala Ala Arg Trp Ser Pro Pro Ala Ala Thr Ser Pro
1               5                   10                  15
Pro Pro Pro Ala Ala Thr Ser Thr Asp Trp Ser Ser Ser Thr Ser Ser
            20                  25                  30
Ala Pro Ser Pro Ser Ala Ser Ser Ala Pro Pro Arg Pro Ser Arg Ser
        35                  40                  45
Ser Pro Ala Thr Ala Thr Pro Pro Pro Arg Pro Gly Ser Trp Pro Ser
    50                  55                  60
Thr Thr Pro Ala Ser Pro Cys Ser Thr Ala Ser Ser Thr Pro Pro Ser
65                  70                  75                  80
Ser Pro Arg Pro Gly Pro Pro Ala Ile Arg Ser Cys Thr Cys Pro Pro
                85                  90                  95
Ala Arg Ser Thr Pro Ser Pro Ser Pro Ala Thr Pro Pro Ala Ser Ser
            100                 105                 110
Arg Pro Ala Thr Ala Gly Ala Ser Pro Thr Trp Pro Ser Ala Ser Pro
        115                 120                 125
Pro Ser Thr Arg Ser Val Ile Thr Arg Gly Lys Arg Ser Thr Thr
    130                 135                 140
```

<210> 33559
<211> 406
<212> PRT
<213> A.fumigatus

<400> 33559

```
Gly Val Val Asp Leu Leu Pro Arg Val Met Thr Glu Arg Val Glu Gly
1               5                   10                  15
Gly Asp Ala Asp Gly His Val Gly Asp Ala Pro Ala Val Ala Gly Leu
            20                  25                  30
Glu Asp Ala Gly Gly Val Ala Gly Asp Gly Glu Gly Val Glu Arg Ala
        35                  40                  45
Gly Gly His Val Gln Glu Arg Ile Ala Gly Gly Pro Gly Arg Gly Glu
    50                  55                  60
Asp Gly Gly Val Asp Asp Ala Val Glu His Gly Asp Ala Gly Val Val
65                  70                  75                  80
Asp Gly His Asp Pro Gly Arg Gly Gly Gly Val Ala Val Ala Gly Asp
                85                  90                  95
Asp Leu Leu Gly Leu Gly Gly Ala Asp Asp Ala Asp Gly Glu Gly Ala
            100                 105                 110
```

```
Glu Asp Val Glu Glu Asp Gln Ser Val Asp Val Ala Ala Gly Gly Gly
        115                 120                 125
Gly Asp Val Ala Ala Gly Gly Leu His Leu Ala Ala Gly Asp Asp Asp
    130                 135                 140
Gln Phe Arg Gly Glu Asp Glu Gly Asp Gly Ala Leu Asp Asp Ala Leu
145                 150                 155                 160
Gln Gln Ala Asp Glu Ala Ala Gly Gly Ala Val Arg Gln Ile Leu Val
                165                 170                 175
His Gly Ala Arg Val Leu Pro Val Val Glu Ala Gln Ala Leu Ala Val
            180                 185                 190
Gly Ala Ala Ala Pro Glu Glu Asp Glu Gly Glu Glu Glu Gln Ala Asp
        195                 200                 205
Gln Arg Asp Asp Leu Asp Pro Gly Glu Pro Glu Leu Gly Leu Ala Val
    210                 215                 220
Gly Phe Asp Gly His Glu Val Glu Gln His Asn Asp Asp Gln His Asp
225                 230                 235                 240
Gly Asp Pro Asp Gly Asp Val His Ala Gly Val Pro Val Ile Asp Asp
                245                 250                 255
His Gly Arg Gly Asp Asn Leu Val Arg His Gln Asp Pro Gln Arg Ile
            260                 265                 270
Pro Val Glu Ile Ala His Gly Glu Thr His Ala Ala Arg His Ile Ala
        275                 280                 285
Lys Pro Val Val Thr His Gly Ala Ser Met Asp Arg Gln Ile Arg Ala
    290                 295                 300
Asn Leu Gly His Pro Arg His Gln Arg Ile His Gln Arg Gly Asn Lys
305                 310                 315                 320
Asp Val Pro Glu Gln Gln Arg Gln Arg Thr Thr Asp Gly Glu Arg Leu
                325                 330                 335
Ser Arg Pro Asp Lys Gln Thr Arg Pro Asp Gly Ala Thr Gln Cys His
            340                 345                 350
Gln Leu His Met Thr Val Phe Gln Ser Ser Leu Gly Asp Leu Val Ser
        355                 360                 365
Phe Val Gln Glu Ile Ala Leu Asp Gln Gly Leu Asp Gly Ala Met Phe
    370                 375                 380
Asp Val Gly Leu Gly Val Val Val Arg Gly Arg Ser Ala Ser Gly Phe
385                 390                 395                 400
Phe Phe Arg His Phe Ile
                405
```

<210> 33560
<211> 527
<212> PRT
<213> A.fumigatus

<400> 33560

```
His Gly Gly Phe Ser Asp Val Ala Glu Ala Thr Gly Met Thr Leu Ala
1               5                   10                  15
Glu Gln Glu Glu Arg Glu Leu Gln Glu Ala Val Ala Met Ser Leu Asn
            20                  25                  30
Gln Asn Leu Gly His Gln Glu Met Gly Ile Thr Ser Ser Asn Gln Ser
        35                  40                  45
Asn Phe Gly Lys Ala Thr Arg Asp His Tyr Asp Glu Gly Ala Trp Ala
    50                  55                  60
Met Thr Leu Phe Asn Ser Ser Ala Gln Glu Ile Ile Ile Ser Pro Asp
65                  70                  75                  80
Pro Ala Asp Arg Arg Arg Val Ala Asp Glu Pro Ala Phe Leu Arg Pro
```

```
                85                  90                  95
Ser Gln Asp Asn Leu Tyr Leu Gly Gly Leu Leu Thr Ile Leu His Ser
            100                 105                 110
Ile Pro Leu Ala Arg Glu Ala Leu Leu Leu Arg Asn Lys Val Leu Pro
        115                 120                 125
Lys Tyr Gly His Asp Pro Gln Trp Trp Asn Gly Gln Pro Ile Asn Leu
    130                 135                 140
Pro Lys Ile Val Thr Met Gln Asp Ala Gln Asp Gly Asp Thr Ala Trp
145                 150                 155                 160
Asp Asp Ile Leu Tyr Glu Thr Gln Arg Leu Val Ala Phe Leu Asp Ala
                165                 170                 175
Thr Asn Arg Ala Phe Gly Ser Val Asp Ala Leu Ser Ser Leu Lys Ser
            180                 185                 190
Met Val Ser Tyr Asp Ser Glu Ser Gly Ile Ser Gln Phe Leu Glu Lys
        195                 200                 205
Trp Gln Glu Ala Ala Val Arg Ala Asp Pro Gly Asn Gln Leu Ala Thr
    210                 215                 220
Val Phe Ser Ser Asn Ala Phe Lys Cys Pro Leu Ser Val Tyr Asp Thr
225                 230                 235                 240
Pro Ile Gln Lys Glu Phe Phe Ile Leu Asp Pro Phe Val Glu Pro Asp
                245                 250                 255
His Gly Gln Thr Leu Tyr Asp Val Leu Asp Arg Thr Ile Trp Ser Asp
            260                 265                 270
Arg Pro Gly Glu Glu Leu Asp Asp Val Trp Leu Glu His Val Ala Glu
        275                 280                 285
Val Leu Met Ile Lys Leu Asp Ser Ser Asp Ser Ala Lys Ser Val Asp
    290                 295                 300
Val Lys Ile Pro Ala Val Phe Tyr Pro Asp Arg Tyr Leu Ala Thr Cys
305                 310                 315                 320
Lys Asp Leu Ala Arg Asp Phe Arg Ala Arg Arg Leu Gln Val Tyr Glu
                325                 330                 335
Glu Ile Asn Lys Leu Glu Ala Leu Met Asn Arg Phe Ser Val Ser Lys
            340                 345                 350
Ser Val Phe His Arg Gly Leu Gly Ser Arg Glu Ile Leu Glu Lys Ala
        355                 360                 365
Ala Val Ala Ala Ser Phe Thr Leu Pro Lys Ser Leu Ala Asn Gly Arg
    370                 375                 380
Gly Asp Leu Ala Leu Thr Pro Glu Ala Ala Asn Ala Glu Ala Gln Arg
385                 390                 395                 400
Leu Ala Ala Glu Leu Arg Asp Leu Ser Ser Lys Ile Glu Asp Lys Leu
                405                 410                 415
Lys Gly Lys Cys Thr Ser Leu Val Ser Leu Tyr Lys Leu Thr Met Tyr
            420                 425                 430
Ile Ala Asp Leu Gln Asn Arg Arg Gln Lys Ala Val Lys Thr Leu Arg
        435                 440                 445
Asn Tyr Ser Lys Phe Leu Thr Glu Pro Ser Glu Ser Pro Thr Glu Pro
    450                 455                 460
Pro Gln His Arg Tyr Thr Leu Arg Gly Val Cys Thr Glu Pro His Ile
465                 470                 475                 480
Thr Tyr Val Leu Arg Pro Val Thr Ser His Asn Ser Glu Gln Ala Thr
                485                 490                 495
Asp Leu Gln Pro Ser Ala Gly Asp Arg Trp Gln Trp Trp Arg Asn Asn
            500                 505                 510
Leu Leu Tyr Gly Arg Ser Gln Gly Pro Ile Asn Gln Tyr Pro Leu
        515                 520                 525
```

<210> 33561
<211> 64
<212> PRT
<213> A.fumigatus

<400> 33561
Asp His Leu Thr Gly Arg Leu Tyr Lys Gln Tyr Val Arg Ser Leu Pro
1 5 10 15
Cys Ser Asn Pro Leu Gln Thr Ser Gly Leu Gly Lys Ile Ser Leu Gly
20 25 30
Arg Arg Ser Leu Lys Lys Phe Ala Thr Asp Phe Leu Pro Lys Thr Phe
35 40 45
Tyr Thr Leu Asn Asn Asn Asn Asn Thr Lys Gln Arg Phe Trp His His
50 55 60

<210> 33562
<211> 215
<212> PRT
<213> A.fumigatus

<400> 33562
Val Leu Val Phe Pro His Cys Tyr Tyr Ser Ser Ser Val Ser Val Ile
1 5 10 15
Pro Ile Gln Phe His Cys His Gln Ser Ser Cys Thr Thr Ile Cys Arg
20 25 30
Gln Ser Ser Arg Pro Phe Ser Ile Leu Pro Ser Phe Cys Cys Arg Ser
35 40 45
Leu Leu Glu Leu Ser Trp Phe Leu Arg Arg Thr Glu Val Ile Arg Cys
50 55 60
Ile Ile Ser Val Leu Leu Ser Phe Arg Thr Ile Leu Ala Thr Ser Ser
65 70 75 80
Gln Leu Ser Pro Ile Cys His Ile His His His Ile Arg Pro His Ser
85 90 95
Glu Cys Leu Gln Ala Ala Ile Thr Ala Leu Trp Ala Arg Arg Thr Ser
100 105 110
Thr Gln Ile Ser Leu Pro Ser Leu Gly Ser Ser Leu Lys Ser Lys Ser
115 120 125
Arg Tyr Arg Lys Pro Leu Val Thr Ser Arg Glu Phe Val Arg Ser Thr
130 135 140
Asn Trp Asn Ser Cys Ala Glu Thr Asn Arg Ala Ala Met Ser Ala Asn
145 150 155 160
Arg Leu Leu Cys His Ala Leu Gln Phe Ser Phe Lys Ser Ile Ala Tyr
165 170 175
Tyr Ile Arg Arg Ala Ser Leu Ile Asn Leu Thr Gly Leu Ala Gly Ser
180 185 190
Ser Asn Thr Thr Gly Asp Asp Gln Lys Lys Leu Asp Val Ile Gly Asn
195 200 205
Asp Ile Phe Val Phe Arg Pro
210 215

<210> 33563
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33563

```
Ser Glu Met Thr Ser Leu Phe Ser Ala His Glu Arg Ala Pro Ala Lys
1               5                  10                  15
Cys Arg Ile Leu Val Ser Glu Glu Glu Glu Gln Ala Ile Val Phe Asp
            20                  25                  30
Glu His Pro Asn Ala Arg Tyr Ala Val Val Cys Asp Pro Ile Asp Gly
        35                  40                  45
Ser Ser Asn Leu Asp Ala Gly Val Leu Val Gly Thr Ile Phe
    50                  55                  60
```

<210> 33564
<211> 91
<212> PRT
<213> A.fumigatus

<400> 33564

```
Val Ser Thr Gly Thr Leu Leu Val Ser Pro Ser Asn Arg Gly Tyr Thr
1               5                  10                  15
Leu His Tyr Ile Gly Ser Ala Leu Leu Gln Asn Tyr Ser Ser Asn Ile
            20                  25                  30
Ile Ser Ile Val Ser His Leu Pro Tyr Thr Ser Pro His Pro Ser Thr
        35                  40                  45
Phe Arg Met Ser Ser Ser Gly Asn Asn Gly Ala Val Gly Gln Glu Asn
    50                  55                  60
Ile Asn Pro Asp Ile Ile Thr Leu Thr Arg Phe Leu Thr Glu Glu Gln
65                  70                  75                  80
Val Lys Val Pro Glu Ala Thr Gly Asp Phe Thr
                85                  90
```

<210> 33565
<211> 98
<212> PRT
<213> A.fumigatus

<400> 33565

```
Thr Arg Ser Ala Val His Arg Cys Pro Arg Val Cys Cys Gly Ser Pro
1               5                  10                  15
Leu Pro Trp Leu Ser Cys Leu Leu Trp Ser Met Asn Asp Gly Ala Gln
            20                  25                  30
Thr Leu Ile Gln Ile Tyr Leu His Ser Gln Gly Lys Lys Lys Arg Gln
        35                  40                  45
His Gly Thr Glu Ala Val Lys Ser His Ile Val Ala Ala Lys Thr Val
    50                  55                  60
Ala Asn Ile Val Lys Thr Ser Leu Val Trp Ser Gly Gly Ser Lys Lys
65                  70                  75                  80
Ile Gly Thr Ala Ser Lys Lys Tyr Tyr Arg Val Leu Ala Val Trp Thr
                85                  90                  95
Arg Phe
```

<210> 33566
<211> 140
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222> (114)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33566
Tyr His Arg Tyr Gln Arg Trp Arg Asp Tyr Pro Leu Pro Gly Pro Phe
1 5 10 15
Phe Asn Arg Phe Gly Asp His Arg Phe Gly Val Ser Leu Thr Cys Asp
20 25 30
Cys Pro Gln Met Glu Ile Thr Asn Asn Val Ala Lys Leu Leu Val Glu
35 40 45
Leu Ser Lys Ser Gln Asp Glu Glu Ile Gly Asp Gly Thr Thr Gly Val
50 55 60
Val Val Leu Ala Ala Ala Met Leu Glu Gln Ala Ala Glu Leu Ile Asp
65 70 75 80
Lys Gly Ile Pro Pro Ile Arg Ile Ala Asp Gly Tyr Asp Gln Ala Cys
85 90 95
Glu Ile Ala Val Ala Pro Leu Asp Lys Ile Arg Asp Glu Ile Pro Phe
100 105 110
Pro Xaa Gly Arg Tyr Gly Glu Pro Thr Pro Cys Cys Glu Arg Pro Phe
115 120 125
Leu Val Ala Lys Cys Leu Ile Arg Leu Gly Thr Pro
130 135 140

<210> 33567
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33567
Val Asp Leu Cys Ala Gly Thr Arg Gln Val Arg Leu Thr Leu Pro Val
1 5 10 15
Ala Pro Val Glu Asp Leu Ser Asp Asp Glu Ser Thr Gly Gly Ser Ile
20 25 30
Pro Tyr Asn Asn Ala Glu His Asp Lys Asp Ile Ala Gly Asp Val Lys
35 40 45
Glu Glu Glu Glu Asp Asp Asp Glu Asn Glu Glu Glu Gly Met
50 55 60

<210> 33568
<211> 146
<212> PRT
<213> A.fumigatus

<400> 33568
Pro Val Gly Val Leu Leu Gly Leu Ile Val Phe Gln Leu Ala Val Ile
1 5 10 15
Gly Val Leu Ala Leu Arg Arg Ala Ile Thr Arg Ser Leu Leu Leu Val
20 25 30
Pro Leu Leu Gly Ala Thr Leu Trp Phe Ser Tyr Phe Phe Ala Gln His
35 40 45
Tyr Glu Pro Leu Met Lys Phe Ile Ala Leu Lys Ser Ile Asp Arg Asn
50 55 60
Arg Pro Gly Gly Gly Asp Ile Ser Pro Ser Pro Ser Ser Thr Phe Ser
65 70 75 80
Pro Pro Ser Gly Leu Glu Arg Asp Ala Leu Pro Ile Gln Ile Gly Gly
85 90 95

```
Gln Gln Leu Gly Leu Arg Leu Lys Lys Tyr Val Asn Pro Ser Leu Ile
            100                 105                 110
Leu Pro Leu Asp Asp Ala Trp Leu Pro Gly His Ser Ala Thr Arg Glu
        115                 120                 125
Tyr Gln Gly Ala Phe Asp Ala His Glu Thr Arg Asn Gly Asn Gly Ser
    130                 135                 140
Ala Val
145
```

<210> 33569
<211> 203
<212> PRT
<213> A.fumigatus

<400> 33569

```
Gly Val Ser Leu Thr Ala Gly Ala Asn Met Leu Lys Arg Ala Ala Pro
1               5                   10                  15
Tyr Cys Thr Glu Ile Leu Arg Leu Lys Pro His Ser Leu Ala Ala Leu
            20                  25                  30
Leu Phe Lys Gly Gln Ile Ala Leu Asp Glu Glu Arg Phe Glu Asp Ala
        35                  40                  45
Ile Arg Thr Leu Asn Glu Ala Arg Glu His His Pro Gly Ser Gln Glu
    50                  55                  60
Val Gln Thr Leu Met Gln Lys Ala His Val Leu Leu Lys Arg Phe Lys
65                  70                  75                  80
His Lys Asp Tyr Tyr Lys Val Leu Gly Val Ser Arg Asp Ser Asp Glu
                85                  90                  95
Arg Thr Ile Lys Arg Ala Tyr Arg Gln Leu Thr Lys Gln His His Pro
            100                 105                 110
Asp Lys Ala Val Ser Gln Gly Val Ser Lys Glu Glu Ala Glu Lys Lys
        115                 120                 125
Met Ala Ala Ile Asn Glu Ala Tyr Glu Val Leu Ser Asp Pro Glu Leu
    130                 135                 140
Arg Ala Arg Tyr Asp Asn Gly Asp Asp Pro Asn Asp Pro Glu Ser Gln
145                 150                 155                 160
Arg Gly Asn Pro Phe Gln Gly Asn Pro Phe Gly Ala Ala Gly Gly Gln
                165                 170                 175
Gln Phe Phe Phe Gln Gln Gly Ala Pro His Phe Lys Phe Ser Gly Gln
            180                 185                 190
Gly Phe Asn Phe Pro Arg Gly Phe Pro Phe Arg
        195                 200
```

<210> 33570
<211> 199
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1),(16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33570

```
Xaa Ser Lys Val Asp Arg Ala His Tyr Ala Pro Ser Arg Pro Tyr Xaa
1               5                   10                  15
Asp Ser Pro Gln Pro Ile Gly His Gly Ala Thr Ile Ser Ala Pro His
```

```
            20                  25                  30
Met His Gly His Ala Cys Glu Tyr Leu Val Glu Phe Ile Lys Pro Gly
        35                  40                  45
Ser Arg Val Leu Asp Ile Gly Ser Gly Ser Gly Tyr Leu Thr His Val
    50                  55                  60
Phe Ala Asn Leu Val Thr Asp Arg Ser Thr Asn Asp Ala Ser Gly Gln
65                  70                  75                  80
Val Ile Gly Val Asp His Ile Pro Glu Leu Val Asp Leu Ala Leu Ala
                85                  90                  95
Asn Met Ser Lys Ser Glu Gln Gly Arg Thr Leu Leu Asn Ser Gly Lys
            100                 105                 110
Val Lys Phe Ile Thr Ala Asp Gly Arg Leu Gly Trp Arg Glu Gly Ala
        115                 120                 125
Pro Tyr Asp Ala Ile His Val Gly Ala Ala Ala Asp Lys Leu His Pro
    130                 135                 140
Val Leu Ile Asp Gln Leu Arg Ala Pro Gly Arg Leu Phe Ile Pro Val
145                 150                 155                 160
Asp Val Glu Asn Asp Asp Gly Pro Leu Ser Ser Leu Gly Leu Gly Gly
                165                 170                 175
Gly Gln Tyr Ile Trp Val Val Asp Lys Lys Glu Asp Gly Ser Val His
            180                 185                 190
Lys Glu Lys Ile Phe Pro Gly
        195
```

<210> 33571
<211> 80
<212> PRT
<213> A.fumigatus

<400> 33571

```
Gly Tyr Pro Arg His Ser Ala Ser Ala Arg Gly Ser Pro Ser Met Ala
1               5                   10                  15
Pro Tyr Gln Gln Tyr Pro Ser Asp Cys Pro Pro Glu Pro Phe Ala Pro
            20                  25                  30
Ala His His Pro Asp Pro Pro Asp Ile Ala Ser Pro Pro His His Pro
        35                  40                  45
Gln Ser Gly Arg Thr Gly His Gln Pro Ala Thr Ala Gln Arg Asp Met
    50                  55                  60
His Pro Thr Ala Trp Gln Leu Pro Gln Ser His Ser Pro His His Pro
65                  70                  75                  80
```

<210> 33572
<211> 385
<212> PRT
<213> A.fumigatus

<400> 33572

```
Leu His Ser Gln Pro Gly Lys Gly His His Asn Phe Pro Leu Phe Val
1               5                   10                  15
Gly Arg Leu His Thr Thr Ser Ile Ile Gln Ile Pro Ile Ser Met Pro
            20                  25                  30
Leu Leu Phe Gly Arg Phe Lys Ser Arg Ser Pro Cys Leu Pro Arg Ser
        35                  40                  45
Pro Val Glu Ser Leu Thr Pro Glu Pro Ile Gln His Gln Pro Leu Pro
    50                  55                  60
Ala Tyr Ser Ile Asn Asp Lys Pro Glu Leu Thr Met Gly His Arg His
```

```
65                  70                  75                  80
Ser Arg Val Ala Gly Ser Ser Ser Thr Ser Ser Ser Arg Lys Thr Thr
                85                  90                  95
Tyr Arg Gly Thr Gln Ser Thr Pro His Lys Gly Asn Thr Tyr Val Gln
            100                 105                 110
Thr Gly Asn Val Asp Val Trp Phe Pro Pro Pro Tyr Thr Pro Gln Ala
        115                 120                 125
Ser Ala Pro Ala Ala His Thr Pro Gly Trp Thr Ala Ser Phe Thr Ser
    130                 135                 140
Ser Thr Gly Asp Ser Pro Tyr Ala Phe Leu Arg Glu Phe Asp Thr Leu
145                 150                 155                 160
Phe Val Val Asp Asp Ser Ser Ser Met Leu Gly Ala Arg Trp Lys Glu
                165                 170                 175
Ala Glu Glu Ala Leu Ala Ala Ile Ala Pro Ile Cys Thr Arg Tyr Asp
            180                 185                 190
Gln Asp Gly Ile Asp Ile Tyr Phe Leu Asn His Arg Arg Glu Ala Thr
        195                 200                 205
Ala Thr Ser Thr Gly Ala Tyr His Asn Ile Thr Thr Ala Ala Asp Val
    210                 215                 220
Gln Glu Ile Phe Asn Ser Val Gln Pro Arg Gly Pro Thr Pro Tyr Gly
225                 230                 235                 240
Lys Arg Leu Leu Gln Ile Leu Thr Pro Tyr Leu Arg Arg Val Glu Lys
                245                 250                 255
Met Ala Ala Ala Thr Asp Glu Asp Gly Asn Leu Arg Asp Pro Ala Arg
            260                 265                 270
Phe Val Lys Pro Leu Asn Ile Ile Ala Ile Thr Asp Gly Val Phe Thr
        275                 280                 285
Asp Asp Ala Glu Ser Val Ile Val Glu Val Ala Lys Arg Leu Asp Ala
    290                 295                 300
Cys Arg Ala Val Pro Trp Gln Val Gly Val Gln Phe Phe Gln Ile Gly
305                 310                 315                 320
Asp Asp Glu Gly Ala Arg Arg Tyr Leu Glu Asp Leu Asp Asp Glu Leu
                325                 330                 335
Gly Gln Met Ala Gln Glu Asp Asn Leu Arg Asp Ile Val Asp Thr Val
            340                 345                 350
Pro Trp Lys Gly Ser Arg Gly Gln Thr Leu Ser Ala Glu Gly Ile Leu
        355                 360                 365
Lys Cys Thr Met Gly Ala Val His Lys Lys Tyr Asp Lys Arg Lys Ala
    370                 375                 380
Phe
385
```

<210> 33573
<211> 163
<212> PRT
<213> A.fumigatus

<400> 33573

```
Gln Ala Ala Gln Ala Pro His Pro Gln Glu Arg Pro Pro Thr Glu Glu
1               5                   10                  15
Pro Ser Arg His Pro Thr Arg Glu Thr Arg Thr Cys Lys Pro Ala Thr
            20                  25                  30
Ser Thr Ser Gly Phe Arg Leu His Thr Pro Leu Lys His Gln His Gln
        35                  40                  45
Pro His Ile Leu Pro Ala Gly Gln Pro Pro Ser Pro Val Ala Gln Ala
    50                  55                  60
```

```
Thr Arg Pro Thr Pro Ser Ser Ala Ser Ser Thr His Ser Ser Ser Ser
65                  70                  75                  80
Thr Thr Ala Pro Val Cys Ser Gly His Ala Gly Arg Lys Pro Arg Arg
                85                  90                  95
Pro Trp Arg Pro Ser Arg Pro Ser Ala Arg Gly Thr Thr Lys Thr Glu
            100                 105                 110
Ser Thr Ser Thr Ser Ser Thr Thr Ala Val Arg Arg Leu Pro Leu Pro
        115                 120                 125
Arg Ala His Thr Thr Thr Ser Pro Pro Arg Gln Thr Cys Arg Arg Ser
    130                 135                 140
Ser Thr Ala Cys Ser Arg Ala Gly Pro Arg Pro Thr Gly Asn Gly Cys
145                 150                 155                 160
Cys Arg Ser
```

<210> 33574
<211> 76
<212> PRT
<213> A.fumigatus

<400> 33574

```
Ile Lys Ser Tyr His Cys Pro Met Leu Ser Pro Ser Ser Thr Ser Pro
1               5                   10                  15
Ser Asn Phe Ser His Leu Phe Gln Ser Phe Ser Pro Ser Ser Arg Phe
            20                  25                  30
Asp Ala Arg Phe Pro Ser Pro Pro Pro Pro Pro Ala Asn Ile Gly Leu
        35                  40                  45
Gln Gly Cys Asp Val Val Leu Thr Ala Ala Asn Gly Ser Tyr Leu Ile
    50                  55                  60
Ile Lys Val His Phe Lys Ser Val Asp Cys Leu Pro
65                  70                  75
```

<210> 33575
<211> 112
<212> PRT
<213> A.fumigatus

<400> 33575

```
Pro Asn Arg Asn Leu Thr Ser Ile Pro Lys Ser Ile Leu Pro Gln Pro
1               5                   10                  15
Asn His Gln Ser Leu Thr Ile Asn Lys Tyr Ile Pro Val Ser Phe Val
            20                  25                  30
Glu Met Ser Thr Val Lys Ile Thr Ser Asp Val Ala Ser Tyr Leu Ala
        35                  40                  45
Leu Leu Arg Ser Tyr Leu Ala Ser Asp Asp Ile Ala Ser Ala Arg Leu
    50                  55                  60
Glu Asp Lys Glu Asn Gln Gly His Ser Lys Ser Gly Gln Leu Pro Ala
65                  70                  75                  80
Thr Leu Gln Gln Pro Gln Lys Pro Arg Glu Cys Arg Pro Tyr Glu Gln
                85                  90                  95
Val Arg Val Lys Gly Ser Thr Ala Asn Lys Asn Leu Ser Gln Leu Arg
            100                 105                 110
```

<210> 33576
<211> 124
<212> PRT

<213> A.fumigatus

<400> 33576

```
Ala Thr Pro Asp Arg Lys Arg Glu Cys Phe Leu Arg Arg Cys Val Leu
1               5                  10                  15
Glu Val Phe Glu Ser Thr Asp Ser Pro Thr Met Glu Thr Asn Met Ile
            20                  25                  30
Ser Ser Ala Ser Glu Lys Glu Asn Pro Asp Lys Pro Ile Ser Ala Gly
        35                  40                  45
Leu Tyr Arg Leu Glu Lys Gly Thr Pro Leu Val Tyr Glu Tyr Thr Tyr
    50                  55                  60
Asp Glu Met Lys Ile Ile Leu Glu Gly Gln Phe Glu Ile Ala Asp Glu
65                  70                  75                  80
Thr Gly Gln Lys Val Thr Ala Leu Pro Gly Asp Val Phe Tyr Phe Pro
                85                  90                  95
Lys Gly Ala Lys Ile Thr Phe Thr Thr Gln Thr Tyr Gly Leu Ala Phe
            100                 105                 110
Tyr Val Ser Phe Ser Phe Val Val Val Leu Pro Phe
        115                 120
```

<210> 33577
<211> 182
<212> PRT
<213> A.fumigatus

<400> 33577

```
Pro Glu Met Pro Ser Glu Pro Ala Ser Asp Leu Ala Lys Arg Val Leu
1               5                  10                  15
Ile Leu Leu Ala Thr Val Pro Pro Gly Ser Arg Thr Ile Ile Val Gln
            20                  25                  30
Met Phe Pro Leu Ile Ala Ala Gly Cys Glu Ala Glu Pro Gly Glu Asp
        35                  40                  45
Arg Gln Trp Val Leu Thr Arg Trp Arg Ala Ile Gln Ser Arg Leu Met
    50                  55                  60
Ile Gly Ser Ile Asp Arg Cys Ile Glu Val Val Gln Glu Val Trp Ser
65                  70                  75                  80
Arg Arg Asp Ala Ile Glu Ala Glu Lys Gln Arg Arg Gln Glu Arg Val
                85                  90                  95
Leu Ser Ser Ser Ser Arg Gln Ser Lys Gly Gly Pro Gly Leu Ser Ser
            100                 105                 110
Gln Gly Thr Arg Glu Gln Phe Met Ser Ser Pro Ala Ile Pro Ser Asp
        115                 120                 125
Leu Ala Val Ser Ser Arg Pro Pro Phe Val Gly Thr Arg Arg Ser Ser
    130                 135                 140
Ala Val Ser Pro Leu Glu Asn Ile Glu Phe Glu Lys Thr Val Arg Gly
145                 150                 155                 160
Arg Leu His Trp Val Ser Val Met Gln Glu Trp Gly Trp Glu Gly Glu
                165                 170                 175
Ser Leu Ser Cys Ser Val
            180
```

<210> 33578
<211> 720
<212> PRT
<213> A.fumigatus

<400> 33578

```
Glu Asp Gly Gln Gln Ala Asp Gly Leu Arg Ser Gln Glu Ala Gly Gln
1               5                  10                  15
Leu Val Val Pro Ala Ser Ser Ser Gln Met Asn Gln Gln Pro Tyr Thr
            20                  25                  30
Ala Pro Gln Asn Met Phe Gln Val Gly Gln Gln Met Gly Gln Gly Gly
        35                  40                  45
Gln Thr Asn Leu Asn Gly Ala Ser Ile Ser Pro Gln Phe Leu Ala Ala
    50                  55                  60
Gln His Leu Gln Asn Pro Gln Asn Val Gln Gln Asp Arg Asn Gln Gln
65                  70                  75                  80
Ala Ala Gln Phe Gln Pro Gln Pro Gln Ala Gln Thr Gln Ala Gln Ala
                85                  90                  95
Arg Ala Gln Ala Ala Gln Lys Ala Gln Met Ala Ile Ser Gln Ala Gly
            100                 105                 110
Gln Ala Asn Pro Gln Met Gln Gln Gln Leu Ser Gln Ser Pro Ala Met
        115                 120                 125
Pro Met Leu Asn Arg Pro Met Pro Pro Gly Gln Met Ser Pro Arg Gln
    130                 135                 140
Val Ala Ala Gln Val Arg Pro Pro Ser Arg Ala Pro Gly Met Gly Gln
145                 150                 155                 160
Gln Pro Asn Gly Val Gln Gly Leu Ala Gly Gln Pro Gly Met Gln Ser
                165                 170                 175
Arg Pro Gln Ile Pro Pro Gly Leu Pro Pro Ala Ala His Glu Gln Leu
            180                 185                 190
Ala Gln Met Thr Pro Glu His Leu Asn Ala Phe Leu Leu Asn Gln Gln
        195                 200                 205
Arg Arg Ala Leu Ala Asn Asn Gln Ala Leu Ala Arg Ala Asn Ala Gly
    210                 215                 220
Gln Gln Pro Leu Pro Met Gln Gln Asn Leu Ser Gln Pro Gly Gln Asn
225                 230                 235                 240
Gln Gln Met Val Asn Asn Gln Met Gly Asn Asn Gln Asn Met Arg Ala
                245                 250                 255
Ser Leu Gly Leu Gln Gln Gln Leu Ala Gly Met Asn Asn Gly Gln Met
            260                 265                 270
Pro Asn Gln Met Leu Ala Gly Gln Gln Met Ser Ala Gln Gln Arg Gln
        275                 280                 285
Gln Gln Gln Arg Gln His Asp Leu Tyr Lys Leu Gln Leu Leu Arg Gln
    290                 295                 300
Gln Ser Gly Ser Ile Glu Met Thr Pro Asp Gln Val Lys Glu Met Asp
305                 310                 315                 320
Arg Ile Gln Phe Pro Pro Ala Ile Leu Ala Asn Asn Pro Asn Met Val
                325                 330                 335
Ser Pro Val Pro Lys His Ile Lys Thr Trp Gly Gln Leu Lys Gln Trp
            340                 345                 350
Val Ala Ala Asn Pro Gln Ala Leu Gly Gly Val Asp Leu Gln Lys Leu
        355                 360                 365
Met Thr Leu Gln Lys Leu His Leu Ala Gln Ile Val Ala Gln Gly Lys
    370                 375                 380
Glu Gly Ala Val Arg Asn Val Asp Gln Asn Gly Gln Gly Asn Trp Gly
385                 390                 395                 400
Gln Met Met Thr Phe Gln Gly Gln Pro Gln Gln Phe Val Asn Pro Gln
                405                 410                 415
Ala Phe Gln Ala Gly Gln Gln Gln Val Pro Met Asn Met Pro Ala Leu
            420                 425                 430
Arg Pro Val Thr Ala Thr Glu Ile Gln Met Ala Arg Gln Arg Leu Gly
```

```
        435                 440                 445
Ala Gln Val Ala Asn Tyr Ser Asp Asp Gln Leu Arg Glu Ile Ile Leu
    450                 455                 460
Arg Asn Arg Gln Lys Gln Leu Met Gln Met Ala Gln Ser Arg Ala Ala
465                 470                 475                 480
Gln Ala Leu Ala Ala Gln Asn Met Asn Gln Asn Gln Gln Asn Gln Thr
                485                 490                 495
Val Gln Gln Pro Pro Leu Ser Gly Pro Ser Thr Asn Pro Gln Ala Lys
            500                 505                 510
Gln Gly Pro Gln Gln Pro Thr Pro Pro Gln Asn Gln Gln Asn Gln Thr
        515                 520                 525
Val Lys Ala Gln Asn Thr Ala Ala Ala Lys Gly Val Lys Gly Ser Ala
    530                 535                 540
Pro Lys Gln Gly Thr Lys Arg Lys Ser Ala Ala Asp Glu Pro Thr Glu
545                 550                 555                 560
Ala Gln Ala Ala Pro Val Ser Lys Thr Ala Gln Pro Thr Thr Thr Gln
                565                 570                 575
Gly Gly Val Ser Ala Pro Pro Ser Arg Pro Asn Met Thr Ile Thr Pro
            580                 585                 590
Glu Gln Leu Ala Ala Met Thr Pro Gln Gln Arg Met Gln Leu Ala Gln
        595                 600                 605
Met Arg Arg Gln Gln Gly Gln Gln Arg Leu Pro Ile Ser Arg Ala Ala
    610                 615                 620
Ala Glu Glu Ala Trp Asn Asn Leu Pro Glu Lys Ile Arg Gln Leu Tyr
625                 630                 635                 640
Asn Asp Ile Ala Lys Asn Ala Pro Ala Ala Glu Pro Val Ala Leu Ser
                645                 650                 655
Pro Glu Gln Lys Ala Ala Met Thr Gln Gln Leu Arg Glu Cys Thr Asp
            660                 665                 670
Met Leu Gly Arg Met Asp Ala Leu Ala Gln Trp Phe Ser Lys Ile Pro
        675                 680                 685
Gly Gln Glu Lys Asn Val Arg Ser Leu Leu Ala Met Val Cys Pro Gln
    690                 695                 700
Ser Thr Leu Glu Pro Ala Pro Pro Gly Ile Tyr Ile Leu Thr Gln Ser
705                 710                 715                 720
```

<210> 33579
<211> 341
<212> PRT
<213> A.fumigatus

<400> 33579

```
Arg Ile Gln Leu Met Arg Gln Phe Lys Pro Gly Pro Asp Trp Thr Ile
1               5                  10                  15
Asn Asp Gln Phe Thr Ile Ala Pro Glu Tyr Leu Ser Gly Thr Ile Asn
            20                  25                  30
Tyr Ile Arg Lys Leu Phe His Ala Met Ile Thr Arg Val Asn Gln Gln
        35                  40                  45
Gln Asn Gln Pro Pro Gly His Arg Pro Ser Ser Val Pro Gln Gly Ser
    50                  55                  60
Ser Thr Met Pro Gln Pro Asn Gln Asn Asn Met Pro Ala Leu Asn Ala
65                  70                  75                  80
Ser Asn Leu Gln Gln Leu Gln Gln Gln Glu Glu Ala Leu Gln Arg Ala
                85                  90                  95
Arg Arg Ala Ser Ser Gln Ala Ala Ser Ala Thr Ser Ala Val Pro Gln
            100                 105                 110
```

```
Pro Pro Phe Gly Ala Pro Ser Pro Gln Gly Val Pro His Val Tyr Gly
        115                 120                 125
Pro Gly Ser Ile Pro Pro Glu Lys Leu Lys Ile Pro Pro Ser Lys Lys
    130                 135                 140
Arg Lys Gln Ser His Pro Gly Gly Thr Pro Thr Gln Gly Gln Ala Pro
145                 150                 155                 160
Gly Thr Pro Val Ser Lys Leu Gln Ala Ala Lys Gln Ala Val Pro Glu
                165                 170                 175
Ala Lys Pro Ala Gly Leu Val Leu Gly Gly Pro Phe Lys Cys Ser Val
            180                 185                 190
Ile Glu Cys Gln Tyr His His Leu Gly Phe Ala Thr Gln Asp Ala Leu
        195                 200                 205
Asp Lys His Val Gly Glu Ser His Lys Val Glu Glu Pro Ile Asn Asp
    210                 215                 220
Pro Leu Glu Phe Ala Ile Glu Ser Phe His Thr Ser Leu Val Lys Asp
225                 230                 235                 240
Glu Glu Gly Ala Gln Pro Gln Asp Leu Thr Lys Asp Leu Leu Thr Thr
                245                 250                 255
Gly Ile Val Ser Ser Ser Ala Lys His Glu Val Lys Gly Glu Pro Ile
            260                 265                 270
Ala Pro Asn Thr Thr Gly Val Gly Arg Ala Pro Gly Pro Leu Gly Thr
        275                 280                 285
Lys Pro Ala Ser Pro Gly Ser Thr Gln Gln Thr Pro Arg Thr Thr Ala
    290                 295                 300
Ala Lys Val Pro Thr Leu Ser Ala Leu Lys Pro Ser Pro Ser Lys Asp
305                 310                 315                 320
Gly Lys Lys Glu Thr Val Lys Pro Val Asp Gln Ser Ser Ala Gly Arg
                325                 330                 335
Leu Glu Gly Tyr Glu
            340
```

<210> 33580
<211> 95
<212> PRT
<213> A.fumigatus

<400> 33580

```
Phe Ser Arg Asn Asp Cys Ala Pro Ala Ile Thr Pro Ser Asn His Ala
1               5                   10                  15
Leu Tyr Ser Asp Ala Tyr Phe Leu Val His Ser Arg Ala Ile Ser Ser
            20                  25                  30
Tyr Arg Leu Gly Ser Phe Leu Tyr Cys Ser Ala Ile Arg Pro Ser Thr
        35                  40                  45
Ala Ser Ser Gly Met Gly Ser Leu Ser Asn Cys Arg Ala Asn Ser Ser
    50                  55                  60
Thr Ala Glu Ile Arg Glu Leu Gly Phe His Ser Ser Gly Arg Ser Met
65                  70                  75                  80
Pro Arg His Ile Leu Pro Leu Ser Ser Leu Val Thr Phe Gly Trp
                85                  90                  95
```

<210> 33581
<211> 105
<212> PRT
<213> A.fumigatus

<400> 33581

```
Lys Gly Lys Phe His Val Lys Leu Val Leu Pro Thr Glu Tyr Pro Phe
1               5                  10                  15
Lys Pro Pro Thr Val Ser Phe Ala Thr Lys Ile Tyr His Pro Asn Val
            20                  25                  30
Thr Asn Asp Asp Lys Gly Ser Met Cys Leu Gly Met Leu Arg Pro Asp
        35                  40                  45
Glu Trp Lys Pro Ser Ser Arg Ile Ser Ala Val Leu Glu Phe Ala Arg
    50                  55                  60
Gln Leu Leu Lys Glu Pro Met Pro Asp Asp Ala Val Glu Gly Arg Ile
65                  70                  75                  80
Ala Glu Gln Tyr Lys Asn Asp Pro Lys Arg Tyr Glu Glu Ile Ala Arg
                85                  90                  95
Glu Trp Thr Arg Lys Tyr Ala Ser Glu
            100                 105
```

<210> 33582
<211> 73
<212> PRT
<213> A.fumigatus

<400> 33582

```
Ser Ser His Asn Ile Pro Arg Asn Ser Arg Ala Val Met Asp Ile Glu
1               5                  10                  15
His Ile Lys Ala Ala Asp Ser Ala Ser Val Asp Gln Ser Val Gln Asp
            20                  25                  30
Ala Arg Asp Leu Ala Thr Met Gly His Asp Gln Ala Leu Thr Arg Lys
        35                  40                  45
Phe Asp Leu Trp Ser Met Leu Ala Leu Ala Phe Cys Val Leu Gly Ile
    50                  55                  60
Pro Leu Pro Leu Pro Leu Leu Thr Ala
65                  70
```

<210> 33583
<211> 411
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (214)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33583

```
Leu Arg Val Gly Thr Tyr Ser Thr Phe Ala Gln Gly Leu Ser Ser Gly
1               5                  10                  15
Leu Thr Asn Gly Gly Pro Ile Thr Ile Leu Trp Gly Leu Val Leu Val
            20                  25                  30
Thr Val Cys Asn Leu Cys Val Ala Val Ser Leu Gly Glu Leu Thr Ser
        35                  40                  45
Ser Met Pro Thr Ala Leu Gly Gln Ala Tyr Trp Val Tyr Arg Leu Trp
    50                  55                  60
His Thr Pro Thr Gly Arg Phe Val Ser Tyr Leu Cys Ala Trp Ile Asn
65                  70                  75                  80
Thr Phe Gly Trp Trp Thr Leu Thr Ala Ser Gln Ile Ala Phe Met Thr
                85                  90                  95
Glu Phe Leu Leu Gly Met Lys Val Met Phe Asp Glu Lys Trp Gly Gly
```

```
            100                 105                 110
Ala Gly Val Gly Trp Leu Gln Phe Val Ile Tyr Leu Gly Leu Val Leu
        115                 120                 125
Val Leu Thr Gly Val Asn Val Val Gly Cys Arg Arg Glu Lys Ile Leu
    130                 135                 140
Pro Trp Leu Asn Gly Phe Val Gly Val Trp Phe Thr Gly Leu Phe Val
145                 150                 155                 160
Val Leu Ser Leu Ala Leu Leu Ile Ser Val Gly Thr Lys Ala Asp Leu
                165                 170                 175
Ser Val Gln Pro Gly Gly Val Val Phe Gly Ala Trp Met Asn Gln Thr
            180                 185                 190
Gly Trp Ser Asp Gly Val Val Trp Phe Thr Gly Leu Val Gln Ala Ala
        195                 200                 205
Tyr Gly Leu Thr Gly Xaa Asp Ala Val Ile His Met Val Glu Glu Met
    210                 215                 220
Pro Ala Pro Arg Ile Asn Ala Pro Arg Val Thr Tyr Leu Ala Val Leu
225                 230                 235                 240
Ser Gly Ala Val Thr Gly Phe Gly Phe Met Val Val Cys Leu Phe Cys
                245                 250                 255
Met Gln Asp Val Asp Arg Ile Val Asp Ser Pro Ser Gly Leu Pro Phe
            260                 265                 270
Ile Glu Leu Met Leu Glu Thr Val Gly Leu Lys Gly Gly Ala Ala Leu
        275                 280                 285
Ile Ala Leu Phe Ile Phe Asn Gly Val Gly Gln Gly Ile Ser Ile Leu
    290                 295                 300
Thr Thr Ala Ser Arg Leu Thr Trp Gly Phe Ala Arg Asp Gly Gly Leu
305                 310                 315                 320
Pro Trp Ser Arg Tyr Leu Thr Val Val Asp Pro Ala Trp Lys Ala Pro
                325                 330                 335
Val Arg Ala Leu Trp Ala Gln Gly Val Leu Ile Ala Leu Val Gly Val
            340                 345                 350
Leu Tyr Leu Phe Ala Asn Thr Val Leu Glu Ala Ile Leu Ser Val Ser
        355                 360                 365
Thr Ile Ala Leu Thr Ile Ser Tyr Ala Leu Pro Ile Ala Val Leu Gln
    370                 375                 380
Arg Val Gly Arg Asp Gln Leu Pro Pro Gly Pro Phe Arg Leu Gly Arg
385                 390                 395                 400
Trp Gly Thr Ala Val Asn Trp Val Ser Ile Val
                405                 410
```

<210> 33584
<211> 150
<212> PRT
<213> A.fumigatus

<400> 33584

```
Arg Arg Arg Gly Cys Thr Gly Glu Ala Thr His Val Thr Val His Thr
1               5                   10                  15
Pro Tyr Ser Thr Val Thr Leu Gly Ala Pro Thr Asp Ala Arg Thr Thr
            20                  25                  30
Arg Thr Ser Thr Arg Thr Thr Thr Thr Thr Thr Glu Gln Met Phe Thr
        35                  40                  45
Ala Ile Ser Val Thr Lys Ser Ala Thr Ala Thr Ala Thr Ala Thr Ala
    50                  55                  60
Thr Ala Thr Ala Thr Gly Ser Arg Ser Thr Thr Thr Arg Glu Thr Glu
65                  70                  75                  80
```

```
Thr Ala Thr Glu Gly Glu Thr Gly Ser Ser Pro His Ser His Leu Val
                  85                  90                  95
Ser Val Leu Ser Thr Ser Val Ala Ala Glu Thr Thr Ser Ser Thr Ser
             100                 105                 110
His Arg Ser Ala Ala Thr Thr Ala Ala Phe Ser Pro Asn Asn Asn Gly
         115                 120                 125
Ala Ser Ala Met Gly Val Glu Ala Pro Val Leu Ala Gly Met Val Ala
     130                 135                 140
Leu Gly Ala Val Leu Leu
145                 150
```

<210> 33585
<211> 430
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (200)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33585

```
Arg Leu Tyr Asn Ala Asp Pro Val Asp Cys Arg Ser Pro Ala Ala Glu
1               5                  10                  15
Thr Lys Arg Thr Arg Arg Gln Leu Val Pro Ala His Thr Leu Gln Tyr
            20                  25                  30
Arg Asn Gly Gln Arg Val Gly Asp Gly Gln Gly Asp Gly Ala Asp Ala
        35                  40                  45
Glu Asp Arg Leu Glu Asp Arg Val Gly Lys Glu Val Glu His Pro Asn
    50                  55                  60
Glu Arg Asn Gln Asp Pro Leu Arg Pro Glu Arg Ala Asp Arg Ser Leu
65                  70                  75                  80
Pro Arg Gly Ile His His Cys Gln Val Pro Thr Pro Gly Glu Thr Ala
                85                  90                  95
Val Ala Gly Lys Pro Pro Gly Gln Pro Gly Cys Ser Arg Gln Asp Thr
            100                 105                 110
Asp Ala Leu Ala Asp Ser Ile Glu Asp Glu Gln Arg Asp Gln Ser Ser
        115                 120                 125
Ala Pro Leu Glu Ala Asp Arg Leu Gln His Gln Leu Asp Lys Arg Gln
    130                 135                 140
Ser Ala Arg Arg Val His Asn Pro Ile His Ile Leu His Ala Lys Gln
145                 150                 155                 160
Thr Asp Asp His Glu Ala Lys Pro Arg Asp Ser Thr Arg Gln His Arg
                165                 170                 175
Gln Ile Arg His Pro Arg Arg Val Asp Pro Arg Ser Arg His Leu Leu
            180                 185                 190
Asp His Met Asp Asp Arg Val Xaa Ala Ser Lys Pro Ile Arg Arg Leu
        195                 200                 205
His Gln Pro Arg Lys Pro His Asp Pro Ile Thr Pro Thr Arg Leu Val
    210                 215                 220
His Pro Gly Pro Lys Asp Asn Pro Pro Trp Leu Asn Arg Gln Val Arg
225                 230                 235                 240
Leu Gly Ala Asn Arg Asn Gln Gln Arg Lys Arg Gln His His Lys Gln
                245                 250                 255
Pro Gly Glu Pro His Ser His Lys Pro Ile Gln Pro Arg Gln Asp Leu
            260                 265                 270
```

```
Leu Pro Pro Thr Pro His His Ile His Pro Arg Gln Asn Gln His Gln
        275                 280                 285
Pro Glu Ile Asn His Lys Leu Gln Pro Ala Asp Pro Gly Pro Ala Pro
    290                 295                 300
Leu Leu Ile Lys His His Leu His Pro Gln Gln Lys Leu Gly His Lys
305                 310                 315                 320
Arg Asn Leu Arg Arg Arg Glu Arg Pro Pro Pro Glu Arg Val Asp Pro
                325                 330                 335
Arg Thr Gln Val Arg His Glu Pro Pro Arg Arg Arg Met Pro Gln Pro
            340                 345                 350
Val His Pro Val Arg Leu Pro Glu Arg Arg Arg His Ala Thr Arg Gln
        355                 360                 365
Phe Ala Gln Arg His Arg Asn Thr Lys Val Thr Asp Arg His Gln Asp
    370                 375                 380
Gln Thr Pro Glu Asp Arg Asn Gly Thr Ala Val Gly Gln Pro Ala Ala
385                 390                 395                 400
Glu Ala Leu Arg Glu Ser Arg Val Arg Ser Tyr Ser Gln Leu Ala Arg
                405                 410                 415
Pro Pro Leu Cys Ser Lys Lys Gly Gln Trp Gln Gly Asn Thr
            420                 425                 430
```

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<210> 33586
<211> 177
<212> PRT
<213> A.fumigatus

<400> 33586

```
Pro Gly Leu Lys Asn Lys Asn Leu Asp Arg Ile Thr Arg Ser Trp Glu
1               5                   10                  15
Asn Glu Glu Gly Gly Arg Phe Pro Arg Thr Lys Pro Glu Leu Arg Lys
            20                  25                  30
Pro Gly Asp Phe Cys Ile Pro Arg Leu Arg Gly Leu Ser Phe Pro Glu
        35                  40                  45
Arg Thr Lys Ser Thr Lys Lys His Leu Ala Glu Met Cys Thr Leu Gln
    50                  55                  60
Lys Thr Ser Ile Asn Asn Gln Phe Tyr Pro Leu Gln Lys Val Asp Asn
65                  70                  75                  80
Ala His Glu Val Thr Glu Ala Ser Ser Lys Ser Phe Val Val Val His
                85                  90                  95
Leu Thr Tyr Thr Ser Gly Asn Val Glu Ser Arg Val Leu Ser Asp Leu
            100                 105                 110
Trp Arg Gln Leu Asp Met Lys Tyr Gly Asp Ile Lys Phe Cys Glu Ile
        115                 120                 125
Arg Gly Asp Met Cys Ile Glu Gly Tyr Pro Glu Arg Asn Thr Pro Thr
    130                 135                 140
Ile Leu Val Tyr Lys Asp Gly Glu Ile Arg Arg Gln Leu Val Thr Leu
145                 150                 155                 160
Arg Glu Leu Asn Gly Pro Lys Thr Lys Leu Glu Gly Ala Phe Thr Asn
                165                 170                 175
Asp
```

<210> 33587
<211> 249
<212> PRT
<213> A.fumigatus

<400> 33587
Pro Cys Gly Ala Trp Ile Arg Arg Ser Arg Arg Arg Pro Thr Ser Ala
1 5 10 15
Ser Glu Gln Gln Arg Arg Lys Gly Gln Phe Asp Ser Ser Thr Lys Gln
20 25 30
Ala Gln Gly Thr Glu Pro Ser Cys Val Cys Asp Ser Phe Val Pro Val
35 40 45
Lys Val Leu Gly Leu Gln Tyr Met Pro Ala Leu Lys Ala Tyr Cys Gly
50 55 60
Ile Arg Ala Thr Asp Ile Ser Pro Ile Asp Ala Phe Ser Gln Arg Ala
65 70 75 80
Phe Arg Glu Arg Lys Glu Arg His Val Arg Glu Leu Glu Glu Lys Val
85 90 95
Ser Ala Leu Glu Gln Glu Ser Thr Thr Leu Ala Ala Asp Asn Glu Arg
100 105 110
Leu Lys Arg Glu Leu Ala Lys Phe Ala Thr Glu Asn Glu Val Leu Arg
115 120 125
Ala Thr Thr Gly Gln Leu Ala Ser Ser Gln Gly Arg His Leu Asp Ser
130 135 140
Glu Pro Thr Ile Thr Gly Pro Met Lys Tyr Thr Pro Thr Asp Phe Tyr
145 150 155 160
Thr Asn Leu Val Pro Lys Gly Glu Pro Ala Pro Thr His Arg Val Thr
165 170 175
Val Cys Glu Lys Thr Gly Glu Arg Leu Leu Asp Ala Gly Ala Thr Trp
180 185 190
Asp Leu Ile Gln Gly His Glu Leu Tyr Lys Gln Gly Leu Val Asp Ile
195 200 205
Gly Asp Val Ser Asn Arg Leu Lys Gly Met Ala Gln Cys Asn Gly Gln
210 215 220
Gly Pro Ala Phe Arg Glu Gly Gln Val Leu Gln Ala Ile Glu Ala Ser
225 230 235 240
Ala Ala Ala Cys Arg Asp Glu Leu Ile
245

<210> 33588
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33588
Ser Cys His His Thr His Gln Pro Met Leu Phe Arg Ser Ala Phe Asn
1 5 10 15
Ile Tyr Ile Tyr Ile Tyr Ile Phe Ile Ile Met Ile Thr Gln Asn His
20 25 30
Ala Met Leu Leu Arg Ser Trp Cys Gln Leu Leu Gly Ala Ala Lys Leu
35 40 45
Thr Val Ala Leu His Leu Cys Tyr Ser Lys Leu Phe Leu Ser Leu
50 55 60

<210> 33589
<211> 375
<212> PRT
<213> A.fumigatus

<400> 33589

```
Leu Arg Leu Arg Gly Ser Phe Gln Pro Arg Gly Glu Asp Ser Ala Gly
1               5                  10                  15
Glu Pro Val Ile Pro Ala Ala Pro Pro Lys Thr Glu Ala Ile Leu Thr
            20                  25                  30
Pro Leu Gln Gln Ala Met Arg Gln Lys Leu Ile Ser Ser Arg Phe Arg
        35                  40                  45
His Leu Asn Glu Thr Leu Tyr Thr Thr Pro Ser Thr Lys Ala Leu Glu
    50                  55                  60
Leu Phe Thr Ser Asn Pro Glu Leu Phe His Glu Tyr His Ala Gly Phe
65                  70                  75                  80
Ser Arg Gln Val Lys Glu Ser Trp Pro Ser Asn Pro Val Asp Gly Tyr
                85                  90                  95
Ile Ala Ala Ile Arg Lys Arg Gly Gly Val Ser Ser Gly Ser Lys Lys
            100                 105                 110
Gly Asn Lys Pro Asp His Lys Lys Asn Ala Gln Ala Leu Pro Leu Pro
        115                 120                 125
Arg Arg Pro Asn Gly Leu Cys Thr Ile Ala Asp Leu Gly Cys Gly Asp
    130                 135                 140
Ala Gln Leu Ala Arg Ala Leu Thr Pro Ser Ala Gln Gln Leu Asn Leu
145                 150                 155                 160
Lys Leu Leu Asn Phe Asp Leu His Ala Pro Gln Gly Ser Leu Ile Thr
                165                 170                 175
Lys Ala Asp Ile Ser Asn Leu Pro Ile Ala Asp Gly Ser Val Asp Val
            180                 185                 190
Ala Ile Phe Cys Leu Ser Leu Met Gly Thr Asn Trp Val Ser Phe Val
        195                 200                 205
Glu Glu Ala Trp Arg Val Leu Arg Ser Asp Gly Lys Gly Glu Cys Trp
    210                 215                 220
Val Ser Glu Val Lys Ser Arg Phe Gly Lys Val Val Arg Lys Lys Ala
225                 230                 235                 240
Gln Ile Gly Ala Arg Lys Pro Leu Ser Lys Ser Glu Lys Lys Lys Leu
                245                 250                 255
Lys Lys Lys Gln Ala Gly Glu Asp Asp Ala Gly Ser Asp Val Asp Asp
            260                 265                 270
Ala Asp Ile Tyr Ala Glu Asp Ala Arg Lys Ala Asp Asp Asp Glu Thr
        275                 280                 285
Asp Ile Ser Ala Phe Ile Glu Val Phe Arg Thr Arg Gly Phe Ile Leu
    290                 295                 300
Lys Pro Glu Ser Val Asp Lys Ser Asn Lys Met Phe Val Lys Met Glu
305                 310                 315                 320
Phe Val Lys Gln Gly Gly Ala Pro Thr Lys Gly Lys Tyr Ala Ser Val
                325                 330                 335
Ala Ser Ala Gly Gly Pro Gly Lys Lys Arg Phe Ile Asp Lys Ala Thr
            340                 345                 350
Asp Val Gly Ala Gly Met Ser Pro Glu Glu Glu Ala Arg Val Leu Lys
        355                 360                 365
Pro Cys Val Tyr Lys Thr Arg
    370                 375
```

<210> 33590
<211> 107
<212> PRT
<213> A.fumigatus

<400> 33590
Leu Val Leu Pro Leu Asn Arg Thr Asn Leu Gly Leu Arg Phe Arg Tyr

```
1               5                   10                  15
His Ala Glu Pro Ser Gly Thr Phe Tyr Arg Tyr Asp Ala Lys Ala Ile
            20                  25                  30
Gly Ser Gly Ser Glu Gly Ala Gln Ala Glu Leu Gln Asn Glu Tyr His
        35                  40                  45
Arg Ser Leu Thr Leu Pro Glu Ala Glu Thr Leu Val Leu Lys Thr Leu
    50                  55                  60
Lys Gln Val Met Glu Glu Lys Leu Asp Ala Lys Asn Val Gln Leu Ala
65                  70                  75                  80
Ser Val Thr Lys Glu Lys Gly Phe His Ile Tyr Asn Asp Glu Glu Met
                85                  90                  95
Gly Arg Ala Val Ala Gln Leu Gly Gly Asn Gln
            100                 105
```

<210> 33591
<211> 137
<212> PRT
<213> A.fumigatus

<400> 33591

```
Val Ala Thr Ser Glu Gly Val Ile Leu Gly Val Glu Lys Arg Val Thr
1               5                   10                  15
Ser Thr Leu Leu Glu Ala Ser Ser Val Glu Lys Ile Val Glu Ile Asp
            20                  25                  30
Gln His Ile Gly Cys Ala Met Ser Gly Leu Gln Ala Asp Ala Arg Ser
        35                  40                  45
Leu Ile Glu His Ala Arg Val Glu Cys Gln Asn His Ala Phe His Tyr
    50                  55                  60
Ala Glu Pro Leu Arg Val Glu Ser Thr Thr Gln Ala Ile Cys Asp Leu
65                  70                  75                  80
Ala Leu Arg Phe Gly Glu Thr Gly Asp Asp Asp Glu Ser Val Met Ser
                85                  90                  95
Arg Pro Phe Gly Val Ala Leu Leu Ile Ala Gly Tyr Asp Glu Asp Gly
            100                 105                 110
Pro Gln Leu Tyr Val Val His Ser Gln His Leu Thr Val Met Cys Ser
        115                 120                 125
Lys Pro Pro Val Asp Trp Phe Cys Arg
    130                 135
```

<210> 33592
<211> 333
<212> PRT
<213> A.fumigatus

<400> 33592

```
Ser Pro Met Asp Ala Lys Asn Pro Tyr Thr Gln Pro Thr Ala Cys Ser
1               5                   10                  15
Pro Ala Gly Gly His Glu Gln Val Leu Pro Met Leu Gly Lys Pro Ala
            20                  25                  30
Ala Trp Asp Ser Ala Ile Pro Thr Thr Ser Asn Thr Ser Gly Gly Thr
        35                  40                  45
Ile Phe Asn Asn Tyr Asn Tyr Pro His His His His Gln Gln Gln Gln
    50                  55                  60
Pro Gln Leu Val His His Pro Phe Val Ala Val Ser Ser Ala Gly Thr
65                  70                  75                  80
Thr Thr Val Pro Ala Val Ala Pro Ser Ser Ser Ser Leu Ser His Asn
```

```
                85                  90                  95
Pro Asp Glu Ser Val Ala Ala Ala Ser Arg Ser Ala Asp Ser Asp Ser
            100                 105                 110
Lys Asn Arg Gln Asp Val Gly Lys Gly Ala Leu Ser Lys Leu Arg Lys
        115                 120                 125
Thr Arg Lys Thr Thr Asn Ala Ser Asn Gly Arg Ser Thr Leu Phe Trp
    130                 135                 140
Val His Thr Asp Pro Gln Ser Val Ser Glu Gly Thr Arg Glu Glu Thr
145                 150                 155                 160
Leu Lys Arg Ile Arg Ser His Val Met Ser Glu His Asn Arg Lys Lys
                165                 170                 175
Arg Leu Glu Asn Thr Lys Arg Tyr Lys Ser Lys Thr Trp Lys His Leu
            180                 185                 190
Ala Phe Gln Pro Val Glu Thr Thr Ser Ser Asn Ser Ser Ser Ala Thr
        195                 200                 205
Ala Ala Ser Ala Pro Ala Pro Ser Ser Ala Ser Ser Ser Pro Ala Phe
    210                 215                 220
Glu Gln Asn Thr Thr Thr Ser Ser Pro Thr Ile Pro Ser Thr Gln His
225                 230                 235                 240
Asp Gln Arg Ala Glu Gln Glu His Asp Gln Gly Gln Pro Gln Ile Lys
                245                 250                 255
Glu Glu Glu Gly Gln Phe Glu Leu Ala Val Thr Lys Arg Asn Asp Asn
            260                 265                 270
Val Glu Ser Tyr Gly Val Gly Ala Pro Ser Gln Thr Gln Ser Val Asp
        275                 280                 285
Pro Glu Gln Ser Arg Ser Ser Pro Pro Trp Asp Gly Leu Gly Gln Gly
    290                 295                 300
Gly Lys Asp Pro Phe Asn Thr Leu His Thr Pro Leu Ser Asp Arg Met
305                 310                 315                 320
Tyr Arg His Leu Gln His Cys Lys Pro Thr Arg Leu Ser
                325                 330
```

<210> 33593
<211> 520
<212> PRT
<213> A.fumigatus

```
<400> 33593
Arg Arg Asp Gly Ser Ser Ser Ile Arg Tyr Glu Gly Leu Ala Asp Glu
1               5                   10                  15
Arg Ser Tyr Ser Arg Thr Gly Asn Arg Gly Ala Thr Ser Thr Glu Pro
            20                  25                  30
Glu Lys Lys Asp Ile Gln Gln Glu Thr Met Asp Ile Lys Glu Leu Met
        35                  40                  45
Lys Val Leu Pro Asp Ala Arg Cys Ile Ala Val Tyr Pro Val Trp Asp
    50                  55                  60
Phe Gln Arg Gly Arg Trp Phe Thr Val Cys Val Val Trp Ala Asn Asp
65                  70                  75                  80
Pro Gly Arg Val Leu Phe Glu Pro Lys Asp Leu Thr Tyr Leu Ala Ala
                85                  90                  95
Phe Ser Asn Thr Val Met Ala Glu Val Ser Arg Leu Asp Leu Glu Ala
            100                 105                 110
Ala Asp Arg Ala Lys Ser Asp Phe Ile Ser Ser Ile Ser His Glu Leu
        115                 120                 125
Arg Ser Pro Leu His Gly Leu Leu Gly Thr Met Glu Leu Leu Gln Ala
    130                 135                 140
```

```
Met Val Asn Ser Tyr Ala Gln Lys Ser Leu Ile Glu Thr Val Tyr Ser
145                 150                 155                 160
Cys Gly Arg Thr Leu Leu Asp Thr Leu Asn His Leu Leu Asp Tyr Ala
                165                 170                 175
Lys Ile Asn Thr Leu Thr Arg Pro Arg Pro Ser Glu Lys Ala Ile Ala
            180                 185                 190
Gln Gly Ser Asp Met Ser Gln Pro Gln Ser Ala Val Pro Gly Ser Leu
        195                 200                 205
Gln Ile Glu Asn Leu Ser Val Leu Val Gln Glu Val Val Glu Gly Leu
    210                 215                 220
Leu Ala Gly Ala Glu Tyr Gln Arg Arg Gly Ala Ser Gly Asp Ser Asp
225                 230                 235                 240
Ala Leu Ala Lys Lys Glu Asp Leu Gly Leu Lys Asn His Leu Ile Thr
                245                 250                 255
Ile Val Asp Ile Glu Trp Gln Asp Ser Trp Arg Phe Ser Val Tyr Ala
            260                 265                 270
Gly Ala Trp Arg Arg Val Val Met Asn Leu Phe Gly Asn Ala Leu Lys
        275                 280                 285
Tyr Thr Gln Ala Gly Tyr Ile Arg Leu Arg Met Arg Arg Asp Thr Leu
    290                 295                 300
Leu Val Asp Gly Lys Arg Thr Pro Ala Ile Arg Met Thr Phe Ser Asp
305                 310                 315                 320
Ser Gly Arg Gly Met Ser Lys Asp Phe Leu Thr Asn His Leu Tyr Ser
                325                 330                 335
Ala Phe Leu Gln Glu Asp Thr Thr Ser Pro Gly Leu Gly Val Gly Leu
            340                 345                 350
His Leu Val His Gln Ile Ile Lys Ser Leu Lys Gly Gln Ile Lys Phe
        355                 360                 365
Ala Ser Glu Val Gly Lys Gly Thr Asp Val Asp Val Val Leu Pro Ile
    370                 375                 380
Glu Leu Pro Glu Val Pro Ser Pro Ser Ser Pro Arg Ser Phe Ala Ser
385                 390                 395                 400
Leu Lys Glu Arg Leu Ser Gly Met Thr Val Ser Leu Phe Thr Arg Ser
                405                 410                 415
Ser Lys Leu Gly Asp Leu Gly Phe Asp Pro Arg Val Phe Asp Arg Ile
            420                 425                 430
Arg Ser Ser Leu Gly Arg Met Val Ser Gly Trp Phe Gly Leu Arg Val
        435                 440                 445
Leu Thr Pro Asp Glu Leu Asp Ser Thr Lys Pro Asp Phe Ala Ile Val
    450                 455                 460
Thr Glu His Glu Tyr Arg Asn Tyr Tyr Val Lys Gly Thr Asn Glu Pro
465                 470                 475                 480
Lys Pro Asp Ser Gly Glu Ile Gln Pro Ala Leu Pro Leu Ile Val Leu
                485                 490                 495
Pro Ala Arg Thr Ser Ser Trp Lys Thr Leu Gly Glu Ser Val Glu Asp
            500                 505                 510
Ser Val Ile Phe Leu Thr Gln Pro
        515                 520
```

<210> 33594
<211> 272
<212> PRT
<213> A.fumigatus

<400> 33594
Gly Leu Ser Arg Ser Leu Gly His Val Met Asp His Leu Leu Cys Gln

```
1               5                   10                  15
Arg Ala Met Arg Glu Glu Tyr Arg Glu Glu Arg Met Val Arg Ala Leu
            20                  25                  30
Gly Leu Phe Val Lys Gly Lys Ser Asp Leu Asn Glu Trp Phe Asp Ser
        35                  40                  45
Gly Asp Ala Arg Asp Lys Lys Tyr Gly Gly Gln Met Gly Leu Leu Asn
    50                  55                  60
Lys Arg Leu Glu Lys Arg Gln Val Ala Arg Ser Thr Arg Glu Asp Ser
65                  70                  75                  80
Gln Gly Ala Arg Asp Asn Lys Asp Ser Lys Asp Asp Lys Asp Asp Asp
                85                  90                  95
Ala Gly Gln Tyr Gln Asp Asn Glu Leu Ser Glu Ala Arg Ser Lys His
            100                 105                 110
Arg Arg Gly Met His Gly Ser Pro Val Gln Arg Phe Lys Gln Gly Gly
        115                 120                 125
Glu His Glu Ala Asp Glu Ala Gly Asn Asp Asp Lys Pro Asp Glu Lys
    130                 135                 140
Pro Arg Lys Lys Arg Pro Thr Leu Ser Pro Thr Thr Ser Gln Leu Gln
145                 150                 155                 160
Asp Ser Leu Ala Pro Thr Asn Val Arg Ser Val Val Asn Arg Ala Ala
                165                 170                 175
Ser Met Ile Tyr Gln Ala Leu Asp Val Glu Gly Ala Met Phe Ile Asp
            180                 185                 190
Ala Ser Val Tyr Ala Arg Arg Gln Thr Val Gly Phe Thr Lys Ser Lys
        195                 200                 205
Leu Asp Asn Pro Glu Ala Tyr His Gly Gln Gln Ser Pro Asp Ile Ala
    210                 215                 220
Gly Ala Glu Glu Pro Ala Pro Ser Ile Ser Asn Pro Glu Ser Arg Ser
225                 230                 235                 240
Asp Thr Asp Ala Ser Asp Asp Asp Ser Gln Ser Arg Ser Leu Val Leu
                245                 250                 255
Gly His Tyr Thr Ser Thr Thr Ser Glu Ala Gly Val Asn Leu Glu Gln
            260                 265                 270
```

<210> 33595
<211> 71
<212> PRT
<213> A.fumigatus

```
<400> 33595
Ala Phe Phe Val Ala Ile Ile Phe Ile Thr Leu Glu Ile Cys Phe Ile
1               5                   10                  15
Thr Leu Phe Ser Ile Phe Ala Phe Thr Phe Phe Tyr Arg Gly Leu Ala
            20                  25                  30
Ser Pro Phe Ser Phe Val Gln Val Ser Ile Ala Ile Pro Asn Leu Ile
        35                  40                  45
Cys Arg Val Thr Ile Asn Ala Gly Arg His Gly His Leu Arg Ile Arg
    50                  55                  60
Ile Trp Arg Asn Thr Ile Pro
65                  70
```

<210> 33596
<211> 103
<212> PRT
<213> A.fumigatus

<400> 33596
Phe Ala Leu Cys Arg Lys Leu Arg Gln Leu Leu Ile Ile Asn Phe Ala
1 5 10 15
Glu Leu Ala Leu Ile Val Gly Ala Ile Leu Asn Ala Leu Arg Asp Ile
20 25 30
Ala Leu Leu Thr His Phe Glu Thr Gly Leu Val Gly Leu Ile Ser Arg
35 40 45
Arg Arg Gly Arg Leu Arg Cys Ser Gly Trp Leu Gly Phe Arg Arg His
50 55 60
Arg Cys Leu Cys Ser Arg Arg Ala Arg Gly Glu Phe Ala Ala Asp Asp
65 70 75 80
Ser Phe Gly Ser Leu Leu Asp Val Pro Ser Gly Asp Ala Leu Gly Ala
85 90 95
Ala Ser Arg Gly Gly Arg Phe
100

<210> 33597
<211> 155
<212> PRT
<213> A.fumigatus

<400> 33597
His Thr Gln Ile Gly Arg Asn Asp Glu His Leu Asp Lys Lys Ile Glu
1 5 10 15
Leu Leu Ser Arg Gly Phe Gln Gly Lys Asn Val Thr His Asp His Ile
20 25 30
Ala Ser Asn Ser Ala Asn Ile Tyr Asn Pro Val Tyr Glu Asp Pro Gly
35 40 45
Ser Ala Thr Asp Gln Arg Val Glu Glu Leu Glu Leu Glu Asn Asp Gln
50 55 60
Leu Arg Ser Arg Ile Ala Ala Leu Glu Arg Glu Leu Met Gly Arg Ser
65 70 75 80
Pro Thr Lys Lys Pro Lys Ser Lys Asn Ala Leu Glu Pro Ser His Gly
85 90 95
Ser Asn His Leu Gly Arg Glu Ser Asp Ile Glu Ser Ala Leu Arg Arg
100 105 110
Met Asp Gln Leu Lys Leu Ala Asp Ser Met Phe Ser Pro Ala Thr Ser
115 120 125
Gly Asn Ser Ser Pro Ser Lys Lys His Arg Lys Met Ala Thr Arg Lys
130 135 140
Trp Asp Phe Ala Pro Glu Glu Asp Ile Tyr Val
145 150 155

<210> 33598
<211> 162
<212> PRT
<213> A.fumigatus

<400> 33598
Gln Leu Glu Gln Gly Met Arg Cys Cys Trp Arg Arg His Cys Ala His
1 5 10 15
Val Ser Met Gly Ser Gly Ser Glu Ala Phe Ser Phe Gly Gly Ser Pro
20 25 30
Ser Met Thr Ser Gly Ser Ser Ala Ser Ser Ser Ile Ser Cys Ala Phe
35 40 45
Ser Val Ser Ser Pro Leu Pro Ser Pro Ser Ser Arg Leu Ser Ser Ser

```
    50                  55                  60
Pro Ser Phe Ser Ser Arg Ser Arg Ser Ala Ser Ser Pro Ser Ser Pro
65                  70                  75                  80
Ser Ser Pro Ser Pro Ser Ser Thr Val Val Ser Pro Pro Pro Ser Ala
                85                  90                  95
Ser Phe Arg Ser Ala Ser Pro Ser Pro Thr Ser Ser Ala Ala Ser Pro
            100                 105                 110
Ser Met Leu Ala Gly Thr Asp Ile Ser Glu Ser Gly Ser Gly Glu Ile
        115                 120                 125
Arg Ser Arg Arg Leu Gly Lys Ser Ser Leu Arg Ser Ala Ala Ser Phe
    130                 135                 140
Asp Asn Phe Ser Ser Ser Ile Ser Leu Ser Ser Leu Ser Ser Ser Ala
145                 150                 155                 160
Leu Ser
```

<210> 33599
<211> 229
<212> PRT
<213> A.fumigatus

<400> 33599

```
Pro Pro Phe Gln Pro Ala Glu Gly Ser Gln Thr Leu Met Ala Thr Pro
1               5                   10                  15
Leu Ala Arg Lys Val Gln Pro Pro Glu Asp Lys Ala Gly Trp Lys Pro
            20                  25                  30
Tyr Ile Leu Glu Val Leu Arg Arg Leu Lys His Ala Asp Lys Ser Asn
        35                  40                  45
Trp His His Arg Met Ala Val Arg Ala Ala His Val Thr Tyr Asp Asp
    50                  55                  60
Thr Arg Asp Thr Val Ser Ala Ala Ala Ala Lys Asn Glu Leu Thr Gln
65                  70                  75                  80
Gln Ile Phe Thr Lys Thr Met Thr Ile Gln Val Trp Arg Pro Glu Phe
                85                  90                  95
Glu Arg Pro Gly Arg His Phe Val Tyr Thr Thr Arg Tyr Val Tyr Phe
            100                 105                 110
Phe Val Ser Leu Leu Asp Gln Leu Asn Asp Arg Ala Asn Leu Asp Gln
        115                 120                 125
Leu Leu Arg Arg Val Arg Lys Lys Gln Gly Asp Phe Ile Asn His Thr
    130                 135                 140
Lys Leu Trp Glu Asp Val Cys Leu Thr Tyr Ala Lys Val Ile Arg Arg
145                 150                 155                 160
Ala Gly Ser Ile Asn Glu Gly His Glu Glu Asn Val Phe Lys Pro Ile
                165                 170                 175
Gly Trp Glu Glu Phe Val Ala Asn Thr Ala Arg Leu Gly Glu Ser Ser
            180                 185                 190
Pro Ala Ser Thr Gly Gln Pro Ser Ser Thr Gly Thr Ala Ser Arg Arg
        195                 200                 205
Tyr Arg Thr Glu Lys Ala Gln Gln Gln Pro His Glu Ser Val Phe Ala
    210                 215                 220
Arg Arg Pro His Arg
225
```

<210> 33600
<211> 371
<212> PRT

<213> A.fumigatus

<400> 33600

```
Glu Arg Ser Lys Val Thr Ser Ser Thr Thr Pro Ser Tyr Gly Arg Met
1               5                  10                  15
Ser Ala Leu Pro Thr Gln Arg Ser Phe Glu Glu Gln Ala Val Ser Thr
            20                  25                  30
Arg Asp Met Lys Arg Met Tyr Ser Ser Gln Leu Asp Gly Lys Asn Ser
        35                  40                  45
Ser Pro Thr Gln Pro Ala Trp Glu Asn Leu Pro Gln Leu Ala Pro Gly
    50                  55                  60
Ser Gln Val Leu Leu Glu Leu Leu Arg Asp Ala Ile Glu Leu Lys Lys
65                  70                  75                  80
Leu Asn Asn Asn Leu Met Lys Val Ser Leu Leu Glu Asp Leu Ile Ala
                85                  90                  95
Asp Leu Tyr Ser Arg Leu Tyr Glu Ile Asn Met Pro Gln Val Leu Glu
            100                 105                 110
Gln Ala Asn Glu Glu Asn Lys Glu Lys Met Lys Val Asp His Leu Leu
        115                 120                 125
Met Ala Ser Asp Gly Ala Ala Asp Thr Pro Thr Pro Pro Asn Ser Ala
    130                 135                 140
Pro Ala Ser Glu Ala Pro Ala Pro Arg Gly Arg Thr Lys Gly Ile Ala
145                 150                 155                 160
Arg Arg Asp Val Gln Lys Arg Ala Glu Thr Ile Val Gly Arg Lys Leu
                165                 170                 175
Thr Pro Arg Ala Pro Ala Ala Lys Ala Ser Val Pro Ala Glu Ser Glu
            180                 185                 190
Pro Pro Ala Thr Ser Glu Pro Ala Ala Pro Ser Gly Asn Gln Pro Asn
        195                 200                 205
Lys Thr Ser Phe Glu Met Gly Gln Gln Ser Asp Ile Pro Gln Ser Ile
    210                 215                 220
Gln Asp Ser Ala Asp Asp Glu Ser Glu Leu Ser Glu Ile Asp Asp Glu
225                 230                 235                 240
Lys Leu Ser Lys Leu Ala Ala Glu Arg Lys Leu Leu Phe Pro Asn Leu
                245                 250                 255
Arg Asp Arg Ile Ser Pro Asp Pro Asp Ser Glu Met Ser Val Pro Ala
            260                 265                 270
Ser Ile Asp Gly Asp Ala Ala Asp Glu Val Gly Asp Gly Asp Ala Asp
        275                 280                 285
Leu Asn Glu Ala Glu Gly Gly Gly Glu Thr Thr Val Glu Glu Gly Glu
    290                 295                 300
Gly Glu Asp Gly Glu Glu Gly Asp Glu Ala Asp Leu Glu Arg Asp Glu
305                 310                 315                 320
Asn Asp Gly Asp Glu Glu Ser Leu Glu Glu Gly Glu Gly Asn Gly Glu
                325                 330                 335
Asp Thr Glu Asn Ala Gln Asp Met Glu Asp Glu Ala Glu Glu Pro Glu
            340                 345                 350
Val Ile Glu Gly Asp Pro Pro Lys Glu Asn Ala Ser Glu Pro Glu Pro
        355                 360                 365
Met Glu Thr
    370
```

<210> 33601
<211> 61
<212> PRT
<213> A.fumigatus

<400> 33601
Arg Leu Asp Val Val Phe Ala Ser Lys Ser Pro Ser Glu Ala Phe Pro
1 5 10 15
Glu Ile Lys Ser Lys Ala Gln Tyr Ser Thr Ile His Lys Thr His Arg
20 25 30
Asn Thr Val Ala Ser Asn Ile Gln Pro Val Tyr Lys Pro Gly Arg Val
35 40 45
Gly Phe Leu Leu Glu Ala Pro His His Cys Gln Asn Pro
50 55 60

<210> 33602
<211> 193
<212> PRT
<213> A.fumigatus

<400> 33602
Cys Pro Glu Ala Ile Trp Val Asn Ala His Thr Cys Pro Cys Arg Phe
1 5 10 15
Ile Gln Ile Leu Ile Tyr Ser His Arg Arg Leu Leu Leu Val Thr Thr
20 25 30
Tyr Thr Ile Phe Leu Leu Ile Ser Ile Gly Ser Leu Met Ile Ile Asn
35 40 45
Ser Ile Pro Asp Tyr Gly Ala Gln Arg Leu Trp Ser Ala Ile Phe Tyr
50 55 60
Gly Val His Leu Ile Cys Ile Tyr Pro Ile Leu Thr Ala Leu Gly Val
65 70 75 80
Leu Gly Ile Phe Cys Gln Ala Arg Glu Ile Met Val Ala Pro Phe Pro
85 90 95
Asn Ala Leu Ser Leu Gln Gly Leu Ala Leu Gln Ala Leu Ile Phe Thr
100 105 110
Leu Ile Ser Val Thr Trp Ile Pro Ser Leu Pro Phe Pro Tyr Glu Lys
115 120 125
Leu Glu Gly Arg Tyr Asn Trp Asn Thr Phe Thr Val Trp Tyr Gly Ala
130 135 140
Val Gly Phe Ile Ile Val Asn Ser Phe Ile Phe Ala Leu Gly Gln Ala
145 150 155 160
Val Leu Leu Leu Leu Ala Leu His Arg Ser Ser Leu Ser Lys Ala Thr
165 170 175
Ile Gln Arg Gly Thr Glu Thr Glu Pro Leu Leu Gly His Pro Ala Glu
180 185 190
Met

<210> 33603
<211> 73
<212> PRT
<213> A.fumigatus

<400> 33603
Pro Gly Leu Thr Arg His Gln Gly Tyr Lys Phe Ile Leu Leu Val Ala
1 5 10 15
Ala Asp Ile Tyr Trp Asp Gly Leu Gly Lys Ser Val Pro Val Ile Cys
20 25 30
Lys Thr Ala Gly Lys Phe Met Trp Ala Pro Val Val Leu Phe Ser Glu
35 40 45

```
Val Lys Pro Glu Ala Pro Leu Ala Ala Ile Asp Ile Phe Glu Tyr Gly
    50                  55                  60
Arg Met Lys Cys Asp Trp Leu Ser Val
65                  70

<210> 33604
<211> 88
<212> PRT
<213> A.fumigatus

<400> 33604
Glu Asp Ala Asp Arg His Ser Leu Ala Arg Ser Val Ile Thr Thr Thr
1               5                   10                  15
Tyr Thr Ser Ile Ile Cys Ala Ala Ser Leu Tyr Asp Ser Arg Ser Ser
            20                  25                  30
Pro Val Asp Leu Thr Lys Leu Gln Lys Gly Ile Glu Val His Leu Tyr
        35                  40                  45
Asp Val Gln Cys Ile Arg Pro Ser Arg Ser Cys Ser Ile Leu Gln Phe
    50                  55                  60
Leu Pro Leu Ser Arg His Trp Lys Glu Ala Gln Arg Trp Ile Arg Pro
65                  70                  75                  80
Arg Ser Gly Ser Ala Glu Pro Arg
                85

<210> 33605
<211> 127
<212> PRT
<213> A.fumigatus

<400> 33605
His Arg Gln Val Ser Phe Ala Leu Leu Leu Leu Gln Val Lys Leu Lys
1               5                   10                  15
Thr Thr Leu Gly Ser Val Ser Asp Arg Ser Arg His Gly Ile Gly Arg
            20                  25                  30
Val Val Glu Met Ala Leu Ala His Ile Gly Asn Asp Thr Pro Ile His
        35                  40                  45
Leu Ser Phe Asp Val Asp Ala Leu Asp Pro Gln Trp Ala Pro Ser Thr
    50                  55                  60
Gly Thr Pro Val Arg Gly Gly Leu Thr Leu Arg Glu Gly Asp Phe Ile
65                  70                  75                  80
Cys Glu Cys Val His Glu Thr Gly Asn Leu Ile Ala Met Asp Leu Val
                85                  90                  95
Glu Val Asn Pro Ser Leu Asp Glu Val Gly Ala Ser Glu Thr Ile Arg
            100                 105                 110
Ala Gly Cys Ser Leu Val Arg Cys Ala Leu Gly Asp Thr Leu Leu
        115                 120                 125

<210> 33606
<211> 98
<212> PRT
<213> A.fumigatus

<400> 33606
His Pro Thr Ile Phe Val Ser Pro Asn Gly Val Pro Leu Arg Ile Asn
1               5                   10                  15
Gly Leu Phe Leu Arg Val Tyr Arg Ser Ile Pro Pro Cys Ile Val Thr
```

```
            20                  25                  30
Lys Ser Tyr Leu Glu Tyr Thr Thr Pro His Leu Pro Pro Thr Met Ala
        35                  40                  45
Ala Arg Val Gln Arg Arg Arg Arg Tyr Arg Trp Pro Glu Leu Gln Leu
    50                  55                  60
Asn Ile Trp Ile Ile Ile Val Leu Ala Gly Ser Ala Ile Cys Leu Gly
65                  70                  75                  80
Ile Phe Ala Trp Phe Met Ala Val Gln Ser Gln Leu Arg Leu Gly Thr
                85                  90                  95
Pro Trp
```

<210> 33607
<211> 195
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (36)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33607

```
Cys Lys Val Gly Val Glu Ala Ala Pro Leu Ala Leu Ile Glu Ala Gly
1               5                   10                  15
Leu Leu Asn Gln Val Arg Asp Asp Leu Gly Tyr Gln Leu His Tyr Asp
            20                  25                  30
Asp Thr Val Xaa Tyr Tyr Glu Ser Leu Thr Pro Leu Ser Asp Pro Asp
        35                  40                  45
His Arg Gly Met Lys Lys Pro Arg Ala Val Ser Val Val Thr Glu Thr
    50                  55                  60
Leu Ser Lys Gln Val Tyr Asp Tyr Ala Lys Asp Gly Lys Phe Val Leu
65                  70                  75                  80
Thr Leu Gly Gly Asp His Ser Ile Ala Ile Gly Thr Ile Ser Gly Thr
                85                  90                  95
Ala Lys Ala Ile Arg Glu Arg Leu Gly Arg Glu Met Ala Val Ile Trp
            100                 105                 110
Val Asp Ala His Ala Asp Ile Asn Thr Pro Glu Met Ser Pro Ser Gly
        115                 120                 125
Asn Ile His Gly Met Pro Met Ala Phe Leu Thr Arg Leu Ala Arg Glu
    130                 135                 140
Asp Lys Lys Asp Ile Phe Gly Trp Leu Gln Asp Glu His Ile Ile Asn
145                 150                 155                 160
Lys Asn Lys Leu Val Tyr Ile Gly Leu Arg Asp Val Asp Arg Gly Glu
                165                 170                 175
Lys Gln Leu Leu Arg Glu His Gly Ile Lys Ala Phe Ser Met His Asp
            180                 185                 190
Ile Asp Arg
        195
```

<210> 33608
<211> 166
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (4),(100)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33608
Asp Ile Val Xaa Asp Leu Gln Gln Glu Gln Glu Arg Pro Val Leu Val
1 5 10 15
Gly Val Leu Pro Gly Met Ala Gly Asn Trp Val Leu His Glu Leu Gly
20 25 30
Ala Phe Cys Thr Lys Pro Asn Leu Ala Trp Asp Ala Gln Arg Val Pro
35 40 45
Ala Glu Thr Phe Ala Gln Ile Ile Asp Gln Leu Gln Arg Lys Arg Ile
50 55 60
Thr Gly Ala Thr Ala Lys Gln Val Leu Ala Met Val Phe Asp Gly Asp
65 70 75 80
Arg Arg Pro Asp Pro Gln Leu Leu Glu Glu Glu Asn Leu Leu Leu Arg
85 90 95
Pro Leu Ser Xaa Asp Glu Tyr Leu Ala Leu Ala Glu Ala Ala Ile Gly
100 105 110
Gln Asn Pro Gln Met Val Glu Gln Ile Arg Ala Lys Asn Gln Leu Gly
115 120 125
Lys Leu Gly Trp Phe Val Gly Gln Met Met Arg Met Gly Glu Lys Gly
130 135 140
Arg Val Glu Ala Gln Lys Ala Asp Glu Ile Leu Arg Glu Leu Ile Leu
145 150 155 160
Gly Lys Ser Asp Gln Pro
165

<210> 33609
<211> 120
<212> PRT
<213> A.fumigatus

<400> 33609
Ile Asp Leu Thr Leu Pro Phe Arg Glu Ser Leu Ser Leu Ser Phe Ser
1 5 10 15
His Leu Phe Pro Ala Ile Asn Ser Val Ala Ala Cys Thr Trp Asn Arg
20 25 30
Thr Asp Ser Arg Pro Glu Ala Ser His Leu Gly Ser Asn Leu His Arg
35 40 45
Ala Gln Ser Leu Ser Tyr Arg Phe Ser Ser Ser Arg Thr Val Ser Phe
50 55 60
Phe Arg Tyr Gln Ala Leu Ile Phe Ala Leu Asp Leu Asn Val Val Ile
65 70 75 80
Gln Ile Lys Ser Ser Pro Leu Thr Phe Lys Met Thr Ala Pro Ser Thr
85 90 95
Ile Lys Gln Arg Phe Leu Ser Lys Pro Asn Glu Leu Gly Val Val Ala
100 105 110
Val Gly Phe Asn Gly Gly Gln Val
115 120

<210> 33610
<211> 443
<212> PRT
<213> A.fumigatus

<400> 33610

```
Ile Leu Arg Gly Ile Pro Ala Ala Leu Val Gln Leu Ser Val Trp His
1               5                  10                  15
Arg Val Ser His Lys Ser Ser Asn Glu Lys Leu Ala Asn Val Phe Val
            20                  25                  30
Ser Val Phe Thr Thr Ala Met Pro Ser Ile Gln Val Gly Leu Ala Val
        35                  40                  45
Gly Asn Gly Thr Gly Pro Glu Leu Thr Val Ile Phe Glu Arg Val Ile
    50                  55                  60
Gln Ser Leu Ala Ala Arg Tyr Asn Val Ser Val Thr Phe Leu Arg Ser
65                  70                  75                  80
Pro Arg Ile Tyr Asn Ser Tyr Ser Ser Leu Leu Ala Ile Asn Asp Thr
                85                  90                  95
Asp Ala Val Thr Glu Glu Thr Leu Ala Asp Ala Ala His Tyr Arg Gln
            100                 105                 110
Phe Cys Arg Glu Ala Val Pro Cys Gly Val Arg Ala Ile Phe Arg Thr
        115                 120                 125
Ser Ile Ser Ala Gln Ala Leu Tyr Leu Val Arg Glu Gln Leu Gln Ala
    130                 135                 140
Ile Lys Ile Glu His Phe Thr Leu Ser Pro Thr Ser Ser Ile Leu Leu
145                 150                 155                 160
Val Arg Asp Gln Ala Gln Gly Phe Tyr Ser Gly Thr Asn Ser Val Asn
                165                 170                 175
Thr Ser Lys Asp Ala Val Ser Arg Thr Ala His Phe Ser Lys Ala Val
            180                 185                 190
Phe Thr Arg Ile Leu Ser Phe Ala Leu Val Arg Ala Asn Gln Leu Trp
        195                 200                 205
Gly Gly Thr Asn Ser Val Thr Met Val Tyr Lys Phe His Leu Phe Asp
    210                 215                 220
Gly Leu Phe His Thr Trp Ala Thr Glu Trp Glu Arg Thr Phe Gly Val
225                 230                 235                 240
Arg Ile Arg Phe Val Gln Gly Asp Thr Met Asn Arg Asp Leu Leu Ala
                245                 250                 255
Phe Gly Val Ser Gly His Asn Leu Leu Ile Ser Gly Asn Glu Tyr Ala
            260                 265                 270
Asp Ile Met Gln Thr Ile Leu Leu Asp Arg Ser Gly Leu Gly Ala Gln
        275                 280                 285
Glu Ser Ala Cys Ala Glu Asn Val Tyr Leu His Pro Asp Val Trp Gly
    290                 295                 300
Leu Ser Glu Tyr Gln Thr Ala His Gly Ser Ala Asp Asp Leu Val Gly
305                 310                 315                 320
Lys Gly Ile Val Asn Pro Thr Ala Thr Ile Arg Ala Ala Ala Ala Val
                325                 330                 335
Leu Glu Asp Gln Ala Gly Cys Ala Gly Ala Thr Gln Arg Val Asp Asp
            340                 345                 350
Val Leu Gly Asp Leu Gly Ala Lys Gly Ile Arg Thr Pro Asp Gln Gly
        355                 360                 365
Gly Thr Ala Thr Thr Glu Ala Phe Val Glu Ala Phe Leu Gln Gly Leu
    370                 375                 380
Gly Gln Pro Leu Asp Ala His Asn Gly Ala Ser Ser Trp Phe Ser Gly
385                 390                 395                 400
Glu Ala Asn Gly Arg Gly Gly Arg Gly Phe Pro Glu Arg Phe Cys His
                405                 410                 415
Pro Val Gln Glu Pro Ile Gly His Gly Thr Gly Gly Ser Glu His Pro
            420                 425                 430
Ala Ser Gly Gly Met Gly Pro Thr Gly Ser Tyr
```

435 440

<210> 33611
<211> 215
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (175),(192),(203)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33611
Gln Gly Ile Arg Lys Ala Cys Arg Pro Leu Val Ala Leu Val Cys Leu
1 5 10 15
Thr Met Glu Thr Ile Ser Ser Gly Phe His Leu Ala Asp Gly Asn Gly
20 25 30
Tyr Met Leu Asp Lys Gly Tyr Ala Ala Arg Cys Arg Leu Asn Leu Gln
35 40 45
Phe Tyr Leu Trp Lys Asn Ser Leu Ala Phe Asn Leu His Pro Ser Ile
50 55 60
Pro Ile Pro His Thr His Gly Ser Pro Pro Leu Arg Ile Ala Asp Leu
65 70 75 80
Ala Cys Gly Thr Gly Ile Trp Leu Leu Asp Leu Ala Cys Glu Leu Pro
85 90 95
Glu Pro Ala Val Leu Asp Gly Leu Asp Ile Asp Leu Ser Lys Ala Pro
100 105 110
Pro Ala Gln Trp Leu Pro Asn Asn Val Thr Val His Asn Trp Asp Ile
115 120 125
Leu Ser Pro Val Pro Glu His Leu Val Gly Arg Tyr Asp Ile Val His
130 135 140
Leu Arg Leu Leu Ile Leu Val Val Glu His Ser Asp Pro Val Pro Ile
145 150 155 160
Ile Gln Asn Ala Tyr Arg Met Leu Lys Pro Gly Gly Tyr Ile Xaa Trp
165 170 175
Asp Asp Leu Lys Leu Pro Asp Thr His Val Gln Gln Gly Asn Pro Xaa
180 185 190
Ala Asn Thr Pro Ala Phe Asp Arg Leu Leu Xaa Asn Leu Ser Ala Pro
195 200 205
Met Glu Glu Leu Asp Gly Cys
210 215

<210> 33612
<211> 233
<212> PRT
<213> A.fumigatus

<400> 33612
Gly Thr Asn Thr Leu Gln Arg Pro Phe Leu His Phe Tyr Ser Pro Val
1 5 10 15
Phe Ile Leu Tyr Glu Leu Ser Ser Pro Phe Leu Asn Ile His Trp Phe
20 25 30
Leu Asp Lys Val Asn Met Thr Gly Ser Lys Leu Gln Trp Tyr Asn Gly
35 40 45
Met Leu Leu Leu Ile Val Phe Phe Cys Cys Arg Leu Ile Trp Gly Thr
50 55 60

```
Trp Gln Ser Ala Ala Val Tyr Lys Asp Met Trp Tyr Ala Leu Lys Lys
65                  70                  75                  80
Thr Trp Ser Ala Ser Glu Ser Ala Ala Leu Asn Pro Val Asp Ile Thr
                85                  90                  95
Thr Asp Val Phe Gln Ile Arg Asp Gly Ser Ile Cys Val Asn Glu Ala
            100                 105                 110
Cys Ala Arg Ala Gln Ala Glu Ile Ser Lys Phe Ser Lys Tyr Thr Ala
        115                 120                 125
Gly Gly Val Pro Thr Trp Leu Val Val Thr Tyr Val Val Ser Asn Ile
    130                 135                 140
Val Leu Asn Gly Leu Asn Tyr Tyr Trp Phe Thr Lys Met Ile Asp Ala
145                 150                 155                 160
Val Ile Lys Arg Phe Arg Ala Pro Ala Pro Ala Gly Lys Ala Lys Glu
                165                 170                 175
Glu Glu Leu Lys Gln Asp Val Val Ile Glu Ala Ala Thr Lys Leu Glu
            180                 185                 190
Lys Glu Glu Gly Ala Phe Thr Thr Gly Asp Leu Ala Ser Glu Lys Ile
        195                 200                 205
Ala Ser Ala Val Glu Val Gly Pro Ser Glu Glu Leu Arg Gln Arg Asn
    210                 215                 220
Pro Asn Val Pro Thr Ala Ala Arg Ser
225                 230
```

<210> 33613
<211> 195
<212> PRT
<213> A.fumigatus

<400> 33613

```
Arg Ala Leu Thr Ser Trp Ser Glu Ser Ala Asp Leu Ala Lys Thr Pro
1               5                   10                  15
Asn Trp Gly Gln Tyr Val Asp Met Ile Asp Pro Ile Pro Pro Pro Pro
            20                  25                  30
Arg Trp Leu Arg Asp Leu Val Glu Pro Trp Ala Val Tyr Leu Asn Ile
        35                  40                  45
Pro Ala Val Thr Asp His Val His Glu Ile Ile Ala Ala Phe Ala Phe
    50                  55                  60
Tyr Gln Phe Ile His Ser Tyr Leu Ser Pro Trp Leu Ser Pro Arg Leu
65                  70                  75                  80
Phe Pro Arg His Tyr Pro Asn Leu Asn Asn Arg Thr Gln Leu Asn Trp
                85                  90                  95
Asp Val His Val Val Ser Leu Val Gln Ser Val Leu Ile Asn Ala Val
            100                 105                 110
Ala Leu Trp Val Met Phe Thr Asp Asp Glu Arg Lys Ser Met Ser Pro
        115                 120                 125
Ala Glu Arg Val Tyr Gly Tyr Ser Gly Ala Cys Ala Phe Ile Ser Ala
    130                 135                 140
Leu Ala Ala Gly Tyr Phe Ile Tyr Asp Leu Tyr Val Ser Thr Val Tyr
145                 150                 155                 160
Val Lys Ile Phe Gly Ile Gly Met Leu Phe His Ala Val Ser Ala Leu
                165                 170                 175
Trp Val Phe Ser Leu Gly Phe Val Ser Gly Ser Leu Phe Leu Ser Leu
            180                 185                 190
Pro Ala Phe
        195
```

<210> 33614
<211> 174
<212> PRT
<213> A.fumigatus

<400> 33614
Ile Phe Gly Arg Asp Gln Met Phe Phe Pro Gln Ile Pro Glu Ser Ile
1 5 10 15
Gly Pro His Thr Ser Pro Leu Asp Pro Ile Lys Leu Pro Tyr Thr Ile
20 25 30
Arg Val Asp Glu Asp Phe His Lys Asp Pro Thr Pro Thr Val Tyr Asp
35 40 45
Ile Gln Val Ala Val Glu Asp Pro Leu Arg Ala Lys Met Leu Ala Leu
50 55 60
Thr Gln Asn Pro Gln Tyr Thr Ala Gly Leu Arg Gln Ile Ala Ala Leu
65 70 75 80
Asp Asp Gln Leu Ala Leu Ile Val Gln Ala Leu Thr His Ser Arg Ala
85 90 95
Lys His Ser Phe Tyr Thr Ala Leu Ser Lys Asp Pro Ala Thr Phe Leu
100 105 110
Arg Arg Trp Val Asn Ser Gln Arg Arg Asp Leu Glu Thr Ile Leu Gly
115 120 125
Glu Ala Thr Arg Gly Gly Gly Glu Asp Gly Ser Gly Pro Glu Phe Arg
130 135 140
Arg Gly Gly Ala Glu Ser Val Trp Asp Thr Gln Val Ala Arg Glu Ala
145 150 155 160
Val Arg Tyr Met Leu Ala Lys Pro Asp Ala Ala Ala Ala Arg
165 170

<210> 33615
<211> 305
<212> PRT
<213> A.fumigatus

<400> 33615
Ala Phe Pro Ser His Ile Asn Val Ala Ile Leu Glu Thr Gly Phe Ser
1 5 10 15
Leu Gln Ile Leu Asn Ala Asp Leu Ser Leu Arg Ile Phe Leu Asp Ser
20 25 30
Thr Ser Val Ser Ala Arg Thr Thr Ser Asn Pro Pro Asn Gly Asp Ala
35 40 45
Ala Thr Ala Glu Trp Ser Ser Ala Val Gly His Ala Thr Thr Gly Lys
50 55 60
Ser Gly Arg Val Ile His Asn Leu Gln Glu Glu Ile Ala Arg Leu Thr
65 70 75 80
Arg Glu Cys Ser Val Tyr Arg Ser Arg Ala Glu Glu Thr Gln Arg Met
85 90 95
Asn Asp Ala Phe Lys Met Gln Val Gln Asn Met Thr Glu Arg Leu Arg
100 105 110
Asn Leu Glu His Ala Asn Glu Thr Asn Leu Gln Ser Ile Arg Arg Lys
115 120 125
Asp Lys Lys Ile Glu Glu Leu Arg Ala Glu Val Gln Ser Glu Lys Glu
130 135 140
Arg Arg Arg Arg Ala Glu Gly Glu Thr Asp Lys Phe Gln Gln Leu Met
145 150 155 160
Asn Glu Ala Arg Asp Glu Phe Asn Arg Lys Cys Ala Glu Leu Gln Glu

```
                165                 170                 175
Ile Ala Asn His Ser Arg Thr Gln Tyr Asp Val Leu Ala Lys Ala Gly
            180                 185                 190
Gln Arg Glu Arg Ala Asp Gln Gln Arg Lys Leu Lys Ala Ile Arg Asp
        195                 200                 205
Asp Phe Leu Ala Leu Lys Ala Glu His Glu Lys Arg Asp Val His Leu
    210                 215                 220
Glu Arg Leu Asp Thr Val Ile Ser Gln Lys Asn Arg Glu Ile Glu Ile
225                 230                 235                 240
Gly Arg Glu Arg Phe Asp Gln Leu Phe Glu Asp Tyr Glu Ala Tyr Lys
                245                 250                 255
Lys Ala His Asp Glu Glu Val Arg Ala Leu Ile Glu Arg Asn Tyr Gln
            260                 265                 270
Gly Ala Ala Asn Ile Asp Ser Ala Leu Ala Ser Leu Lys Glu Thr Glu
        275                 280                 285
Glu Lys Met Lys Trp Ala Ile Gln Val Lys Asn Glu Ile Lys Asp Ala
    290                 295                 300
Gln
305

<210> 33616
<211> 69
<212> PRT
<213> A.fumigatus

<400> 33616
Gly Arg Pro Met Ser Glu Arg Tyr Ile Leu Arg Ile Ile Asn Pro Ala
1               5                   10                  15
Glu Glu Ala Pro Asn Lys Gln Asp Ile Arg Leu Leu Gly Thr Gln Ser
            20                  25                  30
Val Asp Lys Ser Leu Arg Gly Ser Trp Thr Gln Arg Thr Lys Ile Asp
        35                  40                  45
Pro Leu Asp Tyr Phe Val Leu Cys His Ser Val Phe Thr Thr Gly Leu
    50                  55                  60
Glu Gly Ala Ala Pro
65

<210> 33617
<211> 94
<212> PRT
<213> A.fumigatus

<400> 33617
Leu Gln Leu Ser Thr Leu Ile Val Leu Val Ser Ser Leu Leu Ser Ser
1               5                   10                  15
Leu Ser Thr Ser Ser Ser Phe Ser Pro Pro Phe Ile Ser Ala Pro Leu
            20                  25                  30
Val Ser Leu Gly Ser Ile Ala Ser Gly Gln Ser Asn Ala Asn Glu Val
        35                  40                  45
Leu Phe Thr Ile Tyr Arg Cys Val Val Val Gly Asp Gly Ala Val Gly
    50                  55                  60
Lys Thr Cys Leu Leu Ile Ser Tyr Thr Thr Asn Lys Phe Pro Ser Glu
65                  70                  75                  80
Tyr Val Pro Thr Val Phe Asp Asn Tyr Ala Val Thr Val Met
                85                  90
```

<210> 33618
<211> 148
<212> PRT
<213> A.fumigatus

<400> 33618
Pro Gly Phe Ala Cys Tyr Arg Ile Gly Asp Glu Pro Tyr Thr Leu Gly
1 5 10 15
Leu Phe Asp Thr Ala Gly Gln Glu Asp Tyr Asp Arg Leu Arg Pro Leu
20 25 30
Ser Tyr Pro Gln Thr Asp Val Phe Leu Val Cys Phe Ser Val Thr Ser
35 40 45
Pro Ala Ser Phe Glu Asn Val Arg Glu Lys Trp Phe Pro Glu Val His
50 55 60
His His Cys Pro Gly Val Pro Cys Leu Ile Val Gly Thr Gln Thr Asp
65 70 75 80
Leu Arg Asp Asp Pro Ala Val Arg Glu Lys Leu Ala Arg Gln Lys Met
85 90 95
Gln Pro Ile Arg Lys Glu Asp Gly Asp Arg Met Ala Lys Glu Leu Gly
100 105 110
Ala Val Lys Tyr Val Glu Cys Ser Ala Leu Thr Gln Tyr Lys Leu Lys
115 120 125
Asp Val Phe Asp Glu Val Arg Ile Gly Cys Asp Ala Asn Gln Ile Ser
130 135 140
His Ile Gly Arg
145

<210> 33619
<211> 74
<212> PRT
<213> A.fumigatus

<400> 33619
Pro Phe Leu Ser Val Ala Ile Ile Tyr Ile Cys Asn Ser Val Gly Cys
1 5 10 15
Cys His Ile Ile Gln Asn Pro Ser Ser Lys Thr Asp Arg Asn Lys Lys
20 25 30
Lys Thr Pro Phe Ile Leu Ser Arg His Ile Ser Phe Ile Val Asn Arg
35 40 45
Tyr His Arg Ser Ile Ile Ser Lys His Phe Ile Arg Leu Phe Glu Glu
50 55 60
Asn Lys Tyr His Ser Ile Val Ala Pro Tyr
65 70

<210> 33620
<211> 73
<212> PRT
<213> A.fumigatus

<400> 33620
Ser Ser Lys Trp Arg Ile Trp Leu Tyr Cys Ile Thr Arg Lys Trp Ile
1 5 10 15
Ala Arg Gly Phe Tyr Glu Ile Asp Ser Ile Asn Lys Ala Ser Cys Thr
20 25 30
Val Glu Thr Phe Asn Met Asp Tyr Leu Ser Phe Glu Gly Thr Ala Ile
35 40 45

```
Phe Tyr Ile Ser Ala Ser Tyr Ser Pro Ile Thr Ser Gly Arg Ser Arg
    50                  55                  60
Met Gly Val Ala Pro Ala Asn Ser Pro
65                  70
```

<210> 33621
<211> 208
<212> PRT
<213> A.fumigatus

<400> 33621

```
Arg Ser Ala Lys Thr Thr Ala Ala Thr Glu Ser Leu Phe Asn Lys Thr
1               5                   10                  15
Pro Gly Asp Arg Thr Thr Arg Met Ser Ser Arg Leu Pro Asp Arg Thr
            20                  25                  30
Gly Ser Lys Arg Ser Arg Ser Arg Ser Pro Ser Ser Met Arg Gln Pro
        35                  40                  45
Gln Lys Tyr His Arg Lys Tyr Asp Glu Arg Asp Arg His Arg Asp Gly
    50                  55                  60
Gly Lys Trp Glu Asp Gly Asn Ser Arg Ser Ser Gln Pro Pro Val Arg
65                  70                  75                  80
Asn Met Arg Asp Gln Val Arg Leu Asn Gln Leu Gln Glu Asp Glu Gln
                85                  90                  95
Val Arg Glu Trp Val Ala Gln Glu Asp Met Phe Val Leu Lys Gln Ala
            100                 105                 110
Lys Lys Lys Ala Glu Ile Arg Val Lys Glu Gly Arg Ala Lys Pro Ile
        115                 120                 125
Asp Trp Leu Thr Val Thr Leu Arg Val Ile Asp Pro Thr Arg Asn Pro
    130                 135                 140
Leu Asp Asp Glu Ile Ala Asp Ser Glu Leu Asp Leu Val Asp Pro Asp
145                 150                 155                 160
Gly Val Phe Glu Gly Leu Ser Gln Ser Gln Leu Leu Glu Leu Glu Lys
                165                 170                 175
Asp Ile Asp Thr Phe Leu Ser Leu Glu Lys Asn Ser Lys Asn Arg Asp
            180                 185                 190
Phe Trp Lys Val Ser Pro Ile Cys Val Ser Leu Ser Phe Ala Arg Asp
        195                 200                 205
```

<210> 33622
<211> 198
<212> PRT
<213> A.fumigatus

<400> 33622

```
Ser Arg Cys Ala Ser Val Gln Thr Met Lys Val Ile Cys Arg Asp Arg
1               5                   10                  15
Gln Lys Ala Thr Ala Pro Glu Gly Arg Ala Leu Ser Ser Val Ala Ala
            20                  25                  30
Asp Ile Asn Arg Leu Leu Thr Pro Lys Thr Tyr Glu Gln Leu Glu Thr
        35                  40                  45
Leu Glu Val Gln Val Arg Lys Lys Leu Asp Ser Asn Glu Pro Ile Asp
    50                  55                  60
Thr Asp Tyr Trp Glu Glu Leu Leu Arg Ser Leu Thr Val Trp Lys Ala
65                  70                  75                  80
Arg Ala Lys Val Lys Lys Val His Arg Ala Val Ile Asp Glu Arg Val
                85                  90                  95
```

```
Arg Gly Leu Arg Lys Gln Gln Tyr Glu Glu Ala Glu Ser Ile Arg Thr
            100                 105                 110
Lys Leu Ala Pro Leu Ala Pro Val Ile Gln Thr Tyr Gln Glu Arg Pro
        115                 120                 125
Gln Gln Leu Cys Glu Lys Glu Ile Arg Asp Leu Asp Pro Glu Pro Leu
    130                 135                 140
Leu Gln Ile Arg Pro Glu Asp Lys Gly Leu Glu Ile Leu Asp Glu Gly
145                 150                 155                 160
Ala Phe Leu Asn Gln Val Val Ser Phe Pro Cys Ser Tyr Val Cys Gly
                165                 170                 175
Pro Ser Leu Leu Leu Thr Thr Leu Glu Gly Thr Arg Ala Leu His Gln
            180                 185                 190
Pro Ala Gly Arg Ser Arg
        195
```

<210> 33623
<211> 460
<212> PRT
<213> A.fumigatus

```
<400> 33623
Val Pro Arg Pro Cys Lys Ala Arg Lys Val Lys Trp Tyr Val Ser Val
1               5                   10                  15
Ser Cys Tyr Phe Ser Ser Ala Pro His His Gln Asn Ser Pro Ser Asp
            20                  25                  30
Asn Gly Phe Ser Asp Glu Glu Lys Pro Ser Cys Leu Asn Cys Arg Arg
        35                  40                  45
Gln Asn Glu Ser Cys Asp Tyr Ser Ile Arg Leu Asn Trp Glu Gly Arg
    50                  55                  60
Thr Arg Arg Lys Ser Ser Val Ser Ser Pro Ser Ser Gln Ser Ser Gly
65                  70                  75                  80
His Ser Ala His Leu Val Ser Leu Ala Val Leu Pro Ser Asp Leu Ala
                85                  90                  95
Gln Val Asp Pro Leu Glu Ser Gly Gln Gly Glu Gly Ser Pro Gln Glu
            100                 105                 110
Leu Ala Pro His Asn Thr Ile Trp Ala Thr Ala Cys Gly Ser Ser Leu
        115                 120                 125
Val Ala Lys Thr Ser Cys Ser Arg Glu Leu Glu Asn Gly Leu Glu Ile
    130                 135                 140
Leu Thr Ser Ser Ala Tyr Ser Asp His Leu Gly Asn Ser Phe Pro Tyr
145                 150                 155                 160
Met Ser Tyr Arg Thr Pro Pro Ala Thr Ser Ser Gln Met Thr Asp Ser
                165                 170                 175
Ile Asn Ser Arg Pro Asp Thr Thr Pro Gln Met Met Ala Thr Pro Gln
            180                 185                 190
Glu Thr Leu Ser Pro Phe Thr Ser Pro Ala Leu His Gly Ser Gly Asp
        195                 200                 205
Val Ala Tyr Pro Asp Ala Ser Leu Asn Ile Gly Ser Pro Ala Thr Leu
    210                 215                 220
Asn Phe Pro Gln Ser Ser Ile Leu Ser Ser Ser Leu Ser Tyr Leu Arg
225                 230                 235                 240
Glu Ser Ala Lys Glu Thr Asp Pro Tyr Val Arg Ser Leu Val Val His
                245                 250                 255
Pro Arg Gln Thr Gly Ser Arg Gly Glu Arg Asn Ser Val Ala Ser Gly
            260                 265                 270
Ser His Lys Tyr Phe Pro Phe Asp Thr Asp Asp Asn Ser Arg Gln Ala
```

```
        275                 280                 285
Gly Ile Pro Phe Pro Arg His Arg Phe Ser Cys Thr His Pro Asp Thr
    290                 295                 300
Val Asp Lys Asp Ser Leu Ser Ala Val Arg Thr Glu Thr Thr Thr Lys
305                 310                 315                 320
Thr Pro Gly Ser Ala Pro Thr Asp Thr Tyr Phe Thr Glu Val Met Asn
                325                 330                 335
Gly Pro Ile Ala Ser Glu Asp Tyr Ile Tyr Ser Leu Gln Arg Asp Ala
            340                 345                 350
Glu Gly Ile Cys Gln Arg Asn Ile Tyr Gln Pro Ser Glu Ile Ser Ser
        355                 360                 365
Ser Glu Arg Lys Trp Ser Ala Tyr Leu Thr Ser Val Thr Asp Asn Tyr
    370                 375                 380
Gly Leu Asp His Gly Arg Pro Asp Leu Asp Leu Asn Gln Met Asp Asp
385                 390                 395                 400
His Ser Ala Val Asp Ile Asn Tyr Ala Leu Asp Leu Ile Ile Pro Glu
                405                 410                 415
Arg Gln Thr Arg Thr Thr Phe Glu Ser Ala Ser Ala Asp His Gly Leu
            420                 425                 430
Ala Thr Ser Val Gly Cys Gly Tyr Tyr Ala Ser Pro Val Pro Ile Asn
        435                 440                 445
Ile Pro Arg Tyr Leu Ser Pro Leu Pro Leu Ala Leu
    450                 455                 460

<210> 33624
<211> 81
<212> PRT
<213> A.fumigatus

<400> 33624
Gln Ile Pro Thr Pro Glu Tyr Ser Tyr Asp Ser Met Glu Leu Trp Thr
1               5                   10                  15
Trp Ile Asp Tyr Ser Ser Arg Ala Thr Ala Ser Phe Arg Gly Ala Phe
            20                  25                  30
Ser Thr Ser Ser Ser Ile Pro Ala Ile Cys Thr Asp Pro Cys Gln Leu
        35                  40                  45
Ala His Pro Gly Trp Leu Leu Leu Leu Leu Gln Pro Leu Val Arg His
    50                  55                  60
Gly Ser Phe Ser Leu Ala Asp Ile Phe Leu Phe Ser Phe Ser Ile Leu
65                  70                  75                  80
Val


<210> 33625
<211> 75
<212> PRT
<213> A.fumigatus

<400> 33625
Leu Asp Ala Val Asn Asp Leu Gly Pro Gln Thr Lys Phe Pro Val Pro
1               5                   10                  15
Glu Gly Ile Leu Asn Tyr Asn Gly Val Asn Tyr Val Ala Val Ser Leu
            20                  25                  30
Trp Ala Leu Glu Ser Gln Gly Ala Leu Ile Gly Gly Leu Asp Leu Val
        35                  40                  45
Ala Ser Thr Pro Ile Leu Ser Gly Tyr Arg Lys Pro Ala Pro Ala Pro
```

```
    50                  55                  60
Gln Pro Gly Trp Lys Pro Arg Arg Gly Ala Tyr
65                  70                  75

<210> 33626
<211> 528
<212> PRT
<213> A.fumigatus

<400> 33626
Gln Thr Leu Pro Arg Met Thr Ser Lys Gly Glu Ile Glu Ser Leu Ser
1               5                  10                  15
Ala Tyr Gly Val Ala Arg Ser Thr Ile Gln Gly Thr Pro Leu Ser Gln
            20                  25                  30
Asp Glu Leu Arg Lys Met Asp Ala Tyr Phe Arg Ala Ser Met Tyr Leu
        35                  40                  45
Cys Leu Gly Met Leu Tyr Leu Arg Glu Asn Pro Leu Leu Lys Glu Pro
    50                  55                  60
Leu Lys Val Glu His Leu Lys Ala Arg Leu Leu Gly His Trp Gly Ser
65                  70                  75                  80
Asp Ala Gly Gln Ser Phe Thr Trp Ile His Met Asn Arg Leu Ile Lys
                85                  90                  95
Lys Tyr Asp Leu Asp Val Leu Phe Ile Ser Gly Pro Gly His Gly Ala
            100                 105                 110
Pro Gly Ile Leu Ser Gln Ser Tyr Leu Glu Gly Val Tyr Thr Glu Val
        115                 120                 125
Tyr Pro Asp Lys Thr Gln Asn Glu Lys Gly Met Gln Arg Phe Phe Lys
    130                 135                 140
Gln Phe Ser Phe Pro Gly Gly Ile Gly Ser His Ala Thr Pro Glu Thr
145                 150                 155                 160
Pro Gly Ser Ile His Glu Gly Gly Glu Leu Gly Tyr Ser Ile Ser His
                165                 170                 175
Ala Phe Gly Thr Val Phe Asp His Pro Asn Leu Ile Thr Leu Thr Ile
            180                 185                 190
Val Gly Asp Gly Glu Ala Glu Thr Gly Pro Leu Ala Thr Ser Trp His
        195                 200                 205
Ser Asn Lys Phe Leu Asn Pro Ile Thr Asp Gly Ala Val Leu Pro Val
    210                 215                 220
Leu His Leu Asn Gly Tyr Lys Ile Asn Asn Pro Thr Ile Leu Ala Arg
225                 230                 235                 240
Ile Ser His Glu Glu Leu Glu Met Leu Leu Arg Gly Tyr Gly Trp Ala
                245                 250                 255
Pro Tyr Phe Val Glu Gly Ser Asp Arg Glu Ser Met His Gln Ala Met
            260                 265                 270
Ala Ala Thr Leu Glu His Cys Val Leu Glu Ile Lys Lys Ile Gln Lys
        275                 280                 285
Gln Ala Arg Glu Ser Asn Lys Ala Phe Arg Pro Leu Trp Pro Met Ile
    290                 295                 300
Val Leu Arg Ser Pro Lys Gly Trp Ser Ala Pro Arg Glu Ile Asp Gly
305                 310                 315                 320
Lys Tyr Leu Glu Gly Phe Trp Arg Ala His Gln Ile Pro Ile Thr Asp
                325                 330                 335
Val Gln Ser Lys Pro Glu His Leu Lys Ala Leu Glu Asn Trp Met Lys
            340                 345                 350
Ala Tyr Lys Pro Glu Glu Val Phe Asp Lys Asn Gly Thr Leu Ile Pro
        355                 360                 365
```

```
Glu Leu Lys Glu Leu Ala Pro Thr Gly Ser Ser Arg Met Ser Ala Asn
    370                 375                 380
Pro Val Gly Asn Gly Gly Leu Leu Arg Arg Pro Leu Asp Leu Pro Asp
385                 390                 395                 400
Phe Arg Gln Tyr Ala Leu Thr Asp Ile Glu Pro Gly Val Thr Ile Arg
                405                 410                 415
Pro Ser Met Thr Asn Met Ser Lys Tyr Leu Arg Asp Val Val Ala Arg
            420                 425                 430
Asn Met Thr Thr Phe Arg Val Val Gly Pro Asp Glu Thr Glu Ser Asn
        435                 440                 445
Lys Leu Ala Glu Ile Tyr Lys Ala Gly Lys Lys Val Trp Arg Ala Glu
    450                 455                 460
Tyr Phe Lys Glu Asp Glu Ala Gly Gly Asn Leu Asp Met His Asp Arg
465                 470                 475                 480
Val Met Glu Val Leu Ser Glu His Thr Cys Glu Gly Trp Leu Glu Gly
                485                 490                 495
Tyr Val Leu Ser Gly Arg His Gly Met Leu Ser Arg Tyr Glu Pro Phe
            500                 505                 510
Ile His Val Ile Asp Ser Met Val Asn Gln His Cys Lys Trp Leu Glu
        515                 520                 525
```

<210> 33627
<211> 288
<212> PRT
<213> A.fumigatus

<400> 33627

```
Cys Leu Thr Val Glu Trp Arg Ala Lys Val Ser Ser Leu Asn Ile Leu
1               5                   10                  15
Leu Ser Ala Thr Val Trp Arg Gln Asp His Asn Gly Phe Thr His Gln
            20                  25                  30
Asp Pro Gly Phe Leu Asp Val Val Ala Asn Lys Ser Pro Glu Ile Val
        35                  40                  45
Arg Ile Tyr Leu Pro Pro Asp Gly Asn Thr Leu Leu Ser Thr Met Asp
    50                  55                  60
His Cys Phe Arg Ser Val Asn Tyr Val Asn Val Val Val Ala Asp Lys
65                  70                  75                  80
Gln Glu His Val Gln Phe Leu Asn Met Glu Glu Ala Ile Glu His Cys
                85                  90                  95
Thr Lys Gly Val Gly Ile Trp Asp Trp Ala Ser Asn Asp Gln Gly Ser
            100                 105                 110
Glu Pro Asp Val Val Met Val Ser Cys Gly Asp Val Ser Thr His Glu
        115                 120                 125
Ala Leu Ala Ala Thr Ala Leu Leu Arg Glu His Leu Pro Lys Leu Lys
    130                 135                 140
Ile Arg Phe Val Asn Val Val Asp Leu Phe Arg Leu Ile Ser Asp Thr
145                 150                 155                 160
Asn His Pro His Gly Met Pro Asp Arg Gln Trp Gly Ala Ile Phe Thr
                165                 170                 175
Thr Asp Lys Pro Ile Ile Phe Asn Phe His Ser Tyr Pro Trp Leu Val
            180                 185                 190
His Arg Leu Thr Tyr Lys Arg Pro Gly Gln His Asn Leu His Val Arg
        195                 200                 205
Gly Tyr Lys Glu Lys Gly Asn Ile Asp Thr Pro Phe Glu Leu Ala Val
    210                 215                 220
Arg Asn Gln Thr Asp Arg Tyr Ser Leu Ala Ile Asp Ala Ile Asp Arg
```

225 230 235 240
Ile Pro Ser Leu Gly Asn Thr Ala Ser Gly Val Arg Glu His Leu Ile
245 250 255
Asn Leu Gln Leu Ala Ala Lys Asn Lys Ala Phe Asp Asp Gly Ile Asp
260 265 270
Pro Asp Tyr Ile Arg Asn Trp Thr Trp Asn Tyr Pro Arg Lys Lys Cys
275 280 285

<210> 33628
<211> 241
<212> PRT
<213> A.fumigatus

<400> 33628
Ser Phe Asp Pro Arg Gly Glu Asp Gly Ile Pro Leu Ser Pro Asp Gly
1 5 10 15
Thr Leu Ile Leu Arg Phe Ser Val Trp Glu Ala Ser Ile Ser Ser Gln
20 25 30
Pro Arg His Ser Ser Thr Gly Leu Ala His Arg Ser Thr Ser Pro Lys
35 40 45
Thr Trp Pro Thr Gly Ser Ser Ser Pro Met His Ser Pro Asp Arg Ser
50 55 60
Ser Phe Ser Tyr Thr Glu Leu Arg Gln Val Gln Val Ser Ile Cys Leu
65 70 75 80
Ser Leu His Leu Asp Arg Leu Ile Ser Gly Gly Pro Ala Gly Ala Trp
85 90 95
Ala Pro Thr Leu Ser Tyr Ile Asn Gly Lys Tyr Tyr Leu Ala Ala Met
100 105 110
Thr Arg Trp Thr Tyr Asp Pro Val Ala Arg Val Trp Pro Arg Val Met
115 120 125
Trp Val Ser Ser Arg Asp Leu Arg Thr Trp Ser Asp Pro Ile Trp Gly
130 135 140
Asp Pro Trp Gly Ile Asp Pro Ser Leu Phe Gln Asp Pro Val Ser Gln
145 150 155 160
Lys Val Tyr Leu Asn Leu Met Ala Pro Asn Asn Asn Lys Asp Arg Ile
165 170 175
Trp Gly Ile Tyr Gln Cys Glu Val Asp Ile Asp Ser Gly Arg Cys Ile
180 185 190
Gly Glu Tyr Arg Ser Met Trp Asn Gly Thr Leu Pro His Asn Ala Ser
195 200 205
Ala Arg Pro Glu Gly Pro Lys Met Phe Lys Arg Asp Lys Trp Tyr Tyr
210 215 220
Leu Leu Ile Ala Glu Gly Lys Tyr Leu Pro Ile Ser Glu Ala Ala Asp
225 230 235 240
Asp

<210> 33629
<211> 309
<212> PRT
<213> A.fumigatus

<400> 33629
Ile Ser Thr Val Val Ala Val Ser Glu Ser Ile Ala Pro Cys Gly Met
1 5 10 15
Ala Arg Ser Arg Ile Thr Pro Val Leu Val Leu Lys Ala Gln Arg Cys

```
            20                  25                  30
Leu Ser Gly Thr Asn Gly Thr Ile Phe Ser Leu Gln Arg Ala Ser Ile
        35                  40                  45
Ser Leu Ser Pro Lys Arg Gln Thr Thr Asp Asn Arg Pro Gly Gly Thr
    50                  55                  60
Asp Asp Leu His Arg Ala Ser Ile Ala Arg Ser Leu Ala Pro Glu Gly
65                  70                  75                  80
Pro Trp Glu Pro Ala Pro His Asn Pro Ile Leu Phe Asn Gly Ala Tyr
                85                  90                  95
Gly Tyr Asp Asn Leu Thr Val Gln Ser Thr Gly His Ala Thr Ile Phe
            100                 105                 110
Glu Ala Ala Asn Gly Asp Ser Tyr Val Val Tyr Leu Ala Arg Arg Lys
        115                 120                 125
Ile Asn Gly Ser Ser Pro Leu Gly Arg Glu Thr Phe Met Ser Pro Val
    130                 135                 140
Thr Trp Lys Asp Gly Trp Pro Met Ile Asn Gly Gly Asn Pro Val Leu
145                 150                 155                 160
Leu Ser Glu Ser Phe Gly Ala Ser His Asp Gln Lys Pro Pro Pro Pro
                165                 170                 175
Arg Phe Ile Asp Thr Phe Asp Gln Lys Thr Leu Asp Pro Ser Trp Tyr
            180                 185                 190
Thr Leu Arg Thr Pro Tyr Ala Pro Ile Tyr Asp Leu Lys Asp Gly Gly
        195                 200                 205
Arg Lys Lys Ser His Gly Ile Val Phe Arg Pro Asn Val Phe Gly Leu
    210                 215                 220
Ser Asp Arg Asp Thr Pro Ala Ala Ile Leu Arg Lys Gln Lys Ser Leu
225                 230                 235                 240
Asn Met Thr Phe Ser Ala Gln Leu Leu Pro Thr Thr Ser Gly Leu Gly
                245                 250                 255
Tyr Gly Glu Thr Val Gly Ile Ser Ala Tyr Leu Ser Glu Leu Gln His
            260                 265                 270
Gln Asp Ile Gly Val Ser Gly Cys Val Asn Ser Thr Gly Met Cys Ile
        275                 280                 285
Phe Thr Gln Leu Met Met Asn Gly Thr Thr Glu Val Ile Gly Leu Arg
    290                 295                 300
Asp Glu Leu Thr Arg
305
```

<210> 33630
<211> 69
<212> PRT
<213> A.fumigatus

<400> 33630

```
Arg Arg Asn Pro Ile Ile Thr Gly Trp Asn Pro Asp Pro Ser Ile Leu
1               5                   10                  15
Arg Val Gly Gly Glu Tyr Phe Leu Ala Thr Ser Ser Phe Glu Tyr Trp
            20                  25                  30
Pro Ser Thr Pro Ile Tyr Lys Ser Lys Asp Leu Ala Asn Trp Glu Leu
        35                  40                  45
Phe Ser His Ala Phe Thr Arg Pro Glu Gln Leu Gln Leu Tyr Gly Thr
    50                  55                  60
Pro Thr Gly Ala Gly
65
```

<210> 33631

<211> 224
<212> PRT
<213> A.fumigatus

<400> 33631
Leu Glu Ala Tyr Asn Ser Tyr Thr Lys Ala Asp Asn Ser Val Ile Val
1 5 10 15
Ala Thr Asp Ser Ile Lys Asn Thr Ile Tyr Ile Leu Ala Lys Gln His
20 25 30
Pro Val Thr Pro Pro Glu Leu Phe Gly Ser Ile Leu Gly Thr His Phe
35 40 45
Ile Gln Lys Tyr Lys His Ile His Ala Ala His Ala His Ile Ile Thr
50 55 60
His Arg Trp Thr Arg Met Asn Ile Asp Gly Lys Pro His Pro His Ser
65 70 75 80
Phe Val Arg Asp Ser Glu Glu Thr Arg Asn Val Gln Val Asp Val Thr
85 90 95
Glu Gly Ala Gly Ile Asp Ile Lys Ser Ser Ile Thr Gly Leu Thr Val
100 105 110
Leu Lys Ser Thr Gly Ser Gln Phe His Gly Phe Leu Arg Asp Glu Tyr
115 120 125
Thr Thr Leu Lys Glu Thr Trp Asp Arg Ile Leu Ser Thr Asp Val Asp
130 135 140
Ala Ser Trp Gln Trp Lys Arg Phe Ser Asp Leu Gly Glu Val Arg Ala
145 150 155 160
Asn Ile Pro Lys Phe Asp Ala Ala Trp Ser Ala Ala Arg Glu Ile Thr
165 170 175
Leu Lys Thr Phe Ala Gln Asp Asn Ser Ala Ser Val Gln Ala Thr Met
180 185 190
Tyr Lys Ile Ser Glu Gln Ile Leu Ala Ile Glu Pro Phe Ile Glu Thr
195 200 205
Val Glu Tyr Ser Leu Pro Asn Lys His Tyr Phe Glu Val Gly Glu Tyr
210 215 220

<210> 33632
<211> 297
<212> PRT
<213> A.fumigatus

<400> 33632
Pro Pro Pro Met Arg Gly Leu Phe Asp His Leu Ser Tyr Lys Thr Ile
1 5 10 15
Leu Ala Tyr Val Trp Met Leu Ser Val Ala Thr Thr Gly Ile Asp Asp
20 25 30
Arg Ser Leu Gly Ser Pro Lys Pro Gly Ser Thr Thr Phe Ser Thr Thr
35 40 45
Leu Gln Glu Glu Pro Thr Arg Leu Asp Gly Phe Arg Ile Ala Leu Leu
50 55 60
Lys Glu Cys Phe Asp His Ala Ala Val Asp Pro Ala Val Arg Glu Cys
65 70 75 80
Val Thr Met Ala Ala Gln Arg Phe Lys Ala Leu Gly Ala Thr Val Asp
85 90 95
Glu Val Ser Leu Pro Asp His Leu Gln Gly Pro Ala Ile Trp Thr Ile
100 105 110
Gln Gln Arg Ile Ala Gly Ser Met Asn Leu Leu Gly His Ala His Gly
115 120 125

```
Arg Arg Gly Leu Tyr Leu Thr Glu Met Glu Arg Ala Arg Leu Pro Trp
    130                 135                 140
Thr Asn Glu Ser Tyr Gln Arg Ala Phe Pro Ala Thr Lys Asn Val Ile
145                 150                 155                 160
Ile Asn Gly Leu Tyr Leu Ser Ser Arg Phe Pro Asp Leu Tyr Gly Lys
                165                 170                 175
Thr Met Asn Ile Gly Arg Arg Leu Arg Asp Leu Tyr Glu Ala Ile Leu
            180                 185                 190
Glu Gln Tyr Asp Val Val Ile Met Pro Thr Thr Pro Val Val Ala Pro
        195                 200                 205
Arg His Gly Lys Arg Gly Leu Pro Leu Glu Ser Leu Lys Pro Ser Met
    210                 215                 220
Gly Leu Thr Ile Asn Thr Ala Ile Phe Asp Val Thr Gly Gln Pro Ala
225                 230                 235                 240
Met Ser Ile Pro Val Gly Phe Ala Pro Ala Arg Asp Asp Ala Asn Val
                245                 250                 255
Gln Leu Pro Val Gly Met Gln Ile Val Gly Gly Leu Trp Gln Glu Ser
            260                 265                 270
Lys Val Leu Arg Val Gly His Ala Trp Glu Thr His Phe Asn Trp Lys
        275                 280                 285
Glu Asn Cys Tyr Ser Glu Cys Leu Asn
    290                 295
```

<210> 33633
<211> 80
<212> PRT
<213> A.fumigatus

<400> 33633

```
Leu Thr Val Leu Leu Cys Thr Pro Asn Val Leu Met Leu Ser Gln Ser
1               5                   10                  15
Ser Gln Pro Thr Ser Gly Pro Arg Arg Ser Ser Val Gly Ala Lys Thr
            20                  25                  30
Arg Val Cys Val His Cys Gly Arg Asn Phe Arg Arg Thr Glu His Leu
        35                  40                  45
Glu Arg His Ile Arg Thr Arg Lys Asp Leu Ser Glu His Leu Gln Arg
    50                  55                  60
Ala Phe Ala Ile Leu Ser Ile Gly Asn Tyr Thr Val Asp Val Ser Cys
65                  70                  75                  80
```

<210> 33634
<211> 162
<212> PRT
<213> A.fumigatus

<400> 33634

```
Asp Phe Pro Gly Ile Gly Ala Ala Val Ala Lys Ala Phe Ala Ser Ala
1               5                   10                  15
Gly Cys Glu Arg Val Ala Ile Thr Asp Ile Asn Glu Ser Ser Leu Glu
            20                  25                  30
Lys Thr Arg Asp Ala Ile Ser Ser Leu His Pro Asn Ile Arg Leu Val
        35                  40                  45
Val Arg Ala Gly Asn Met Ala Asp Glu Gln Phe Val Glu Ala Phe Met
    50                  55                  60
Asn Glu Val Val Ser Thr Phe Gly Arg Leu Asp Tyr Ala Val Asn Cys
65                  70                  75                  80
```

```
Val Gly Ile Leu Gly Asp Ser Gly Arg Ser Thr Glu Thr Ser Thr Glu
                85                  90                  95
Asp Phe Asp Arg Ile Thr Asn Ile Asn Tyr Arg Gly Cys Trp Leu Ser
            100                 105                 110
Ser Arg Ala Glu Leu Lys Gln Met Leu Lys Gln Asp Pro Leu Pro Ser
        115                 120                 125
His Asp Pro Ser Arg Glu Pro Gln Arg Gly Ser Ile Val Asn Ile Ala
    130                 135                 140
Ser Gln Leu Gly Ile Val Ser Arg Pro Gly Ala Arg Lys Arg Ser Cys
145                 150                 155                 160
Val Pro
```

<210> 33635
<211> 101
<212> PRT
<213> A.fumigatus

<400> 33635

```
Asn Ile Thr Ala Ala Tyr Cys Ala Ser Lys Ser Ala Ile Ile Gly Met
1               5                   10                  15
Thr Arg Ala Asp Ala Ile Asp Tyr Ser Ala Asp Gly Ile Arg Val Asn
            20                  25                  30
Cys Val Cys Pro Gly Val Ile Glu Thr Pro Met Thr Thr Gly Asn Glu
        35                  40                  45
Glu Val His Ala Arg Leu Gln Pro Ala Val Asp Ile Ala Pro Met Lys
    50                  55                  60
Arg Met Gly Lys Pro Glu Glu Val Ala Asp Ala Val Leu Phe Leu Cys
65                  70                  75                  80
Ser Thr Phe Ala Ser Phe Val Gln Gly His Ala Leu Val Val Asp Gly
                85                  90                  95
Gly Tyr Ile Ile Asn
            100
```

<210> 33636
<211> 63
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (19),(53)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33636

```
Leu Ala Cys Val Ile Ala Thr Thr Arg Ile Ala His Arg Leu Arg Asp
1               5                   10                  15
Ile Gln Xaa Leu Pro Tyr Val Val Val Ala Asn Pro His Pro Ser Leu
            20                  25                  30
Val Tyr Glu Leu Tyr Tyr Lys Ala Phe Glu Arg Phe Arg Val Leu Pro
        35                  40                  45
Glu Ile Arg Ile Xaa Lys Asn Thr Lys Asp Pro Val Thr Pro Ala
    50                  55                  60
```

<210> 33637
<211> 82

<212> PRT
<213> A.fumigatus

<400> 33637
Ile Leu Val Thr Glu Ile Asp Tyr His Leu Lys Ala Val Tyr Gln Ile
1 5 10 15
Pro Thr Glu Ala Glu Ala Thr Arg Asp Asn Ser Ala Trp Thr Leu Gln
20 25 30
Arg Leu Phe Tyr Asn Leu Gln Thr Ser Glu Ser Ser Val Ser Thr Thr
35 40 45
Glu Leu Thr Ala Ser Phe Gly Trp Glu Leu Arg Gln Ile Phe Glu Gln
50 55 60
Lys Asp Val Gln Glu Leu Phe Gln Lys Ser Leu Trp Lys Asp Trp Lys
65 70 75 80
Lys Arg

<210> 33638
<211> 144
<212> PRT
<213> A.fumigatus

<400> 33638
His Trp Val Thr Gly Gly Tyr Ser Ser Ser Leu Thr Val Ile Met Ser
1 5 10 15
Ile Met Arg Arg Ser Ile Trp Ser Met Pro Gly Lys Lys Ser Leu Arg
20 25 30
Lys Thr Gly Met His Ala Ser Ser Leu Leu Ser Tyr Cys Gly Thr Ser
35 40 45
Met Thr His Gln Ser Thr Cys Leu Met Val Cys Thr Ser Val Ala Leu
50 55 60
Met Leu Pro Ser Leu Arg Pro Ser Asp Arg Ile Val Val Ala Thr His
65 70 75 80
Arg Phe Asn Ala Asp Glu Gly Asp Trp Gly Phe Thr Arg Phe Cys Glu
85 90 95
Leu Arg Arg Leu Phe Asn Met Pro Trp Glu Gly Arg Gly Val Pro Leu
100 105 110
Val Gln Asn Asp Glu Ala Lys Ile Thr Ala Tyr Val Arg Val Val Lys
115 120 125
Asp Pro Thr Gly Val Leu Trp His Ser Phe Gln Lys Tyr Val Leu Pro
130 135 140

<210> 33639
<211> 64
<212> PRT
<213> A.fumigatus

<400> 33639
Ile Ser Gln Arg Arg Thr Arg Leu Thr Arg Ser Ser Tyr Asp Ser Lys
1 5 10 15
Lys Glu Thr Gly Met Val Gly Leu Lys Asn Gln Gly Ala Thr Cys Tyr
20 25 30
Leu Asn Ser Leu Leu Gln Ser Leu Tyr Phe Thr Asn Ala Phe Arg Lys
35 40 45
Val Arg Ala Ser Ile Leu Arg Phe Leu Leu Gln Lys Leu Thr Ile Ile
50 55 60

<210> 33640
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33640
Val Lys Phe Leu Met His Gln Gln Val Gly Ser Gly Leu Asn Gln Phe
1 5 10 15
Phe Ser Leu Arg Gln Pro Ser Val Ser Ile Ser Ala Leu Val Ala Gln
20 25 30
Leu Val Ala Tyr Pro Val Gly Cys Ala Trp Ala Lys Trp Val Pro Leu
35 40 45
Gly Trp Ala Asn Pro Thr Gly Val Ser Thr Ser Arg Ser Met Arg
50 55 60

<210> 33641
<211> 64
<212> PRT
<213> A.fumigatus

<400> 33641
Gln His Leu Leu Tyr Pro Arg Leu Ile Leu Leu Asn Thr Asn Tyr Asp
1 5 10 15
Pro Ile Thr Val Gln Met His Cys Ser Ser Phe Leu Tyr Ile Leu Gln
20 25 30
Pro Gln Thr Ser Ser Gln Lys Trp Leu Leu Thr Ser Val Leu Glu Leu
35 40 45
Glu Ser Ala Gln Val Arg Leu Ser Ala Leu Pro Ala Ser Arg Gly Arg
50 55 60

<210> 33642
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33642
Gln Gln Pro Lys Pro Phe Ala Thr Leu Asn Ser Gly Asn Ser Gln Leu
1 5 10 15
Leu Ile His Ser Ile Pro Phe Pro Lys Thr Tyr Ile Ile Asp Cys Ile
20 25 30
Ile Ser Arg Val Gln Glu Thr Ser Tyr Leu Trp Cys Arg Gln Met Ser
35 40 45
Cys Asn Trp Ser Phe Thr Tyr Ile Ser Pro Ser Thr Phe Ser Asp
50 55 60

<210> 33643
<211> 77
<212> PRT
<213> A.fumigatus

<400> 33643
Gly Pro Ser Ala Thr Ala Leu His Glu His Thr Ser Val Leu Ser Asp
1 5 10 15
Tyr Asp Ala Gln Lys Ile Leu Pro Tyr Glu Ala Asp Asp Ser Pro Phe
20 25 30

```
Pro Glu Val Arg Ala Val Val Gln Pro Val Asp Asp Val Ser Leu Pro
        35                  40                  45
Val Asn Thr Val Arg Val Trp Ile Ile Gly Ile Ile Phe Thr Ile Val
    50                  55                  60
Cys His Thr Ser Leu Ala Thr Lys Cys Arg Ser Ser Phe
65                  70                  75
```

<210> 33644
<211> 150
<212> PRT
<213> A.fumigatus

<400> 33644

```
Ser Val Thr Asn Asp Ser Ser Leu Lys Ser Gln Gln Lys Cys Gln Gln
1               5                   10                  15
Gly Leu Thr His Lys Met Gly Asp Cys Asp Lys Asn Leu Gln Met Pro
            20                  25                  30
Pro Val Pro Phe Ser Gln Arg Pro Ile Ile Ile Leu Gly Ala Gly Ile
        35                  40                  45
Ile Gly Cys Ala Thr Ala Arg Gln Leu Leu Leu Asn Gly Phe Arg Val
    50                  55                  60
Val Val Val Ala Glu Phe Leu Pro Gly Asp Gln Asn Ile Phe Tyr Ala
65                  70                  75                  80
Ser Ala Trp Ala Gly Ala Thr Trp His Ala Ala Gly Gly Ile Ser Ser
                85                  90                  95
Glu Tyr Arg Tyr Leu Gln Ala Val Thr His Arg His Leu Leu Lys Met
            100                 105                 110
Ala Gln Glu Gly Pro Glu Ser Gly Val Cys Leu Val Asp Ala Arg Glu
        115                 120                 125
Tyr Leu Glu Glu Ala Pro Ser Glu Asn Ser Ser Ile Trp Gly Lys Thr
    130                 135                 140
Val Val Thr Asn Val Arg
145                 150
```

<210> 33645
<211> 223
<212> PRT
<213> A.fumigatus

<400> 33645

```
Ile Met Ser Asp Val Ser Glu Glu Thr Ala Ala Asn Glu Pro Pro Ala
1               5                   10                  15
Gln Ser Ser Gln Thr Arg Trp Ala Phe Ile Asp Ala Ser Asn Asp Ser
            20                  25                  30
Arg Ser Asn Leu Thr Arg Val Lys Arg His Val Met Gln Glu Tyr Met
        35                  40                  45
Arg Gln Lys Arg Gly Gly Glu Pro Gln Pro Asp Asn Glu Asn Gly Glu
    50                  55                  60
Ser Val Lys Glu Lys Glu Glu Ser Gln Pro Lys Gly Arg Arg Arg Pro
65                  70                  75                  80
Arg Asn Lys Thr Ala Gly Lys Ser Thr Thr Glu Lys Glu Lys Lys Gly
                85                  90                  95
Ala Gly Lys Gly Trp Arg Lys Lys Ser Pro Asp Ala Ser Thr Asp Thr
            100                 105                 110
Gln Arg Gly Leu Glu Ser Met Arg Glu Asp Ser Leu Gly Glu Gly Ser
        115                 120                 125
```

```
Ser Thr Gly Ile Gly Glu Arg His Ala Ser Ala Ala Ala Gly Gln Thr
    130                 135                 140
Lys Thr Asp Ile Ile Val Ser Val Ser Ser Ser Asp Leu Pro Lys Phe
145                 150                 155                 160
Tyr Ala Ser Gly Asp Gln Ser Ser Thr Ser Glu Ser Asp Ser Arg Ser
                165                 170                 175
Pro Leu Ser Ser Ala Pro Thr Thr Pro Tyr Glu Leu Thr Leu Ser Pro
            180                 185                 190
Lys Ser Ile Leu Ser Ala Ala Arg Thr Asp Pro Phe Asn Thr Leu Pro
        195                 200                 205
Met Asp Leu Ser Ser Pro Thr Gly Gln Glu Gly His Ala Ile Ala
    210                 215                 220
```

<210> 33646
<211> 157
<212> PRT
<213> A.fumigatus

<400> 33646

```
Ser Arg Gln Cys Phe Val Ala Glu Gly Glu Ser Gly His Ser His Val
1               5                   10                  15
Ser Arg Phe Arg Leu Tyr Leu Ala Gln Arg Gln Ser Ala Arg Met His
            20                  25                  30
His Pro Tyr Pro Arg Thr His Lys Tyr Asp Gly Pro Cys His Gly His
        35                  40                  45
Asp Pro Leu Val His Arg Ser Cys Pro Ala Asn Asn Trp Ser Arg Ser
    50                  55                  60
Ile Arg Arg Gly Pro Leu Ser Pro Pro Gly Leu Pro Glu Cys Ala Arg
65                  70                  75                  80
Arg Asn Gln Glu Ala Glu Asn His Ser Ser Cys Trp Arg Arg Ser Arg
                85                  90                  95
Ser Val Val Lys Glu Ala Arg Ala His Asp Trp Val Arg Val Ala Ser
            100                 105                 110
Gln Gln Trp Leu Val Lys Arg Ser Gly Tyr Pro Leu Ser Asp Arg Arg
        115                 120                 125
Gly Arg Ser Cys Val His Asp Arg Glu Val Pro Gln Asp Ala Arg Gly
    130                 135                 140
Arg Leu Pro Arg Val Cys Arg Arg Thr Met Thr Arg Leu
145                 150                 155
```

<210> 33647
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33647

```
Ala Thr Glu Tyr Asn Ile Ile Arg Asn Lys Ser Leu Leu Asp Pro Val
1               5                   10                  15
Thr Ser Leu Phe Gln Asn Thr Glu Ile Ser Asn Asp Asp Thr Tyr Ser
            20                  25                  30
Arg Arg Ser Val Arg Arg Ser Gln Asn His Val Pro Ile Pro His Pro
        35                  40                  45
Pro Leu Thr Glu Asn Ser Phe Glu Lys Cys Ala Lys Glu His
    50                  55                  60
```

<210> 33648

<211> 400
<212> PRT
<213> A.fumigatus

<400> 33648

```
Lys His Tyr Arg Arg Ser Arg Leu Asn Leu Asn Gly Arg Lys Arg Tyr
1               5                  10                  15
Thr Leu Val Gly Asp Ile Arg Gly His Val Cys Leu His Leu Pro Phe
            20                  25                  30
Gly Val Leu Ala Asp Ser Arg Ile Val Ile Gly Val Ser Ser Phe Ala
        35                  40                  45
Asp Arg Pro Glu Val Val Gly Pro Glu His Leu Ala Glu Leu Leu Asp
    50                  55                  60
His Ala Arg Lys Ile Val Pro Ala Asp Gln Ile Lys Asp Thr Pro Ile
65                  70                  75                  80
Phe Leu Leu Ala Thr Ala Gly Met Arg Leu Leu Pro Asn His Glu Arg
                85                  90                  95
Glu Leu Leu Leu Gln Gln Ile Cys Ser Tyr Ala Ser Lys Asn Tyr Asp
            100                 105                 110
Phe Leu Leu Pro Asp Cys Gly Val His Ile Gln Val Ile Pro Gly Val
        115                 120                 125
Thr Glu Ala Leu Tyr Gly Trp Ile Ala Thr Asn Tyr Leu Leu Gly Ser
    130                 135                 140
Phe Asp Glu Pro Lys Gly His Asp His Gly Lys Gly His His Thr Tyr
145                 150                 155                 160
Gly Phe Leu Asp Met Gly Gly Ala Ser Ala Gln Ile Ala Phe Ala Pro
                165                 170                 175
Asn Ile Thr Glu Thr Glu Lys His Ala Asn Asp Leu Thr Leu Leu Arg
            180                 185                 190
Leu Arg Asn Ile Asp Gly Ser Thr Gln Glu His Arg Val Phe Val Thr
        195                 200                 205
Ser Trp Leu Glu Phe Gly Val His Glu Ala Arg Arg Arg Tyr Leu Glu
    210                 215                 220
Ala Leu Gln Pro Ala Ala Gly Thr Ala Lys Glu Leu Pro Asp Pro Cys
225                 230                 235                 240
Leu Pro Asn Gly Leu Arg Thr Thr Ile Asp Gly Lys Pro Leu Arg Thr
                245                 250                 255
Gly Asp Thr Ser Glu Leu Ser Leu Leu Gly Thr Gly Arg Phe Asp Glu
            260                 265                 270
Cys Leu Arg Gln Thr Tyr Pro Leu Leu Asp Lys Asp Ala Pro Cys Ser
        275                 280                 285
Asp Glu Pro Cys Leu Leu His Gly Val His Val Pro Ala Ile Asp Phe
    290                 295                 300
Asp Val Asn His Phe Ile Gly Ile Ser Glu Tyr Trp His Thr Thr His
305                 310                 315                 320
Glu Ile Phe Glu Met Ala His Lys Asp Lys Thr Tyr Asp Phe Asn Thr
                325                 330                 335
Tyr Gln Gln Arg Val Gln Gln Phe Cys Thr Gln Asp Trp Glu Ala Ile
            340                 345                 350
Asp Gln Gly Ile Gln Lys Gln Ser Trp Gly Lys Lys Val Asp Trp Glu
        355                 360                 365
Ser Ala Ser Glu Val Cys Phe Lys Ala Ser Trp Ile Ile Asn Met Leu
    370                 375                 380
His Asn Val Phe Thr Thr Gly Leu Glu Gly Ser Thr Ala Gly Gln Ser
385                 390                 395                 400
```

<210> 33649
<211> 135
<212> PRT
<213> A.fumigatus

<400> 33649
Ile Gln Gly Pro Trp Phe Gly Gly Met Phe Gly Gly Phe Leu Arg Gly
1 5 10 15
Pro Leu Pro Ile Lys Glu Phe Trp Ser Leu Lys Gly Phe Thr Phe Ser
20 25 30
Ser Gly Ala Ile Asp Gly Asn Gly Ile Gln Val Gly Tyr Gln Leu Ala
35 40 45
Glu Met Cys Ala Ile Ser Gly Tyr Ser Leu Val Ile Ser Cys Val Leu
50 55 60
Val Tyr Ile Leu Lys Phe Ile Pro Gly Met Asn Leu Arg Val Asp Glu
65 70 75 80
Glu Ser Glu Met Met Gly Leu Asp Gln Ala Gln Leu Phe Asp Glu Gln
85 90 95
Ile Gly Asp Trp Ser Leu Val His Asn Asn Ser Phe Pro Val Thr Thr
100 105 110
Pro Thr Ile Ile Gly Val Ser Asn Gln Ser Ser Val Ser Thr Asp Glu
115 120 125
Thr His Ala Gly Lys Ala Met
130 135

<210> 33650
<211> 239
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (6),(20),(31)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33650
Pro Asp Thr Asn Ser Xaa Val Ser Glu Ser Ala Glu Pro Gln Tyr Asp
1 5 10 15
Phe Val Gly Xaa Glu Asn Ile Leu Pro Ser Gln Arg Arg Leu Xaa Glu
20 25 30
Ile Thr Glu Leu Ile His Thr Ala Ser Leu Leu His Asp Asp Val Ile
35 40 45
Asp Asn Ala Val Ser Arg Arg Ser Ser Asn Ser Ala Asn Leu Gln Phe
50 55 60
Gly Asn Lys Met Ala Val Leu Ala Gly Asp Phe Leu Leu Gly Arg Ala
65 70 75 80
Ser Val Ala Leu Ala Arg Leu Arg Asp Pro Glu Val Thr Glu Leu Leu
85 90 95
Ala Thr Val Ile Ala Asn Leu Val Glu Gly Glu Phe Met Gln Leu Lys
100 105 110
Asn Thr Val Ala Asp Glu Lys Asn Pro Val Phe Thr Asp Glu Thr Ile
115 120 125
Ser Tyr Tyr Leu Gln Lys Thr Tyr Leu Lys Thr Ala Ser Leu Ile Ser
130 135 140
Lys Ser Cys Arg Ala Ala Ala Leu Leu Gly Gly Ser Ala Pro Glu Val
145 150 155 160

```
Val Glu Ala Ala Tyr Ser Tyr Gly Arg Asn Leu Gly Leu Ala Phe Gln
                165                 170                 175
Leu Val Asp Asp Leu Leu Asp Tyr Thr Val Ser Gly Val Glu Leu Gly
            180                 185                 190
Lys Pro Ala Gly Ala Asp Leu Glu Leu Gly Leu Ala Thr Ala Pro Leu
        195                 200                 205
Leu Phe Ala Trp Lys Gln Asn Pro Glu Leu Gly Pro Leu Val Gly Arg
    210                 215                 220
Lys Phe Ser Gln Glu Gly Asp Val Gln Arg Val Ser Gly Asp Ser
225                 230                 235
```

<210> 33651
<211> 61
<212> PRT
<213> A.fumigatus

<400> 33651

```
Asp Arg Lys Leu Thr Thr Arg Gln Ala Arg Glu Ile Val Tyr Asn Ser
1               5                  10                  15
Asp Gly Ile Glu Gln Thr Arg Ala Leu Ala Gln Glu Tyr Ala Asp Lys
            20                  25                  30
Ala Val Ala Ala Ile Ala Asp Phe Pro Asp Ser Glu Ala Lys Ser Gly
        35                  40                  45
Leu Ile Gln Met Cys Glu Lys Thr Met Asn Arg Arg Lys
    50                  55                  60
```

<210> 33652
<211> 470
<212> PRT
<213> A.fumigatus

<400> 33652

```
Phe Asp Phe Pro Leu Leu Asn Cys Ser Ser Thr Ile Lys Asp Cys Ala
1               5                  10                  15
His Leu Ser Leu Tyr Ala Pro Pro Gly Glu Ser Ser Pro Val Ala Pro
            20                  25                  30
Ala Thr Leu Pro Phe Asn Ser Ser Leu Arg Pro Arg Ala Ala Lys Asp
        35                  40                  45
Thr Val Thr His Pro Ser Lys Met Gly Asn Pro Ser Val Pro Asp Leu
    50                  55                  60
Asp Ala Val Gly Ile Lys Ala Glu Pro Glu Leu Ala Asp Gln Phe Arg
65                  70                  75                  80
Arg Glu Val Ala Ala Leu Leu Gly Arg Asn Asn Leu Asn Phe Pro Gly
                85                  90                  95
Ala Gln Pro Val Ser Phe Ala Lys Arg His Leu Leu Glu Leu Gln Arg
            100                 105                 110
Glu Asp Tyr Tyr Val Cys Glu Lys Thr Asp Gly Ile Arg Cys Leu Met
        115                 120                 125
Tyr Phe Ala Arg Gly Glu Glu Asp Ser Pro Val Pro Glu Ile His Tyr
    130                 135                 140
Leu Ile Asp Arg Lys Asn Asp Tyr Arg Tyr Val Pro Gly Leu His Phe
145                 150                 155                 160
Pro Gln Pro Asp Asp Glu Thr Phe Gln Ser Phe His Val Asp Thr Leu
                165                 170                 175
Ile Asp Gly Glu Leu Val Asn Asp Thr Tyr Glu Asp Gly Thr Gln Gln
            180                 185                 190
```

```
Leu Lys Phe Leu Val Phe Asp Cys Leu Val Leu Asp Gly Gln Lys Leu
        195                 200                 205
Met His Arg Thr Leu Asp Lys Arg Leu Ala Tyr Phe Lys Glu Lys Val
    210                 215                 220
Leu Lys Pro Tyr Asn Ala Leu Tyr Lys Lys Phe Pro Glu Glu Lys Lys
225                 230                 235                 240
His Arg Ala Phe Ala Val Glu Asp Lys Ser Thr Gln Phe Ser Tyr Gly
                245                 250                 255
Ile Glu Met Met Phe Arg Glu Ile Ile Pro Lys Val Lys Lys Ile His
            260                 265                 270
Gly Asn Asp Gly Leu Ile Phe Thr Cys Arg Ser Thr Pro Tyr Arg Ile
        275                 280                 285
Gly Thr Asp Glu His Ile Leu Lys Trp Lys Pro Pro Ser Glu Asn Thr
    290                 295                 300
Ile Asp Phe Arg Leu Arg Leu Glu Phe Pro Val Leu Glu Pro Asp Thr
305                 310                 315                 320
Asp Asp Glu Ala Asp Gly Ile Thr Glu Pro Tyr Pro Asp Tyr Asp Ala
                325                 330                 335
Ile Pro Ile Cys His Leu Phe Val Met Leu Asn Ala Asn Glu Tyr Gln
            340                 345                 350
His Trp Gly Glu Met Tyr Val Thr Glu Ser Asp Trp Glu Ala Leu Lys
        355                 360                 365
Ala Leu Gln Val Pro Leu Asp Asp Ser Ile Val Glu Cys Phe Lys Asp
    370                 375                 380
Glu Gln Gly Arg Trp Arg Phe His Arg Leu Arg Asp Asp Lys Ala Asp
385                 390                 395                 400
Ala Asn His Ile Ser Thr Val Glu Lys Val Leu Glu Ser Ile Glu Asp
                405                 410                 415
Arg Val Thr Glu Glu Asp Leu Ile Arg Ala Ala Pro Ala Ile Lys Ala
            420                 425                 430
Ala Trp Lys Lys Arg Gln Ala Gln Ala Ala Ala Glu Glu Glu Asp Arg
        435                 440                 445
Arg Arg Arg Ala Arg Gln Met Pro Pro Ser Ala Asn Gly Asn Gly Val
    450                 455                 460
Lys Arg Lys Phe Glu Glu
465                 470
```

<210> 33653
<211> 78
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (22)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 33653
Phe Cys Leu Gly Arg Gly Lys Arg Pro Val Pro Gly Ser Glu Gly Ala
1               5                   10                  15
Ser Ser Asn Gly Leu Xaa Ser Ser Ser Gln Ile Gln Ser His Ile Ser
            20                  25                  30
Lys Gln Lys Thr Tyr Met Asp Thr Leu Gly Arg Thr Val Leu Thr Leu
        35                  40                  45
Thr Val Glu Asn Leu Ser Asp Glu Ala Arg Asp Ser Gln Ile Val Val
    50                  55                  60
```

```
Ser Ser Ser Pro Val Leu Val Pro Trp Asn Phe Leu Ala Gly
65                  70                  75

<210> 33654
<211> 162
<212> PRT
<213> A.fumigatus

<400> 33654
Val Arg Ala Lys Leu Arg Arg Ala Val Ser Val Leu Asp Pro Met Asn
1               5                  10                  15
Val Ile Val Pro Ser Cys Ser Pro Ser Asn Ala Val Glu Leu Ile Thr
            20                  25                  30
Ile Glu Ser Ser Arg Ser Ala Phe Thr Gly Asp Ala Arg Leu Asp Ala
        35                  40                  45
Asn Ser Asp Gly Asp Ile Leu Pro Asp Glu Leu Val Ala Ser Trp Thr
    50                  55                  60
Pro Leu Ala Trp Pro Glu Asp Ala Pro Ala Asp Phe Ser Pro Asn Phe
65                  70                  75                  80
Val Glu Val Pro Arg Val Ala Ala Thr Ala Val Ile Leu Phe Ser Val
                85                  90                  95
Ser Val Pro Val Leu Ser Glu Gln Met Val Val Ala Leu Pro Met Val
            100                 105                 110
Ser Gln Ala Leu Ser Lys Arg Thr Lys Leu Leu Ser Phe Asn Ile Arg
        115                 120                 125
Val Val Ala Asn Ala Ser Ala Ser Val Thr Ala Arg Gly Asn Pro Ser
    130                 135                 140
Gly Thr Ala Thr Thr Met Met Val Thr Ala Thr Met Lys Ile Trp Arg
145                 150                 155                 160
Lys Ala


<210> 33655
<211> 87
<212> PRT
<213> A.fumigatus

<400> 33655
Leu Thr Leu Ser Val Thr Ala Thr Asp Pro Pro Thr Pro His Ile Leu
1               5                  10                  15
Asp Arg Arg Pro Glu Pro Ile Ser Ala Pro Leu Ile Asn Leu Thr Met
            20                  25                  30
Trp Lys Met Ile Ile Gly Gln Ser Ile Phe Gln Leu Val Val Thr Leu
        35                  40                  45
Val Leu Asn Phe Ala Gly Lys Ser Ile Phe Lys Leu Ser Ser Glu Asp
    50                  55                  60
Asp Met Glu Arg Leu Lys Thr Thr Val Phe Asn Thr Phe Val Trp Met
65                  70                  75                  80
Gln Ile Phe Asn Gln Trp Lys
                85

<210> 33656
<211> 1000
<212> PRT
<213> A.fumigatus
```

<400> 33656
Thr Ser Ala Leu Leu Tyr Asn Gly Ser Pro Ser Pro Thr Asp Leu Arg
1 5 10 15
Ser Ser Ala Ser Ile Arg Ser Ser Ala Ser Ser Glu Gly Arg Asp His
20 25 30
Glu Ser Arg Pro Thr Ser Pro His Asn Val Ser Ser Pro Thr Ser Lys
35 40 45
Leu Ala Glu Ser Met Ser Asn Ser Asn Phe Leu Ser Val Pro Gly Thr
50 55 60
Arg Ser Arg Gly Asn Ser Leu Glu Ser Glu Asp Ser Ser Gln Ser Thr
65 70 75 80
Ser Thr Tyr Gly Gly Asp Thr Tyr Val Gly Ser Pro Ser Gln Gly Ala
85 90 95
Arg Pro Glu His Gly Asn Lys Asn Gly Thr Asn Gly Lys Ile Leu Ser
100 105 110
Asp Glu Glu Ala Leu Lys Pro Asp Pro Gly Arg Glu Ala Glu Phe Gln
115 120 125
Val Glu Asp Asn Lys Phe Ala Phe Ser Pro Gly Gln Leu Asn Lys Leu
130 135 140
Leu Asn Pro Lys Ser Leu Gly Ala Phe His Ala Leu Gly Gly Leu Gln
145 150 155 160
Gly Leu Glu Arg Gly Leu Arg Thr Asn Leu Arg Ser Gly Met Ser Val
165 170 175
Asp Glu Ile Thr Leu Glu Gly Thr Val Ser Phe Glu Glu Val Ala Ser
180 185 190
Ser Gly Ala Gln Asn Thr Leu Pro Lys Ser Asp Ser Asp Pro Pro Asn
195 200 205
Gln Gly Ser Pro Ala Arg Ser Asn Thr Ala Pro Ala Arg Arg His Asp
210 215 220
Asp Ala Phe Ser Asp Arg Lys Arg Ile Tyr Gly Leu Asn Lys Leu Pro
225 230 235 240
Glu Lys Lys Pro Lys Ser Ile Leu Glu Leu Ala Trp Ile Ala Tyr Asn
245 250 255
Asp Lys Val Leu Ile Leu Leu Thr Ile Ala Ala Val Ile Ser Leu Ala
260 265 270
Leu Gly Ile Tyr Gln Ser Val Thr Ala Thr Asp Gly Glu Ala Arg Val
275 280 285
Gln Trp Val Glu Gly Val Ala Ile Ile Val Ala Ile Val Ile Val Val
290 295 300
Val Val Gly Ala Ala Asn Asp Trp Gln Lys Glu Arg Gln Phe Val Lys
305 310 315 320
Leu Asn Lys Lys Lys Glu Asp Arg Gln Val Lys Val Ile Arg Ser Gly
325 330 335
Lys Thr Val Glu Ile Ser Ile His Asp Val Leu Val Gly Asp Val Met
340 345 350
His Leu Glu Pro Gly Asp Leu Val Pro Val Asp Gly Val Phe Ile Thr
355 360 365
Gly His Asn Val Lys Cys Asp Glu Ser Ser Ala Thr Gly Glu Ser Asp
370 375 380
Val Leu Arg Lys Thr Pro Gly Ser Asp Val Tyr Gln Ala Ile Glu Arg
385 390 395 400
His Glu Asn Leu Lys Lys Leu Asp Pro Phe Ile Val Ser Gly Ala Lys
405 410 415
Val Ser Glu Gly Val Gly Thr Phe Leu Val Thr Ala Val Gly Val Asn
420 425 430
Ser Thr Tyr Gly Lys Thr Leu Met Ser Leu Gln Asp Glu Gly Gln Thr

```
        435                 440                 445
Thr Pro Leu Gln Ser Lys Leu Asn Val Leu Ala Glu Tyr Ile Ala Lys
    450                 455                 460
Leu Gly Leu Ala Ala Gly Leu Leu Leu Phe Ile Val Leu Phe Ile Lys
465                 470                 475                 480
Phe Leu Ala Gln Leu Lys Asp Met Tyr Gly Ala Asp Ala Lys Gly Gln
                485                 490                 495
Ala Phe Leu Gln Ile Phe Ile Val Ala Val Thr Ile Ile Val Val Ala
            500                 505                 510
Val Pro Glu Gly Leu Pro Leu Ala Val Thr Leu Ala Leu Ala Phe Ala
        515                 520                 525
Thr Thr Arg Met Leu Lys Asp Asn Asn Leu Val Arg Leu Leu Arg Ala
    530                 535                 540
Cys Glu Thr Met Gly Asn Ala Thr Thr Ile Cys Ser Asp Lys Thr Gly
545                 550                 555                 560
Thr Leu Thr Glu Asn Lys Met Thr Ala Val Ala Ala Thr Leu Gly Thr
                565                 570                 575
Ser Thr Lys Phe Gly Glu Lys Ser Ala Gly Ala Ser Ser Gly Gln Ala
            580                 585                 590
Asn Gly Val His Asp Ala Thr Asn Ser Ser Gly Ser Met Ser Pro Ser
        595                 600                 605
Glu Phe Ala Ser Ser Leu Ala Ser Pro Val Lys Ala Leu Leu Leu Asp
    610                 615                 620
Ser Ile Val Ile Asn Ser Thr Ala Phe Glu Gly Glu Gln Asp Gly Thr
625                 630                 635                 640
Met Thr Phe Ile Gly Ser Lys Thr Glu Thr Ala Leu Leu Ser Phe Ala
                645                 650                 655
Arg Thr Tyr Leu Gly Met Gly Ser Ile Ser Glu Ala Arg Ser Asn Ala
            660                 665                 670
Glu Ile Ala Gln Met Val Pro Phe Asp Ser Gly Arg Lys Cys Met Ala
        675                 680                 685
Val Val Ile Arg Leu Glu Asn Gly Lys Tyr Arg Met Leu Val Lys Gly
    690                 695                 700
Ala Ser Glu Ile Leu Leu Ser Lys Ser Thr Arg Ile Ile Arg Asp Pro
705                 710                 715                 720
Thr Lys Glu Val Ser Asp Thr Ser Leu Ser Glu Lys Asp Arg Ser Ala
                725                 730                 735
Leu Glu Asn Ile Ile Thr His Tyr Ala Thr Gln Ser Leu Arg Thr Ile
            740                 745                 750
Gly Leu Val Tyr Arg Asp Phe Asp Gln Trp Pro Pro Arg Gly Ala Pro
        755                 760                 765
Thr Ser Glu Glu Asp Arg Ser Leu Ala Gln Phe Asp Pro Leu Phe Lys
    770                 775                 780
Asp Met Val Leu Phe Gly Ile Phe Gly Ile Gln Asp Pro Leu Arg Pro
785                 790                 795                 800
Gly Val Thr Glu Ser Val Arg Gln Cys Gln Lys Ala Gly Val Phe Val
                805                 810                 815
Arg Met Val Thr Gly Asp Asn Ile Met Thr Ala Lys Ala Ile Ala Gln
            820                 825                 830
Glu Cys Gly Ile Phe Thr Pro Gly Gly Ile Ala Ile Glu Gly Pro Lys
        835                 840                 845
Phe Arg Gln Leu Ser Asn Arg Gln Met Arg Gln Ile Ile Pro Arg Leu
    850                 855                 860
Gln Val Leu Ala Arg Ser Ser Pro Asp Asp Lys Lys Ile Leu Val Thr
865                 870                 875                 880
Gln Leu Arg Lys Leu Gly Glu Thr Val Ala Val Thr Gly Asp Gly Thr
```

```
                885                 890                 895
Asn Asp Ser His Ala Leu Lys Thr Ala Asp Val Gly Phe Ser Met Gly
            900                 905                 910
Ile Thr Gly Thr Glu Val Ala Lys Glu Ala Ser Asp Ile Ile Leu Met
        915                 920                 925
Asp Asp Asn Phe Ala Ser Ile Val Lys Ala Met Ala Trp Gly Arg Thr
    930                 935                 940
Val Asn Asp Ala Val Lys Lys Phe Leu Gln Val Asn Ser Gly Ser Leu
945                 950                 955                 960
Thr Asp Cys Ile Gly Ser Arg Ala Asn Val Leu Ser Phe Ser Ser Lys
                965                 970                 975
Leu Arg Ser Thr Leu Leu Gln Ser Cys Ser His Ser Ser Arg Leu Trp
            980                 985                 990
Leu Val Val Thr Lys Ser Arg Phe
        995                 1000
```

<210> 33657
<211> 600
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (446),(447),(449),(452)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33657

```
Thr Asn Phe Ile Leu Met Ser Ser Tyr Ile Tyr Arg Glu Arg Glu Arg
1               5                   10                  15
Asp Arg Glu Trp Asp Glu Pro Arg Ser Ser Ser Val Ser Ile Lys Arg
            20                  25                  30
Tyr Val Ile Pro Ser Glu Glu Asp Arg Glu Arg Asp Ile Val Tyr Arg
        35                  40                  45
Arg Glu Asp Pro Val Thr Gly Asp Arg Glu Leu Val Ile Arg Arg Ser
    50                  55                  60
Thr Glu Arg Glu Glu Pro Val Met Val Gln Arg Tyr Glu Arg Glu Val
65                  70                  75                  80
Asp Tyr Asp Thr Arg Pro Tyr Asp Tyr Arg Ser Glu Arg Asp Tyr Tyr
                85                  90                  95
Asp Gly Ala Tyr Gln Cys Thr Ser Val Gly Arg Val Asn Leu Thr Asp
            100                 105                 110
Pro Ile Tyr Val Ala Arg Gly Pro Leu Val Val His Pro Arg Glu Ser
        115                 120                 125
Asp Tyr Glu Val Val His Arg Ser Glu Val Glu Arg Glu Pro Ala Tyr
    130                 135                 140
Tyr Tyr His Arg Arg Val Arg Glu Tyr Asp Asp Asp Arg Arg Leu Arg
145                 150                 155                 160
Arg Glu Leu Ser Pro Gly Asp Ser Ile Ser Gln Thr Ser Arg Arg Arg
                165                 170                 175
Asp Asp Gln Asp Tyr Ser Ser Asp Asp Ser Met Val Tyr Ile Arg Lys
            180                 185                 190
Glu Thr Arg Glu Tyr Asp Asp His Pro His His Arg Arg His Leu Ala
        195                 200                 205
Glu Gly Ala Leu Val Gly Ile Gly Ala Ala Glu Leu Ile Arg Asn Arg
    210                 215                 220
Arg Lys Lys Glu Gly Asp Asp Val Ser Ser Gly Leu Ser Arg Leu Gly
```

```
225                 230                 235                 240
His Asp Val Gly Ala Gly Ala Leu Gly Ala Val Ala Val Ser Ala Ala
                245                 250                 255
Ser Arg Ala Arg Asp Tyr Tyr Arg Ser Lys Ser Arg His Arg Ser His
            260                 265                 270
Ser Tyr Asp Asp Glu Arg Ser Ser Arg His Asn His His His His Tyr
        275                 280                 285
Ser His Ser His Ser His Ser Arg His Ser Arg His Ser Arg Arg Ser
    290                 295                 300
Arg Ser Arg Ser Arg Ser Arg Ser Arg Ser His Ser His Ser Arg Ala
305                 310                 315                 320
Lys Thr Leu Thr Glu Ile Gly Leu Gly Ala Ala Ala Ile Ala Gly Ala
                325                 330                 335
Met Ala Leu Ala Arg Lys Lys Ser Thr Ser Asp Arg Arg Ser Arg Ser
            340                 345                 350
Arg His Arg Arg Ser Ser Ser Ala Val Arg Pro Gly Asn Asp Ala Glu
        355                 360                 365
Ser Glu Lys Arg Ser Gln Ser Arg Ile Arg Lys His Met Ala Glu Ala
    370                 375                 380
Gly Leu Ala Gly Ala Ala Val Ala Gly Leu Val Glu Arg Ala Arg Ser
385                 390                 395                 400
Arg Ser Arg Ser Arg Lys Gly Ser Arg Ser His Ser Arg Leu Arg Gln
                405                 410                 415
Ala Leu Pro Val Val Ala Ala Gly Leu Gly Thr Ala Ala Val Thr Gly
            420                 425                 430
Leu Tyr Glu Lys Asn Lys Glu Lys Lys Lys Lys Glu Glu Xaa Xaa Glu
        435                 440                 445
Xaa Gly Gly Xaa Arg Arg Glu Arg Arg Arg Ser Arg Ser Arg Ser Arg
    450                 455                 460
Ala Pro Ser Glu Ala Tyr Ser Asp Pro Ala His Asp Pro Ala Gly Leu
465                 470                 475                 480
Ile Glu Tyr Gly Gln His Pro Val Thr Gly Ser Ile Pro Ala Ala His
                485                 490                 495
Tyr Tyr Gly Arg Pro Ala Ser Gln Gln Gly Tyr Tyr Ser Asp Ala Ser
            500                 505                 510
Asp Arg Val Ala Arg Asp Ala Ala Gly Phe Arg Gly Arg Gly Arg Ser
        515                 520                 525
Arg Ser Arg Ser Arg Gly Gly Arg Tyr Ser Thr Ser Ser Ser Asp Thr
    530                 535                 540
Asp Arg Asp Gly His Arg Arg Arg Ser Ser Arg Arg Arg Lys His Arg
545                 550                 555                 560
Ser Arg Ser Arg Glu Leu Ala Glu Ala Ala Leu Ala Ala Thr Gly Val
                565                 570                 575
Gly Tyr Ala Ala His Lys Tyr Lys Gln Ser Arg Asp Arg Lys Lys Glu
            580                 585                 590
Glu Arg Glu Arg Ser Ser Glu Phe
        595                 600
```

<210> 33658
<211> 141
<212> PRT
<213> A.fumigatus

<400> 33658

```
Leu Lys Lys Cys Thr Asn Asn Leu Leu Val Arg Glu Thr Asn Asp Arg
1               5                   10                  15
```

```
Phe Leu Leu Glu Tyr Asp Asp Asp Ser Tyr Pro Ser Ser Tyr Pro Ser
            20                  25                  30
Asp Leu Pro Tyr Pro Pro Ser Pro Leu Pro Pro Thr Gln Pro Gly Glu
        35                  40                  45
His Pro Tyr Tyr Pro Asn Ser Asn Tyr Phe Pro Pro Pro Pro Gly Ser
    50                  55                  60
Thr Pro Ala Pro Pro Ala Pro Ala Ala Pro Tyr Asn Pro Ala Asp Tyr
65                  70                  75                  80
Pro Pro Pro Pro Gly Ala Val Pro Pro Ala Gln Pro Tyr Gly Tyr Pro
                85                  90                  95
Pro Glu Pro Gly Pro Asp Arg Tyr Ala Pro Arg Pro Arg Arg Ala Asp
            100                 105                 110
Glu Asn Val Ser Ala Ala Trp Asn Ser Pro Pro Ser Ala Ala Gln Tyr
        115                 120                 125
Pro Met His Asp Gly Gly Ser Arg Asp Arg Phe Lys Ile
    130                 135                 140
```

<210> 33659
<211> 173
<212> PRT
<213> A.fumigatus

<400> 33659

```
Leu Val Ala Asn Gln Gln Pro Ser Gly Val Glu Lys Pro Pro Ser Pro
1               5                   10                  15
Leu Arg Thr Pro Arg Pro Arg Thr Pro Arg Asp Arg Ala Arg Ala Ala
            20                  25                  30
Ser Gln Pro Pro Gln Pro Lys Ser Val Ala Phe Asp Leu Asn Ala Glu
        35                  40                  45
Glu Arg Pro Ile Asp Pro Gly Tyr Glu Thr Asp Asp Ser Asp Thr Thr
    50                  55                  60
Ile Asp Ser Leu Thr Pro His His His Arg Asp Arg His Arg Ser Ser
65                  70                  75                  80
Asp Thr Ser Phe Ala His Arg Arg Arg His Ser Ser Ser Asp Pro Tyr
                85                  90                  95
Phe Thr Pro Arg Lys Pro Gln Phe Gln Pro Ser Ser Ser Gln Ala Lys
            100                 105                 110
Ile Asp Arg Pro Gly His Ser Lys Asp Lys Gly Thr Thr Asp Leu Gln
        115                 120                 125
Glu Pro Asp Ser Asp Ser Thr Ile Asp Leu Pro Asp Arg Phe Asp Ser
    130                 135                 140
His Gly Arg Leu Leu Pro Glu Arg Asp Asn Asp Pro Leu Val Asp Gly
145                 150                 155                 160
Leu Glu Lys Leu Leu Arg Gly Ile Asn Arg Val Phe Val
                165                 170
```

<210> 33660
<211> 177
<212> PRT
<213> A.fumigatus

<400> 33660

```
Val Gly Cys Glu Asn Glu Ser Pro Phe Glu Ser Ala Thr Gly Cys Glu
1               5                   10                  15
Leu Ser Arg Pro Asp Arg Pro Leu Arg His Pro Pro Ser Gln Leu Arg
            20                  25                  30
```

```
Pro Tyr Val Ser Glu Ser Gly Ile Gly Cys Val Ser His Ser Arg Arg
        35                  40                  45
Arg Phe Arg Val Gly Arg His Trp Arg Thr Gly Gly Ala Gly Ser Gly
    50                  55                  60
Phe Val Cys Arg Ser Ser Thr Ser Tyr Glu Pro Glu Pro Trp His Arg
65                  70                  75                  80
Gln Trp Gln Arg His Gln Gly Arg Ser Pro Ser Ala Ser Trp His Glu
                85                  90                  95
Ser Ala Ser Ala Ser Gly Cys Asp Tyr Gly Cys Asp Tyr Gly Cys Asp
            100                 105                 110
Gly Cys Gly Gly Cys Gly Gly Tyr Gly Tyr Gly Cys Gly Cys Ser Asp
        115                 120                 125
Asp Gly Asp Cys Asp Gly Ser Cys Ala His His His Arg Ser Gly Ser
    130                 135                 140
Gly Asp Gly Ser Tyr Cys Gly Ser Ser Arg Glu His Val Lys Gln His
145                 150                 155                 160
Ser Arg Gln Gln His Pro Arg Arg Arg His Pro Arg Arg Asp Arg Asp
                165                 170                 175
Gly
```

<210> 33661
<211> 77
<212> PRT
<213> A.fumigatus

<400> 33661

```
Trp Arg Thr Ser Thr Arg Thr Glu Leu Thr Thr Gly Arg His Pro Val
1               5                   10                  15
Ser Asp Ser Asn Gln Arg Arg Lys His Val Val Arg Ser Asp Thr Tyr
            20                  25                  30
Lys Gln Pro Gly Pro Ile Ser Val Ser Ser Leu Arg Leu Gln Gly Pro
        35                  40                  45
Ala Trp Val Ser Ala Gly Gly Gly Ile Tyr Ala Thr Leu Phe Gly Val
    50                  55                  60
Tyr Arg Met Leu Arg Ser Met Arg Gln Leu Arg Tyr Ile
65                  70                  75
```

<210> 33662
<211> 307
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (292),(293),(294),(297),(300)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33662

```
Ile His Leu Pro Ile Leu Lys Ile Met Pro Pro Ser Asp Arg Thr Phe
1               5                   10                  15
Leu Ala Phe Gln His Asn Ala Lys Leu His Asn Leu Gln Thr Ile Val
            20                  25                  30
Arg Gly Ile Tyr Pro Phe Ala Thr Leu Glu Glu Ser Asn Arg Gln Leu
        35                  40                  45
Phe Lys Gln Gly Thr Asp Glu Asp Tyr Ala Ile Ile Thr Glu Gln Thr
```

```
    50                  55                  60
Ile Phe His Pro Gln Gly Gly Gly Gln Pro Ser Asp Glu Gly Thr Met
65                  70                  75                  80
Thr Ser Ala Ser Gly Gly Ala Phe Thr Val Ala Ala Val Arg Met Asp
                85                  90                  95
Ala Val Arg Glu Gly Gln Val Leu His Phe Gly Arg Phe Asn Gln Ser
            100                 105                 110
Ser Val Val Phe Ser Glu Gly Asp Thr Val Glu Gln Thr Ile Asp Ala
        115                 120                 125
Glu Lys Arg Leu Leu Tyr Ser Arg Leu His Thr Ala Gly His Val Leu
    130                 135                 140
Gly Ala Ala Val Arg His Leu Leu Glu Lys Glu Val Glu Gly Phe Asp
145                 150                 155                 160
Glu Leu Lys Ala Ser His Phe Pro Asp Ala Ala Ala Cys Glu Phe Gln
                165                 170                 175
Gly Ala Ile Asp Gly Lys Trp Lys Asp Ser Ile Gln Ala Lys Val Asn
            180                 185                 190
Glu Phe Ile Glu Ala Lys Leu Pro Val Glu Val Asp Trp Trp Asp Glu
        195                 200                 205
Glu Glu Phe Arg Arg Arg Gly Leu Glu Arg Leu Leu Pro Asp Arg Gly
    210                 215                 220
Ala Val Ala Val Ala Pro Gly Glu Lys Phe Arg Val Val Asn Ile Val
225                 230                 235                 240
Gly Ala Glu Val Tyr Pro Cys Gly Gly Thr His Val Glu Thr Thr Asp
                245                 250                 255
Leu Ser Gly Ser Thr Thr Val Lys Glu Asp Tyr Gln Glu Arg Trp Pro
            260                 265                 270
Val Lys Gly His Leu Tyr Arg Asn Arg Leu Asn Pro Ser Asn Cys Arg
        275                 280                 285
Leu Lys Phe Xaa Xaa Xaa Lys Leu Xaa Asn Pro Xaa Lys Leu Leu Phe
    290                 295                 300
Phe Asp Leu
305
```

<210> 33663
<211> 119
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (40)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33663

```
Gly Ala Pro Glu Trp Ile Lys Leu Thr Gly Val Phe Asp Gly Asn Thr
1               5                   10                  15
Thr Asn Thr Thr Leu Asn Asp Gly Tyr Leu Thr Ser Gly Glu Thr Gly
            20                  25                  30
Ser Thr Gly Tyr Ala Ser His Xaa Ala Gln Tyr Phe Val Lys Tyr Ile
        35                  40                  45
Gln Ala Tyr Lys Asn Leu Gly Ala His Val Asp Ala Ile Thr Ile Gln
    50                  55                  60
Asn Glu Pro Leu Phe Ser Ser Ala Gly Tyr Pro Thr Met Tyr Val Tyr
65                  70                  75                  80
Asp Tyr Glu Ser Ala Gln Leu Ile Gln Asn Tyr Ile Gly Pro Ala Leu
```

```
                85                  90                  95
Ala Ser Ala Gly Leu Asp Thr Glu Ile Trp Ala Tyr Asp His Asn Thr
            100                 105                 110
Gly Leu Trp Leu Ser Leu Asn
        115

<210> 33664
<211> 177
<212> PRT
<213> A.fumigatus

<400> 33664
Gln Ile Thr Asp Val Pro Ser Tyr Pro Gln Thr Val Leu Asn Gln Ala
1               5                   10                  15
Gly Gln Tyr Val Lys Ser Val Ala Trp His Cys Tyr Ala Pro Asn Val
            20                  25                  30
Asp Trp Thr Val Leu Ser Gln Phe His Asn Thr Asn Pro Gly Val Lys
        35                  40                  45
Gln Tyr Met Thr Glu Cys Trp Thr Pro Ala Ser Gly Ala Trp His Gln
    50                  55                  60
Ala Ala Asp Phe Thr Met Gly Pro Leu Gln Asn Trp Ala Ser Gly Val
65                  70                  75                  80
Ala Ala Trp Thr Leu Gly Thr Asn Ala Gln Asp Gly Pro His Leu Ser
                85                  90                  95
Thr Gly Gly Cys Ala Thr Cys Gln Gly Leu Val Thr Ile Asn Asn Gly
            100                 105                 110
Gly Tyr Thr Leu Asn Thr Ala Tyr Tyr Met Met Ala Gln Phe Ser Lys
        115                 120                 125
Phe Met Pro Leu Gly Ala Ile Val Leu Asn Gly Ser Gly Ser Tyr Thr
    130                 135                 140
Tyr Phe Gly Arg Arg Arg Tyr Pro Val Arg Gly Phe Leu Glu Ser Arg
145                 150                 155                 160
Trp Glu Pro Ala Leu Trp Leu Leu Lys Thr Leu Leu Ala Met Met Ser
                165                 170                 175
Met


<210> 33665
<211> 155
<212> PRT
<213> A.fumigatus

<400> 33665
Ser Ser Phe Thr Val Val Asp Pro Asp Arg Ser Val Val Ser Thr Cys
1               5                   10                  15
Val Pro Pro Gln Gly Tyr Thr Ser Ala Pro Thr Met Leu Thr Thr Arg
            20                  25                  30
Asn Phe Ser Pro Gly Ala Thr Ala Thr Ala Pro Arg Ser Gly Ser Asn
        35                  40                  45
Arg Ser Arg Pro Arg Leu Arg Asn Ser Ser Ser Ser His Gln Ser Thr
    50                  55                  60
Ser Thr Gly Asn Leu Ala Ser Ile Asn Ser Phe Thr Phe Ala Trp Ile
65                  70                  75                  80
Glu Ser Phe His Phe Pro Ser Ile Ala Pro Trp Asn Ser His Ala Ala
                85                  90                  95
Ala Ser Gly Lys Cys Asp Ala Leu Ser Ser Ser Asn Pro Ser Thr Ser
```

```
            100                 105                 110
Phe Ser Arg Arg Cys Arg Thr Ala Ala Pro Arg Thr Trp Pro Ala Val
        115                 120                 125
Cys Ser Arg Glu Tyr Ser Arg Arg Phe Ser Ala Ser Ile Val Cys Ser
    130                 135                 140
Thr Val Ser Pro Ser Glu Lys Thr Thr Glu Asp
145                 150                 155

<210> 33666
<211> 68
<212> PRT
<213> A.fumigatus

<400> 33666
Val Glu Asp Ile Asp Phe Glu Phe Val Tyr Ala Leu His Asn Phe Val
1               5                   10                  15
Ala Thr Val Asp Gly Gln Ala Asn Ala Ala Lys Gly Asp Thr Met Val
            20                  25                  30
Leu Leu Asp Asp Ser Asn Ser Tyr Trp Trp Leu Val Arg Ile Val Lys
        35                  40                  45
Asp Gly Ser Ile Gly Asn Ile Leu Arg Ser Arg Phe Pro Lys Thr Val
    50                  55                  60
Pro Asp Ser Leu
65

<210> 33667
<211> 283
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (231),(232)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33667
Gln Lys Gln Leu Ser Ala Thr Met Leu Gly Asp Asn Ser Glu Lys Ser
1               5                   10                  15
Lys Asn Pro Leu Lys Lys Ala Met Arg Arg Arg Asn Ala Lys Asn Val
            20                  25                  30
Thr Phe Thr Ala Pro Thr Tyr Ile Glu Ala Ser Asp Ile Asp Trp Ser
        35                  40                  45
Thr Glu Asp Glu Ile Asp Asp Gly Asp Ser Leu Ile Asp Ala Gly Asn
    50                  55                  60
Ile Ile Arg Asp Gly Asp Asp Leu Gln Asp Asp His Asn Asp Asp Ile
65                  70                  75                  80
Val Val Glu Pro Leu Arg Pro Lys Ser Asn Arg Asp Lys Ala Thr Asp
                85                  90                  95
Glu Ser Glu Asn Val Glu Glu Thr Pro Gln Ser Gly Ser Thr Ser Pro
            100                 105                 110
Asp Lys Gln Pro Ser Ser Gln Glu Leu Phe Glu Val Ala Ser Glu Pro
        115                 120                 125
Thr Val Ser Arg Ser Arg Asn Gly Thr Val Arg Asn Thr Asp Ser Phe
    130                 135                 140
Phe Lys Asp Asp Thr Val Glu Thr Lys Lys Ile Ser Leu Thr Pro Asn
145                 150                 155                 160
```

```
Leu Leu Arg Asp Glu Val Ser Ser Gly Gly Leu Ser Ser Glu Thr Lys
                165                 170                 175
Glu Gly Arg Ser Ser Phe Asp Asn Ile Asp Lys Ala Leu Gly Ala Asn
            180                 185                 190
Asp Lys Gly Arg Asp Asp Lys Lys Arg Lys Asp Lys Lys Pro Gly Met
        195                 200                 205
Leu Ser Gly Leu Phe Lys Arg Lys Asp Lys Arg Thr Lys Ser Ile Glu
    210                 215                 220
Asp Asp Ser His Glu Pro Xaa Xaa Val Ser Gly Arg Ile Ile Ser Asn
225                 230                 235                 240
Val Thr His Thr Pro Gly Arg Pro Leu Asn Pro Gly Pro Pro Pro Glu
                245                 250                 255
Ser Arg Pro Thr Lys Gly Asn Pro Ala Pro Lys Ala Gly Arg Leu Lys
            260                 265                 270
Ser Pro Glu Ala Lys Ile Trp Pro Cys Ser Pro
        275                 280

<210> 33668
<211> 201
<212> PRT
<213> A.fumigatus

<400> 33668
Ile Ala Pro Arg Thr Asp Ala Arg Leu Arg Met Pro Ser Arg Gln Ser
1               5                   10                  15
Ala Val Pro Asn Leu Asp Leu Ser Ser Phe Thr Leu Gln Ala Asn Ala
            20                  25                  30
Lys Asn Ser Ser Pro Leu Thr Pro Gly Ala Gln Ser Ser Asp Arg Ala
        35                  40                  45
Ser Pro Leu Thr Pro Arg Ser Pro Lys Ser Ser Thr Ser Ser Pro Phe
    50                  55                  60
Phe Lys Gly Ala Thr Ile Cys Pro Val Thr Gln Glu Ser Asn Ser Lys
65                  70                  75                  80
Ser Ser Ser Pro Thr Phe Pro Leu Ser Ser Ala Gln Ser Ala Glu Pro
                85                  90                  95
Thr Thr Pro Gly Phe Thr Ala Ile Pro Pro Tyr Pro Pro Ser Pro Arg
            100                 105                 110
Asp Ser Pro Lys His Ser Arg Glu Pro Ser Arg Ser Phe Phe Ala Asn
        115                 120                 125
Leu Lys Ala Pro Lys Ser Ala His Arg Ala Gln Arg Ser Asp Gly Ser
    130                 135                 140
Gly Ser Ser Asn Asp Lys Pro Lys Ser Arg Gly Ser Ser Arg Asp Arg
145                 150                 155                 160
Arg Thr Gln Ile Ala Ser Lys Ser Tyr Glu Ser Thr Pro Asp Leu Pro
                165                 170                 175
Gly Thr Ile Asp Arg Ala Ala Gln Glu Glu Lys Ser Lys Arg Leu Ala
            180                 185                 190
Ser Tyr Asn Val Leu Arg Leu Ser Phe
        195                 200

<210> 33669
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33669
```

```
Ser Ile Ser Tyr Cys Gln Lys Leu Met Ser Leu Arg Leu Ser Leu Ser
1               5                  10                  15
Asn Asn His Leu Phe His Ile Pro Tyr Arg Phe Ala Glu Cys Ser His
            20                  25                  30
Leu Arg Tyr Leu Asn Ile Arg Ala Asn Asn Phe Arg Glu Phe Pro Arg
        35                  40                  45
Gly Val Arg Val Ile Lys Glu Ser Val Tyr Lys Leu Ser Lys Ser
    50                  55                  60
```

<210> 33670
<211> 155
<212> PRT
<213> A.fumigatus

<400> 33670

```
Val Tyr Lys Leu Pro Leu Leu Glu Ile Leu Asp Leu Ser Arg Asn Lys
1               5                  10                  15
Ile Ser His Ile Pro Glu Glu Ile Lys Arg Leu Ser Ser Leu Arg Val
            20                  25                  30
Leu Ser Ile Met Gln Asn Arg Leu Asp Asp Leu Pro Phe Gly Ile Ser
        35                  40                  45
Glu Met Asn Lys Leu Gln Ile Leu Lys Val Ala Gly Asn Pro Leu Arg
    50                  55                  60
Tyr Pro Leu Arg Arg Val Leu Glu Thr Ser Glu Thr Glu Ile Ala Pro
65                  70                  75                  80
Ser Thr Met Thr Asp Asn Glu Lys Glu Val Ala Val Thr Ala Glu Leu
                85                  90                  95
Lys Arg Phe Leu Lys Thr Arg Gln Leu Asn Glu Gln Asp Arg Gly Asn
            100                 105                 110
Glu Ser Arg Tyr Cys Gly Phe Ser Lys Cys Ala Trp Arg Leu Leu Ala
        115                 120                 125
Thr Ser Ala Asp Ser Phe Gln Ala Ser Val Phe Ser Ile Leu Gln Ser
    130                 135                 140
Leu Ser Asp Ala Ser Ser Ala Ala Gly Ser Gln
145                 150                 155
```

<210> 33671
<211> 105
<212> PRT
<213> A.fumigatus

<400> 33671

```
Asn Lys Phe Pro Asp Met Thr Lys Ser Ala Ala Tyr Asp Ile Ala Val
1               5                  10                  15
Arg Glu Phe Tyr Arg Leu Arg Leu Gln Glu Asp Ile Glu Arg Arg Val
            20                  25                  30
Ala Ala Glu Glu Ala Glu Ala Thr Gly Ala Thr Phe Gly Pro Ser Leu
        35                  40                  45
Leu Glu Val Gly Met Glu Leu Glu Asn Gln Glu Tyr Glu Arg Trp Lys
    50                  55                  60
Ala Trp Ala Lys Met Glu Ala Gln Leu Leu Asp Gln Lys Thr Ala Ala
65                  70                  75                  80
Phe Thr Gly Ala Pro Glu Ile Ala Ala Ala Asp Asp Ala Val Glu Glu
                85                  90                  95
Leu Glu Glu Lys Val Pro Val Pro Val
            100                 105
```

<210> 33672
<211> 199
<212> PRT
<213> A.fumigatus

<400> 33672
Pro Leu Leu Pro Leu Ser Leu Val Ser Ile Ile Ser Leu Leu Leu His
1 5 10 15
His His His His His Thr Pro His Thr Thr His Thr Met Ser Leu Ser
20 25 30
Leu Ser Arg Ser Leu His Arg Ala Leu Leu Arg Arg Ser Tyr Gly Thr
35 40 45
Val Gln Ala Pro Pro Ser Ala Ala Ser Leu Ala Ala Asn Arg Ile Pro
50 55 60
Pro Ala Leu Gln Glu Ala Thr Ala Ala Thr Ala Pro Arg Thr Asn Trp
65 70 75 80
Ser Arg Glu Glu Val Gln Gln Ile Tyr Glu Thr Pro Leu Ser Gln Leu
85 90 95
Thr Tyr Ala Ala Val Gly Arg Ser Leu Ile Ser Tyr Phe Ser Met Asp
100 105 110
Thr Asp Phe Cys Lys Ala Thr Val His Arg Arg Phe His Asp Pro Ala
115 120 125
Ala Ile Gln Met Cys Thr Leu Met Asn Ile Lys Thr Gly Gly Cys Ser
130 135 140
Glu Asp Cys Ser Tyr Cys Ala Gln Ser Ser Arg Tyr Asn Thr Gly Leu
145 150 155 160
Lys Ala Thr Lys Met Ser Pro Val Asp Glu Val Leu Lys Ala Ala Arg
165 170 175
Ile Ala Lys Asp Asn Gly Ser Thr Arg Phe Val Leu His Gln Pro Gly
180 185 190
Trp Lys Asp Thr Ser Gly Gly
195

<210> 33673
<211> 221
<212> PRT
<213> A.fumigatus

<400> 33673
Asp Ala Ala Ser Phe Leu Asn Val His Pro Asp Val Ala Val Asn Ala
1 5 10 15
Lys Leu Leu Thr Gly Gly Leu Val Pro Leu Cys Thr Thr Leu Ala Ser
20 25 30
Glu Glu Ile Phe Gln Ala Phe Ser Ser Pro Glu Lys Ser Asp Ala Leu
35 40 45
Leu His Gly His Ser Tyr Thr Ala His Ala Val Gly Cys Thr Val Ala
50 55 60
Val Asp Ser Leu Arg Ala Met Thr Lys Met Glu Ser Ser Gly Ser Trp
65 70 75 80
Asp Ala Tyr Arg Gly Asp Trp Lys Ala Val Asp Val Ser Gly Glu Asp
85 90 95
Asn Ser Pro Glu Val Trp Ser Val Trp Ser Arg Asp Leu Leu Arg Asp
100 105 110
Leu Ser Tyr Ala Asp Ser Val Glu Ser Val Phe Ala Leu Gly Thr Val
115 120 125

```
Leu Ser Ile Ser Leu Arg Asp Ala Gln Gly Gly Gly Lys Phe Ser His
    130                 135                 140
Glu Asp His Phe Ser Pro Asp Ser Ser Arg Leu Thr Cys Asp Leu Val
145                 150                 155                 160
Pro Thr Thr Leu Gly Tyr Thr Ser Thr Ala Ala Lys Gly Leu Gln Gln
                165                 170                 175
Arg Leu Ser Ala Gly Gly Pro Gln Phe Asn Val His Ser Arg Val Leu
            180                 185                 190
Gly Asn Val Leu Tyr Leu Met Ser Ser Ile Thr Ser Lys Pro Glu Thr
        195                 200                 205
Val Arg Gly Leu Glu Glu Leu Leu Arg Ser Ala Leu Leu
    210                 215                 220
```

<210> 33674
<211> 137
<212> PRT
<213> A.fumigatus

<400> 33674

```
Gly Arg Ser Leu Asn Gly Arg Thr Arg Ile Ser Gly Leu Thr Ile Pro
1               5                   10                  15
Arg Arg Thr Ser Ser Thr Ala Ser Met His Ser Leu Ser Glu Pro Thr
            20                  25                  30
Arg Leu Pro Val Ile Leu Ser Pro Leu Met Thr Met Val Gln Met Gly
        35                  40                  45
Val Ser Ser Thr Gly Arg Pro Gly Gly Met Pro Thr Gln Leu Arg Val
    50                  55                  60
Pro Pro Thr Arg Ser Met Ser His Ala Trp Ala Asn Ala Phe Ala Leu
65                  70                  75                  80
Pro Ala Val Thr Thr Thr Ala Cys Ala Pro Ser Pro Val Met Ser Cys
                85                  90                  95
Thr Arg Cys Thr Gly Ser Thr Asp Leu Lys Ser Thr Asn Ser Ile Ala
            100                 105                 110
Pro Ser Pro Arg Thr Lys Ser Arg Leu Ser Pro Ala Ser Thr Pro Ile
        115                 120                 125
Thr Ser Ala Pro Trp Ala Leu Ala Tyr
    130                 135
```

<210> 33675
<211> 93
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (65),(72)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33675

```
Gln Leu Lys Leu Ser Ser Thr Gln Val Pro Asp Cys Thr Met Arg Phe
1               5                   10                  15
Leu Arg Leu Leu Ala Leu Ala Pro Leu Ala Leu Ala Ala Ser Val Pro
            20                  25                  30
Arg Ala Lys Ile Pro Thr Tyr Asn Ala Val Thr Val Phe Gln Pro Pro
        35                  40                  45
Ala Asp Tyr Asn Ile Pro Arg Val Leu Tyr Ala Arg Thr Leu Lys Leu
```

```
    50                  55                  60
Xaa Asn Gly Asp Leu Leu Cys Xaa Trp Glu Glu Leu Leu Gln Gly Pro
65                  70                  75                  80
Pro Ala Ser Val Leu Pro His Leu Pro Val Gln Gly Pro
                85                  90
```

<210> 33676
<211> 75
<212> PRT
<213> A.fumigatus

<400> 33676

```
Arg Leu Leu Gln Arg Arg Cys Ile Tyr Met Val Thr Met Gln Ile Pro
1               5                   10                  15
Gln Thr Gln Thr Val Ala Leu Val Ser Glu Leu Gly Gly Lys Val Glu
            20                  25                  30
Phe Asp Asp Asn Tyr Pro Val Pro Val Pro Gly Gln Asn Glu Val Leu
        35                  40                  45
Ala Lys Val Leu Tyr Thr Gly Val Cys Gln Ser Gly Lys Phe Thr Gln
    50                  55                  60
Tyr Gln Tyr Gln Asn Gln Leu Glu Pro Phe Ser
65                  70                  75
```

<210> 33677
<211> 221
<212> PRT
<213> A.fumigatus

<400> 33677

```
Leu Leu Ser Pro Asn Leu Glu Ala Arg Trp Asn Leu Thr Ile Thr Ile
1               5                   10                  15
Leu Ser Leu Ser Leu Val Lys Thr Arg Tyr Trp Arg Arg Ser Ser Ile
            20                  25                  30
Pro Val Phe Val Arg Val Val Ser Leu Pro Ser Thr Ser Thr Arg Thr
        35                  40                  45
Asn Trp Ser His Ser Pro Glu Gln Ser Asp Leu His Thr Lys Asn Gly
    50                  55                  60
Thr Ala Ala Gly Ala Asp Gly Asn Pro Ile Thr Asn Ile Lys Arg Pro
65                  70                  75                  80
His Val Gly Gly His Glu Gly Val Gly Arg Ile Val Ala Val Gly Pro
                85                  90                  95
Gly Cys Gly Pro Gly Leu Lys Val Gly Gly Leu Val Gly Ile Arg Phe
            100                 105                 110
Ala Ser Arg Val Cys Arg Arg Cys Glu Phe Cys Leu Ala Gly Thr Glu
        115                 120                 125
Gln Tyr Cys Ile Arg Ser Thr Asn His Leu His His Glu Asp Gly Ser
    130                 135                 140
Phe Gln Met Tyr Ile Ala Leu Asp Ala Asp Tyr Leu Thr Ile Leu Pro
145                 150                 155                 160
Asp Asp Ile Asp Pro Gln Val Ile Gly Pro Val Leu Cys Ala Gly Val
                165                 170                 175
Thr Ala Tyr Lys Val Cys Asn Pro Pro Leu Val Pro Trp Ser Ser Asn
            180                 185                 190
Arg Leu Gly Arg Ser Gln Arg Gln His Gln Ser Gly Glu Leu Ala Gly
        195                 200                 205
Arg Gly Gly Cys Trp Arg Trp Pro Arg Thr Pro Arg Gly
```

210 215 220

<210> 33678
<211> 176
<212> PRT
<213> A.fumigatus

<400> 33678
Asp Arg Thr Phe Gly Gln Thr Thr Gly Gln Leu Ala Asp Ile Ala Ser
1 5 10 15
Val Gln Tyr Ala Lys Ala His Gly Ala Leu Val Ile Gly Val Asp Ala
20 25 30
Gly Asp Lys Arg Asp Phe Val Leu Gly Leu Gly Ala Ile Glu Phe Val
35 40 45
Asp Phe Lys Ser Val Asp Pro Val Gln Arg Val His Asp Ile Thr Gly
50 55 60
Leu Gly Ala His Ala Val Val Val Thr Ala Gly Asn Ala Lys Ala Phe
65 70 75 80
Ala His Ala Cys Asp Met Leu Arg Val Gly Gly Thr Leu Ser Cys Val
85 90 95
Gly Ile Pro Pro Gly Arg Pro Val Leu Glu Thr Pro Ile Cys Thr Ile
100 105 110
Val Ile Lys Gly Leu Arg Ile Thr Gly Asn Leu Val Gly Ser Leu Lys
115 120 125
Glu Cys Met Glu Ala Val Glu Leu Val Arg Arg Gly Met Val Lys Pro
130 135 140
Glu Ile Arg Val Arg Pro Phe Arg Asp Leu Pro Gln Val Tyr Glu Glu
145 150 155 160
Met Glu Lys Gly Asp Ile Ser Gly Arg Ile Val Leu Gly Val Ala Glu
165 170 175

<210> 33679
<211> 65
<212> PRT
<213> A.fumigatus

<400> 33679
Leu Thr Gln Arg Tyr Arg Pro Leu Ser Ser Phe Phe Ile Lys Ser Thr
1 5 10 15
Ser Ala Ala Gly Arg Ile Asp Asn Ser Leu Ile His Pro Phe Leu Ser
20 25 30
Ile Leu Leu Arg Tyr Leu Tyr Arg Ala Ser Ser Ser Ser Tyr Asn Ile
35 40 45
Val Asn Lys Gly Leu Tyr Ser Ser Asn Phe Leu Leu Ser Ser Tyr Ile
50 55 60
Leu
65

<210> 33680
<211> 60
<212> PRT
<213> A.fumigatus

<400> 33680
Gly Gly Phe Tyr Ser Gly Leu Met Arg Arg Gln Asp Phe Trp Pro Ile
1 5 10 15

```
Met Phe Ala Gly Phe Lys Leu Trp Pro Phe Val Ser Ile Leu Asn Phe
            20                  25                  30
Thr Val Val Pro Ala Asp Lys Arg Leu Leu Val Gly Ser Leu Phe Gly
        35                  40                  45
Val Ile Trp Ala Val Tyr Leu Ser Leu Met Ser Gly
    50                  55                  60
```

<210> 33681
<211> 146
<212> PRT
<213> A.fumigatus

<400> 33681

```
Ala Ala Ala Gly Leu Ala Arg Leu Ile Ile Thr Trp Val Phe Thr Gly
1               5                   10                  15
Gly Arg Ser Ala Arg Ser Thr Val Trp Val Val Ile Ser Ala Arg Pro
            20                  25                  30
Ser Tyr Thr Arg Pro Val Phe Pro Ser Ala Gln Glu Thr Val Thr Ser
        35                  40                  45
Trp Leu Val Cys Ser Thr Tyr Val Ala Phe Pro Val Pro Thr Thr Ala
    50                  55                  60
Gly Arg Pro Ser Ser Arg Leu Thr Ile Ala Ala Cys Glu Val Arg Pro
65                  70                  75                  80
Pro Trp Ser Val Thr Ile Ala Ala Ala Arg Phe Met Met Gly Thr Gln
                85                  90                  95
Ser Gly Ser Val Val Gly Val Thr Arg Ile Asp Pro Ser Thr Asn Arg
            100                 105                 110
Ser Trp Ser Arg Ala Asp Ser Met Arg Gln Thr Arg Pro Ala Thr Ala
        115                 120                 125
Ala Ser Pro Ile Glu Arg Pro Val Ala Ser Thr Arg Pro Leu Pro Arg
    130                 135                 140
Pro Thr
145
```

<210> 33682
<211> 372
<212> PRT
<213> A.fumigatus

<400> 33682

```
Val Val Ala Arg Arg Ala Pro Lys Ala Asn His Arg Val Ile Leu Leu
1               5                   10                  15
Trp Phe Glu Phe Arg Ala Ala Asn Glu Pro Gly Val Phe Ile Gly Leu
            20                  25                  30
Glu Val Ala His Ala Lys Asp Gly Gly Thr Gly Val Asp Gly Arg Thr
        35                  40                  45
Lys Ser Cys Glu Ser Leu Arg Gln Leu Val His Lys Ile Val Ala Thr
    50                  55                  60
Val Val Leu Ile Pro Arg Arg Gln Pro Arg Asn Leu Gly Phe Gly Leu
65                  70                  75                  80
Cys Ile Leu His Pro Val Glu Val Asp Gln Cys His Trp Val His Pro
                85                  90                  95
Asp Arg Val Thr Asp Asp Lys Leu His Ala Arg Gln Pro Asp Ala Val
            100                 105                 110
Arg Arg Gln Pro Pro Pro Ala Val Ser Ser Arg Arg Val Gly Gln Val
        115                 120                 125
```

```
Asp His His Leu Gly Leu His Arg Arg Gln Val Arg Gln Ile His Arg
    130                 135                 140
Leu Gly Cys Asp Leu Arg Ala Thr Leu Ile Tyr Gln Ala Arg Val Pro
145                 150                 155                 160
Phe Gly Ala Gly Asp Arg Tyr Leu Leu Ala Gly Val Gln His Val Arg
                165                 170                 175
Ser Ile Pro Cys Ala His Asn Arg Arg Lys Thr Gln Leu Ala Thr Asp
            180                 185                 190
Asp Arg Arg Val Arg Gly Ala Ala Ala Met Val Arg Asp Asp Arg Gly
        195                 200                 205
Arg Ser Leu His Asp Gly His Pro Val Arg Val Cys Gly Gly Ser His
    210                 215                 220
Gln Asn Arg Pro Ile Tyr Glu Pro Val Leu Val Thr Ser Arg Phe Asn
225                 230                 235                 240
Glu Thr Asp Ala Ala Ser His Arg Arg Phe Ser Tyr Arg Lys Ala Arg
                245                 250                 255
Gly Gln His Pro Ala Leu Ala Ala Ala Asn Leu Ile Arg Val Glu Thr
            260                 265                 270
Gly Ser Arg Ile Thr Pro Ala Arg Met His Arg Leu Trp Pro Gly Val
        275                 280                 285
His Asn Val Gln Pro Ala Ser Asp Pro Ile Phe Gly Pro Phe His Val
    290                 295                 300
His Cys Ala Arg Ile Met Ala Leu Asn Gly Thr Gly Pro Ala Cys Lys
305                 310                 315                 320
Leu Glu Asn Leu Arg Ile Ala Glu His Glu Ser Arg Ala Leu Ser Leu
                325                 330                 335
Gly Arg Arg His Val Met Arg Trp Leu Leu Arg Ile Ile Thr Val Asn
            340                 345                 350
His Leu Asp Ser Leu Ile Pro Pro Leu Phe Ala Asp Asn Gly Pro Gln
        355                 360                 365
Pro Gly Leu Ala
    370
```

<210> 33683
<211> 81
<212> PRT
<213> A.fumigatus

<400> 33683

```
Pro Gly Pro Val Arg Arg Trp Val Asp Ser Gly Asp Ser His His Arg
1               5                   10                  15
Pro Gly Leu Gly Ala His His Glu Ala Ser Gly Arg Asp Arg His Gly
            20                  25                  30
Pro Trp Arg Pro His Leu Ala Arg Gly Asp Arg Gln Ser Arg Ala Gly
        35                  40                  45
Ser Ser Gly Gly Cys Gly His Arg Glu Cys Tyr Val Arg Ala Ala His
    50                  55                  60
Gln Pro Gly Gly Asn Gly Leu Leu Arg Arg Arg Glu His Gly Pro Gly
65                  70                  75                  80
Ile
```

<210> 33684
<211> 665
<212> PRT
<213> A.fumigatus

<400> 33684
Leu Pro Ser Tyr Leu Gly Glu Glu Gln Arg Tyr Glu Gly Glu Met Ala
1 5 10 15
Thr Asn Lys Gln Asn Asn Asp Leu Leu Val Cys Asp Phe Glu Gln Ile
20 25 30
Arg Arg His Asp Gly Ala Ile Val Gly Gly Lys Asn Ala Ser Leu Gly
35 40 45
Glu Met Ile Asn Thr Leu Glu Ala Lys Gly Ile Ala Val Pro Pro Gly
50 55 60
Phe Ala Thr Thr Ala Gln Ala Tyr Cys Val Tyr Val Asp Ala Asn Gly
65 70 75 80
Ile Arg Asp Lys Met Gly Ala Leu Ile Ala Asp Trp Glu Ala Gly Lys
85 90 95
Thr Thr Leu Ala Glu Thr Gly Arg Ala Met Arg Arg Leu Phe Leu His
100 105 110
Gly Ser Trp Pro Glu His Ala Ala Thr Arg Ile Arg Asp Ala Tyr Arg
115 120 125
Ala Leu Ala Thr Arg Val Gly Val Ser Glu Pro Ser Val Ala Ile Arg
130 135 140
Ser Ser Ala Thr Ala Glu Asp Leu Pro Asp Ala Ser Phe Ala Gly Gln
145 150 155 160
Leu Glu Ser Tyr Leu Asn Val Thr Gly Glu Arg Ala Val Leu Asp Ala
165 170 175
Cys Arg Arg Cys Tyr Ala Ser Leu Phe Thr Asp Arg Ala Ile Ser Tyr
180 185 190
Arg Arg Thr Lys Gly Phe Asp Gln Met Asn Ile Ala Leu Ser Val Gly
195 200 205
Val Gln Gln Met Val Arg Ser Asp Ala Gly Gly Ser Gly Val Met Phe
210 215 220
Ser Ile Asp Thr Glu Ser Gly Phe Asp Gln Val Val Leu Ile Thr Ala
225 230 235 240
Ala Trp Gly Leu Gly Glu Asn Val Val Gln Gly Ala Val Asn Pro Asp
245 250 255
Glu Tyr Gln Ile Phe Lys Pro Leu Leu Gly Lys Ala Gly Leu Arg Pro
260 265 270
Ile Ile Ser Lys Lys Arg Gly Asp Lys Ala Ile Lys Met Val Tyr Ser
275 280 285
Asp Asp Pro Gln Gln Pro Thr His Asn Val Pro Thr Ser Lys Ala Glu
290 295 300
Arg Ala Ala Phe Val Leu Ser Asp Ser Glu Ile Leu Gln Leu Ala Ser
305 310 315 320
Trp Ala Cys Thr Ile Glu Gly His Tyr Ala Gly Ala Met Asp Met Glu
325 330 335
Trp Ala Lys Asp Gly Ile Thr Gly Arg Leu Tyr Ile Val His Ala Arg
340 345 350
Pro Glu Thr Val His Ser Arg Arg Gly Asp Ala Thr Ser Arg Leu His
355 360 365
Thr Tyr Gln Val Gly Arg Gly Lys Gly Arg Val Leu Ala Thr Gly Leu
370 375 380
Ser Ile Gly Glu Ala Ala Val Ala Gly Arg Val Cys Leu Ile Glu Ser
385 390 395 400
Ala Arg Asp Gln Asp Arg Phe Val Asp Gly Ser Ile Leu Val Thr Pro
405 410 415
Thr Thr Asp Pro Asp Trp Val Pro Ile Met Lys Arg Ala Ala Ala Ile
420 425 430

```
Val Thr Asp His Gly Gly Arg Thr Ser His Ala Ala Ile Val Ser Arg
        435                 440                 445
Glu Leu Gly Leu Pro Ala Val Val Gly Thr Gly Asn Ala Thr Tyr Val
    450                 455                 460
Leu His Thr Ser Gln Glu Val Thr Val Ser Cys Ala Glu Gly Asn Thr
465                 470                 475                 480
Gly Leu Val Tyr Glu Gly Arg Ala Glu Ile Thr Thr Gln Thr Val Asp
                485                 490                 495
Leu Ala Asp Leu Pro Pro Val Lys Thr Gln Val Met Ile Asn Leu Ala
            500                 505                 510
Asn Pro Ala Ala Ala Tyr Arg Trp Trp Arg Leu Pro Ala Asp Gly Ile
        515                 520                 525
Gly Leu Ala Arg Met Glu Phe Val Val Ser Asn Ala Ile Arg Val His
    530                 535                 540
Pro Met Ala Leu Val His Phe Asp Arg Met Gln Asp Ala Glu Ala Lys
545                 550                 555                 560
Ala Glu Ile Ala Arg Leu Thr Thr Gly Tyr Glu His Asp Arg Cys Asp
                565                 570                 575
Tyr Phe Val Asp Gln Leu Ala Gln Gly Phe Ala Ala Leu Cys Ala Ser
            580                 585                 590
Val Tyr Pro Arg Pro Ala Ile Leu Arg Met Ser Asp Phe Lys Thr Asn
        595                 600                 605
Glu Tyr Ala Gly Leu Ile Gly Gly Ala Glu Phe Glu Pro Gln Glu Asp
    610                 615                 620
Asn Pro Met Ile Gly Phe Arg Gly Ala Ser Arg Tyr Tyr Ser Pro Arg
625                 630                 635                 640
Tyr Arg Glu Gly Phe Ala Leu Glu Cys Arg Ala Ile Lys Arg Leu Arg
                645                 650                 655
Glu Asp Met Gly Phe Thr Asn Ala Ile
            660                 665

<210> 33685
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33685
Thr Ser Arg Cys Pro Ser Glu Cys Ser Arg Trp Cys Gly Arg Thr Gln
1               5                   10                  15
Ala Gly Pro Ala Ser Cys Ser Pro Ser Thr Gln Lys Ala Ala Ser Ile
            20                  25                  30
Arg Leu Cys Ser Ser Leu Pro Arg Gly Val Trp Ala Lys Thr Leu Phe
        35                  40                  45
Arg Ala Arg Ser Thr Arg Met Asn Thr Lys Ser Ser Ser Leu Cys
    50                  55                  60

<210> 33686
<211> 447
<212> PRT
<213> A.fumigatus

<400> 33686
Glu Asp Asp Ala Leu Arg Leu Val Thr Ser Asp Arg Glu Arg Leu Arg
1               5                   10                  15
Gly His Gln Arg Ser Ser Ser Arg Arg Pro Asp Lys Gly Gly Pro Arg
            20                  25                  30
```

```
Arg Asp Ala Ser Leu Glu Ser Arg His Ser Arg Ala Pro Ser Arg Asn
        35                  40                  45
Arg Gln Glu Gln Asp Thr Asn Leu Asn Thr Thr Thr Glu Gln Pro Thr
    50                  55                  60
Asn Arg Leu Met Thr Ser Asp Asn Ser Gln Thr Asp Ala Ser Leu Gln
65                  70                  75                  80
Glu Arg Ala Arg Glu Thr Glu Lys Val Gln Met Gln Ala Arg Asn Ala
                85                  90                  95
Ser Ala Ala Ala Leu Ser Ser Thr Ala Leu Ser Glu Gln Arg Arg Lys
            100                 105                 110
Glu Leu Ala Ala Ala Glu Leu Glu Ala Arg Arg Leu Ser Leu Ala Arg
        115                 120                 125
Asn Pro Ser Ala Pro Asn Ile Pro Phe Pro Gly Glu Leu Gln Tyr Ser
    130                 135                 140
Arg Ser Pro Leu Asp Ser Pro Pro Phe Ser Arg Ser Ser Ala Asn Gln
145                 150                 155                 160
Arg Thr Pro Ala Arg Arg Arg Val Ser Thr Ser Lys Ala Ser Pro Asp
                165                 170                 175
Tyr Pro Ser Ser Ser Asp Ser Asn Ser Ser Arg Ser Gly Gly Pro Leu
            180                 185                 190
Gly Leu Pro Ala Thr Pro Lys Ala Met Arg His Pro Lys Tyr Pro Asn
        195                 200                 205
Gly Tyr Glu Glu Thr Val Ser Pro Gly Ser Ser Val Pro Asp Asn Val
    210                 215                 220
Ile Thr Leu Ser Asp Ala Arg Tyr Gln Gly Glu Gly Glu Arg Ile Gly
225                 230                 235                 240
Arg Ser Met Ser Val Pro Val Pro Glu His His Pro Gly Pro Met Pro
                245                 250                 255
Val Asp Leu Pro Thr His Pro Arg Phe Asn Pro Arg Leu Pro Arg Ser
            260                 265                 270
Arg Ser Thr Ser Arg Ser Arg Asn Ile Gly His Arg Arg Glu Ser Ser
        275                 280                 285
Arg Glu Leu Gly Gly Ser Gly Gly Tyr Pro Tyr Gly Ser Ser Pro Val
    290                 295                 300
Thr Val Ser Ile Glu Glu Thr Ile Glu Asp Ser Val Ser Leu Lys Glu
305                 310                 315                 320
Ala Glu Asn Pro Pro Ile Leu Pro Glu Leu Gln His Leu Asn Thr Pro
                325                 330                 335
Pro Pro Pro Pro Pro Pro Ala Pro Leu Gly Pro Val Ser Pro Arg Thr
            340                 345                 350
Ser Ser Gly Thr Ile Asp Ile Ala Ile Asp Asn Glu Asn Leu Gly Lys
        355                 360                 365
Leu Leu Pro Arg Ala Met Thr Ala Ala Pro Ala Ile Thr Thr Glu Thr
    370                 375                 380
Arg Pro Ser Ile Glu Arg Arg Arg Thr Ser Phe Asp His Arg Arg Gly
385                 390                 395                 400
Lys Ser Val Asn Glu Ser Phe Thr Asn Lys Ile Arg Asn Leu Thr Arg
                405                 410                 415
Met Arg Ser Asn Ser Arg Gly Leu Asp Asn Trp Thr Ser Ser Arg Glu
            420                 425                 430
Thr Gly Val Pro Tyr Glu Ser Val Gln Met Ser Asp Gly Arg Met
        435                 440                 445

<210> 33687
<211> 280
<212> PRT
```

<213> A.fumigatus

<400> 33687

```
Tyr Asn Pro Thr Leu Ile Tyr Ala Lys Ala His Leu Ile Phe Thr Glu
1               5                  10                  15
Ala Ile Ser Cys Thr Ala Phe Leu Leu Leu Ser His Phe Ala His Thr
            20                  25                  30
Leu Arg Leu Thr Thr Arg Leu Ile Asp Leu Arg Ile Asp Leu Ala Glu
        35                  40                  45
Pro Tyr Phe Asp Val Ile Arg Tyr Ser Phe Ser Ile Gly Ser Gln Leu
    50                  55                  60
Thr Ser Leu Lys His Ser Phe Asn Tyr Pro Phe Tyr Thr Ser Gln Ser
65                  70                  75                  80
Pro Glu His Ile Asp Ser His Pro Lys Ala Asn Glu Met Ser Ser Pro
                85                  90                  95
Ser Val Arg Asn Pro Val Gln Arg Asn Pro Gly Thr Thr His Lys Ser
            100                 105                 110
Arg Lys Gly Ser Gly Ser Ser Ala Ala Ser Ser Arg Pro Glu Ile Thr
        115                 120                 125
Thr Pro Lys Asn Lys Lys Thr Pro Arg Lys Leu Gln Thr Arg Thr Pro
    130                 135                 140
Gln Pro Val Glu Glu Asp Val Asp Asp Glu Lys Pro Pro Thr Pro Ser
145                 150                 155                 160
Pro Gln Pro Thr Lys Lys Lys Phe Gln Pro Glu Pro Val Gln Pro Glu
                165                 170                 175
Val Ser Pro Ala Pro Glu Gly Asn Arg Asp Glu Pro Glu Gln Gln Glu
            180                 185                 190
Glu Asp Lys Thr Ala Leu Pro Ala Arg Pro Lys Lys Lys Arg Ser Lys
        195                 200                 205
Pro Glu Ala Glu Gln Arg Gly Ile Ser Ser Pro Leu Pro Gly Asp Val
    210                 215                 220
Gln Pro Gln Ala Ser Gly Ser Ala Ser Arg Gly Asp Lys Ala Thr Asp
225                 230                 235                 240
Leu Thr Gly Thr Ala Lys Ala Leu Gly Gly Lys Val Lys Asp Thr Ala
                245                 250                 255
Gln Asp Thr Arg Glu Glu Val Lys Glu Asp Val Pro Ser Thr Pro Leu
            260                 265                 270
Asp Leu Ser Ala Leu Lys Gly Leu
        275                 280
```

<210> 33688
<211> 173
<212> PRT
<213> A.fumigatus

<400> 33688

```
Asn Ile Ala Ser Thr Ile Pro Phe Ile Pro Pro Ser Leu Pro Ser Ile
1               5                  10                  15
Ser Ile Leu Thr Gln Arg Pro Thr Lys Cys Pro Arg Gln Ala Phe Val
            20                  25                  30
Ile Pro Ser Arg Glu Thr Leu Val Pro Pro Thr Ser Leu Ala Arg Val
        35                  40                  45
Arg Val Pro Ala Leu Arg Pro Gln Gly Arg Arg Ser Leu Pro Pro Arg
    50                  55                  60
Thr Arg Arg Leu Pro Ala Ser Cys Arg Pro Glu Arg Pro Asn Pro Ser
65                  70                  75                  80
```

```
Arg Lys Thr Leu Thr Thr Arg Ser Leu Gln Leu His Leu Leu Asn Arg
                85                  90                  95
Arg Arg Arg Ser Phe Ser Pro Ser Pro Cys Ser Leu Arg Tyr Arg Leu
            100                 105                 110
His Arg Lys Ala Thr Gly Thr Ser Gln Ser Ser Lys Arg Arg Thr Arg
        115                 120                 125
Arg His Ser Leu Pro Gly Arg Arg Arg Arg Gly Pro Ser Pro Arg Leu
    130                 135                 140
Ser Ser Gly Ala Phe Arg Pro Pro Ser Arg Val Met Ser Ser Arg Lys
145                 150                 155                 160
His Pro Ala Leu Gln Ala Glu Ala Ile Arg Pro Arg Thr
                165                 170
```

<210> 33689
<211> 175
<212> PRT
<213> A.fumigatus

<400> 33689

```
Lys Gly Ser Ala Thr Asp Cys Leu Gly Lys Tyr Gln Met Ser Phe Cys
1               5                   10                  15
Val Asp Gln Ser Arg Ile Val Leu Tyr Lys Arg Gln Leu Ala Ser Ser
            20                  25                  30
Thr Tyr Arg Ser Phe Cys Ala Asn Ile Tyr Ser Ser Gln Arg Ser Ile
        35                  40                  45
Pro Phe Asn Ser Phe Lys Cys Thr Gln Ala Thr Ile Thr Cys Ala Tyr
    50                  55                  60
Tyr His Pro Thr Ser Trp Thr Ile Asp Ile Ile Met His Gln Ala Arg
65                  70                  75                  80
Pro Pro Leu Ala Val Ser Ser Cys Ser Phe His Trp Ala Leu Val Pro
                85                  90                  95
Pro Phe Ala Ser Phe Leu Ser Ser Lys Thr Ile Thr Gly Gly His Ile
            100                 105                 110
Cys Asn Glu Gly Asn Ala Lys Arg Gln Pro Gln Ser Ile Gly Thr Gly
        115                 120                 125
Arg Trp Leu Glu Pro Lys Gly Gln Ser Val Asp Gly Gln Ala Ser Met
    130                 135                 140
Glu Asn Trp Thr Ser Asn Gln Val Gly Glu Glu Pro Gly Asn Arg Leu
145                 150                 155                 160
Lys Glu Ile Asn Tyr Asp Cys Ile Ser Gly Arg Lys Gly Pro Ala
                165                 170                 175
```

<210> 33690
<211> 168
<212> PRT
<213> A.fumigatus

<400> 33690

```
Leu Ile His Val Gln Ile Ile Lys Ala Gln Glu Glu Ser Asp Leu Gln
1               5                   10                  15
Leu Cys Trp Thr Tyr Leu Ala Leu Ala Phe Asn Met Cys Gln Ser Met
            20                  25                  30
Gly Leu His Arg Ser Ala Ala Leu Lys His Asp Pro Val Pro Ile Ala
        35                  40                  45
Asp Ala Lys Arg His Ala Phe Trp Ser Leu Tyr Thr Ile Asp Lys Asn
    50                  55                  60
```

```
Leu Ser Leu Asn Leu Gly Leu Ala Ser His Phe Gln Asn His Asp Ile
65                  70                  75                  80
Asp Ala Glu Phe Phe Ala Pro Ser Asp Asn Pro His Tyr Arg Pro Trp
                85                  90                  95
Asp Leu Met Thr Leu Thr Thr Ile Asp Phe Ala Thr Leu Gln Gly Arg
            100                 105                 110
Ile Tyr Asp Arg Leu Tyr Ser Thr Ser Ala Thr Gln Ala Thr Glu Ser
        115                 120                 125
Glu Arg Leu Lys Ser Ile Glu Glu Leu Ser Ser Asp Leu Met Leu Val
    130                 135                 140
Arg Glu Arg Leu Leu Gly Val Ser Val Ser Ile Ile Asp Asp Val Leu
145                 150                 155                 160
Leu Pro Thr Leu Ala Arg Ser Met
                165
```

<210> 33691
<211> 410
<212> PRT
<213> A.fumigatus

```
<400> 33691
Arg Val Val Cys Ala Pro Arg Arg Arg Lys Lys Ser Cys Arg Ser Leu
1               5                   10                  15
Asn Ser Ala Pro Ser Asn Leu Thr Pro Cys Gly Val Ser Ser Ser Pro
            20                  25                  30
Lys Leu His Leu Ile Thr His Ile Cys Phe Cys Ser Glu Pro Lys Asn
        35                  40                  45
Ile Asp Leu Leu Val Phe Cys Lys Tyr Thr Leu Ser Ala Val Ser Arg
    50                  55                  60
Pro Arg Leu Gln Val Pro Asn Thr Pro His Arg Asn Leu Lys His Ser
65                  70                  75                  80
Leu Thr Asp Gly Ser Val Glu Ala Gln Trp Arg Gln Pro Ser Gln Leu
                85                  90                  95
Arg Arg Leu Pro Arg Ala Ala Arg Ala Ser Arg Ala Ala Asp Arg His
            100                 105                 110
Arg Arg Asn Gln Gln Gln Ser Arg Asn Arg Ile Ala Arg Leu Lys Ile
        115                 120                 125
Arg Pro Ala Pro Ile Leu Arg Val Ser Leu Arg Pro Gln Arg Ser Arg
    130                 135                 140
Leu Pro Ile Cys Lys Phe Tyr Gly Leu Arg Cys Ser Arg Lys Thr Val
145                 150                 155                 160
Lys Leu Thr Ser Thr Ser Ser Ser Ser Asn Asp Ser Leu Tyr Pro Lys
                165                 170                 175
Pro Ser Tyr Lys Pro Pro Ser Gly Phe Lys Ala Ala Lys Lys Gln Leu
            180                 185                 190
Pro Pro Ser Ser Thr Thr Ser Ser Leu Leu Ser Asp Leu Arg Gly Lys
        195                 200                 205
Gln Leu Phe His Ile Thr Ala Pro Ser Phe Leu Pro Leu Ser Lys Val
    210                 215                 220
Lys Glu Val Ser Leu Ala Lys Ile Leu Gln Gly Glu Pro Ile Leu Glu
225                 230                 235                 240
His Glu Gly Val Gln Tyr Gly Ile Pro Ser Glu Asn Ile Gly His Gly
                245                 250                 255
Asp Leu Gly Gly Lys Ser Leu Leu Leu Tyr Asp Ser Lys Thr Gln Thr
            260                 265                 270
Tyr Tyr Ser Ala Pro Ala Thr Thr Met Pro Thr Tyr His Val Gln Gln
```

```
        275                 280                 285
Leu Ile Asp Leu Pro Lys Ser Leu Gly Thr Glu Asp Ala Val Leu Ala
    290                 295                 300
Ala Ala Gln Asp Gln Ile Lys Pro Pro Arg Lys Gln Pro Lys His Leu
305                 310                 315                 320
Lys Met Arg Phe Arg Pro Val Gly Ser Glu Glu Gly Pro Pro Glu Thr
                325                 330                 335
Ile Gly Ser Ser Ser Glu Glu Ser Glu Gly Glu Gly Lys Pro Asn Ser
            340                 345                 350
Lys Phe Pro Arg Glu Ser Lys Thr Glu Arg Glu Glu Arg Lys Arg Lys
        355                 360                 365
His Ala Glu Glu Val Glu Gly Ser Gln Ser Ala Gly Leu Pro Arg Lys
    370                 375                 380
Lys Thr Lys Lys Gln Thr Val Asp Thr Ser Gln Ser Ser Lys Lys Arg
385                 390                 395                 400
Asp Glu Lys Lys Arg Lys Lys Glu Lys Ala
                405                 410
```

<210> 33692
<211> 81
<212> PRT
<213> A.fumigatus

```
<400> 33692
Thr Thr Cys Ser Asp Ser Lys Gln Val Cys Thr Tyr Lys Glu Glu Gln
1               5                   10                  15
Ala Gln Arg Pro Ser Leu Ala Ser Gly Val Thr Cys Leu Tyr Gln Leu
            20                  25                  30
Phe Thr Ser Ser Gln Pro His Gln Ser Trp Arg Ser His Val Ile Glu
        35                  40                  45
Gly Gln Tyr Ser Ser Asn Gln Lys Gln Ser Gly Ile Thr Gln Leu Ala
    50                  55                  60
Tyr Val Ile Ala Leu Leu Ile Gly Leu Tyr Phe Thr Leu Pro Ser His
65                  70                  75                  80
Leu
```

<210> 33693
<211> 143
<212> PRT
<213> A.fumigatus

```
<400> 33693
Asn Ser Val Leu Ala Pro Val Ser Ala Phe Ala Ala Arg Lys Ala Arg
1               5                   10                  15
Gln Gln Gln Ala Arg Leu Leu Glu Pro Glu Lys Thr Ala Gln Asn Glu
            20                  25                  30
Pro Ala Val Glu Pro Pro Ser Lys Arg Ala Arg Arg Ser Pro Glu Glu
        35                  40                  45
Gly Ala Ala Arg Gln Ala Ala Asn Glu Asn Asp Arg Val Gln Thr Arg
    50                  55                  60
Arg Ser Ala Arg Thr Lys Ala Glu Thr Leu Ser Ser Ala Glu Leu Ala
65                  70                  75                  80
Glu Lys Gln Pro Gln Glu Ser Ala Ala Ala Ala Arg Ala Gln Thr Ala
                85                  90                  95
Glu Arg Thr Pro Ala Pro Glu Lys Gly Asp Ala Asp Thr Phe Asp Ala
```

```
            100                 105                 110
Ala Glu Glu Glu Glu Glu Glu Lys Glu Glu Asp Ile Leu Glu Arg
        115                 120                 125
Glu Asn Gly Val Gly Val Ile Ala Val Glu Asp Asp Ala Glu Gly
    130                 135                 140

<210> 33694
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33694
Tyr Lys Ile Asn Phe Asn Ala His Thr Arg Val Leu Arg Ile Lys Val
1               5                   10                  15
Met Pro Thr Arg Leu His Asp Val His Gln Arg Trp Ala Thr Ala Ala
            20                  25                  30
Met Ala Thr Trp Ala Leu Asn Gly Leu Leu Asn Gln Asp Glu Val Asp
        35                  40                  45
Leu Leu Cys Gly Ser Val Gly Ser Ser Met Tyr Tyr Phe Cys
    50                  55                  60

<210> 33695
<211> 61
<212> PRT
<213> A.fumigatus

<400> 33695
Leu Gly Lys Leu Leu Val Ser Phe Asp Leu Thr His Met Met Glu Ala
1               5                   10                  15
Ile Val Asn Arg Ala Ile Ser Asp Gln Lys Gln Tyr Ala Glu Ile Ser
            20                  25                  30
Thr Cys Ser Thr Ile Lys Ser Asn Lys Ser Glu Thr Thr Ile Gly Arg
        35                  40                  45
Lys Trp Gln Ala Glu Val Arg Thr Thr Pro Tyr Tyr Ser
    50                  55                  60

<210> 33696
<211> 79
<212> PRT
<213> A.fumigatus

<400> 33696
Pro Pro Leu Trp Phe Cys Arg Leu Glu Tyr Val Leu Leu Leu Leu Gly
1               5                   10                  15
Ser Tyr Gly Thr Asn Lys Tyr Ile Leu Ala Phe Thr Gly Phe Ala Gly
            20                  25                  30
Asn Tyr Arg Gly Ser Ser Lys Glu Pro Asp Tyr Ser Phe Cys Pro Asn
        35                  40                  45
Ser Ser Ala Phe Pro Ser Leu Val Ile Glu Ala Gly Trp Ala Glu Ser
    50                  55                  60
Phe Pro His Cys Leu His Pro Gly Leu Glu Gly Ser Ala Ser Val
65                  70                  75

<210> 33697
<211> 79
<212> PRT
```

<213> A.fumigatus

<400> 33697

```
Pro His Met Val Ser Val Pro Leu Cys Leu Glu Ala Gln Tyr Gly Trp
1               5                  10                  15
Ile Met Val Arg Pro Asp Ile Asp Asn Leu Arg Thr Lys Phe Phe Ser
            20                  25                  30
Asp Tyr Val Thr Gly Leu Glu Gly Leu Thr Ser Leu Arg Thr Leu Leu
        35                  40                  45
Cys Arg Leu Leu Leu Val Lys Ser Cys Glu Gln Thr Thr Gly Gly Leu
    50                  55                  60
Leu Gly Val Gln Gln Met Asp Tyr Ile Ala Trp Pro Gly Glu Glu
65                  70                  75
```

<210> 33698
<211> 350
<212> PRT
<213> A.fumigatus

<400> 33698

```
Phe Pro Gln Gly Tyr Cys Phe Asp Ser Gly Arg Leu Glu Ser Leu Gln
1               5                  10                  15
Ser Ala Leu Glu Ala Glu Ser Ser Leu Lys Arg Arg Arg Gln Ser Ser
            20                  25                  30
Ser Gly Asp Leu Asn Phe Leu Arg Pro Gln Lys Arg Ala Thr Asp Asp
        35                  40                  45
Arg Arg Pro Ser Ser Ser Ser Thr Ala Ser Ser Ser Thr Pro Gln Ser
    50                  55                  60
Gln Leu His Asp Glu Ser Glu Glu Leu Lys Arg Leu Leu Gly Leu Asp
65                  70                  75                  80
Ser Asp Asp Thr Leu Arg Ala Leu Gln Glu Glu Gln Arg Lys Ala Glu
                85                  90                  95
Lys Trp Leu Glu Glu Arg Lys Glu Gln Glu Arg Arg Asp Glu Glu Tyr
            100                 105                 110
Ala Arg Met Leu Met Asn Gly Met Tyr Glu Pro Pro Arg Pro Ala Ser
        115                 120                 125
Ala His Ser Thr Ala Ser Thr Asn Tyr Ser Arg Ser Ser Ile Gln Leu
    130                 135                 140
Pro Ser Glu Ala Ser Leu Val Tyr Arg Gly Glu Ala Gly Pro Ser Ser
145                 150                 155                 160
Ile Pro Glu His Arg Ser Ile Asn Thr Pro Leu Val Asp Arg Leu Val
                165                 170                 175
Asp Arg Ser Arg Ser Ser Tyr Ser Ile Pro Ser Thr Pro Glu Ser Gly
            180                 185                 190
His Ser Glu Val Gln His Leu Pro Leu Ile Thr Leu Arg Asp Ser Asp
        195                 200                 205
Asp Ser Asp Ile Ala Glu Ile Ser Pro Gln Asp Phe His Ser Gly Gln
    210                 215                 220
Ser Arg Pro Gln Ser His His Arg Leu Tyr Pro Ser Tyr Asn Thr His
225                 230                 235                 240
Pro Gly His Ser Ser Asn Arg Arg Ser Val Ala Thr Glu Leu Gly Arg
                245                 250                 255
Tyr Val Pro Val Thr Gln Pro Ser Ile Arg Leu Gly Tyr Ser Ala Pro
            260                 265                 270
Gln Gly Ser Val Tyr Gly Pro Asn Val Leu Gln Asn Thr Met Ala Arg
        275                 280                 285
```

```
Leu Gln Ala Ser Arg Gln Met Leu Gln Gln Ala Gly Arg Ser Val Phe
    290                 295                 300
Glu Gly Phe Ser Ser Tyr Phe Leu Pro Ser Gly Ser Ser Gly Leu Pro
305                 310                 315                 320
Thr Gly Leu Ser Ala Asp Asp Tyr Tyr Ala Ser Leu Lys Gly Tyr Arg
                325                 330                 335
Tyr Ala Ala Leu Arg Leu Asp Ile Thr Thr Ala Ser Leu Gly
            340                 345                 350
```

<210> 33699
<211> 180
<212> PRT
<213> A.fumigatus

<400> 33699

```
Asp Phe Thr Arg Pro Leu Lys Gly Pro Pro Gly Glu Ser Arg Asp Lys
1               5                   10                  15
Ala Met Gln Gln Leu Gln Val Leu Val Lys Ala Val Leu Leu Arg Arg
            20                  25                  30
Thr Lys Thr Ser Lys Ile Asp Gly Gln Pro Ile Leu Arg Leu Pro Pro
        35                  40                  45
Arg Val Leu Glu Lys Val Tyr Ala Val Phe Ser Glu Asp Glu Gln Ala
    50                  55                  60
Ile Tyr Asp Ala Leu Glu Ser Lys Thr Gln Val Gln Phe Asn Lys Tyr
65                  70                  75                  80
Leu Lys Ala Asn Ala Val Gly Arg Asn Tyr Ser Asn Ile Leu Val Leu
                85                  90                  95
Leu Leu Arg Leu Arg Gln Ala Cys Cys His Pro His Leu Met Thr Asp
            100                 105                 110
Phe Ser Val Glu Val Asn Ala Ala Thr Asp Glu Leu Asp Leu Val Ala
        115                 120                 125
Asn Ala Lys Ala Phe Gly Asp Glu Val Val Val Arg Leu Lys Glu Asn
    130                 135                 140
Glu Asn Leu Glu Cys Pro Ile Cys Ile Asp Ala Val Asp Asn Pro Ile
145                 150                 155                 160
Ile Phe Phe Pro Cys Gly Leu His His Gly Ala Gly Arg Ser Arg Ala
                165                 170                 175
Thr Met Thr Ala
            180
```

<210> 33700
<211> 285
<212> PRT
<213> A.fumigatus

<400> 33700

```
Tyr Asn Asn Cys Ile Ile Arg Leu Thr Ile Val Phe Arg Ser Ser Asp
1               5                   10                  15
Phe Tyr Glu Pro Gly Val Asp Pro Lys Gln Val Gln Glu Glu Ile Lys
            20                  25                  30
Gln Leu Leu Glu Thr Ile Arg Pro Asp Thr Glu Ile Ala Lys Glu Lys
        35                  40                  45
Arg Glu Gly Thr Pro Glu Ala Leu Arg Tyr Thr Leu Leu Glu His Gln
    50                  55                  60
Lys Leu Gly Leu Thr Trp Met Lys Thr Met Glu Glu Ser Glu Lys Lys
65                  70                  75                  80
```

```
Gly Gly Ile Leu Ala Asp Asp Met Gly Leu Gly Lys Thr Ile Gln Ala
                85                  90                  95
Ile Ala Leu Ile Val Ser Arg Pro Ser Thr Asp Pro Glu Arg Lys Pro
            100                 105                 110
Thr Leu Ile Val Ala Pro Val Ser Leu Met Gln Gln Trp Lys Arg Glu
        115                 120                 125
Ile Gln Lys Ala Val Lys Pro Gly Arg His Gln Leu Ser Val Tyr Val
    130                 135                 140
Leu His Gly Asp Lys Arg Val Val Ser Tyr Arg Asp Met Lys Asp Tyr
145                 150                 155                 160
Asp Val Val Leu Thr Thr Phe Gly Thr Leu Ser Ser Glu Leu Lys His
                165                 170                 175
Arg Glu Lys Tyr Asp Glu Leu Gln Ser Ala Gly Ala Asn Glu Glu Ala
            180                 185                 190
Leu Ser Arg Thr Leu Leu Lys Asn Leu Pro Cys Leu Gly Pro Ser Ser
        195                 200                 205
Leu Trp His Arg Val Ile Ile Asp Glu Ala Gln Cys Ile Lys Asn Arg
    210                 215                 220
Asn Thr Arg Ser Ala Gln Ala Cys Cys Arg Leu Asn Ser Thr Tyr Arg
225                 230                 235                 240
Trp Cys Met Ser Gly Thr Pro Met Met Asn Thr Val Glu Glu Leu His
                245                 250                 255
Ser Leu Leu Lys Phe Leu Arg Ile Arg Pro Tyr Ser Ser Leu Asp Arg
            260                 265                 270
Phe Asn Lys Val Ser Val Gly Asp His Thr Val Phe Gly
        275                 280                 285

<210> 33701
<211> 106
<212> PRT
<213> A.fumigatus

<400> 33701
Ser Ser Ile Ser Pro Arg Leu Thr Arg Arg Ser Ile Pro Cys Gln Leu
1               5                   10                  15
Glu Ile Pro Val Glu Ser Arg Leu Leu Phe Leu Tyr Lys Asp Ser Ile
            20                  25                  30
Ile Pro Gly Arg Ser Val Leu Gly Ala Gln Leu Asn Thr Leu Arg Thr
        35                  40                  45
Ile Leu Thr Ala Ser Thr Ala His Ile Pro Ser Tyr Arg Ser Gln Thr
    50                  55                  60
His Asp Leu Pro Asn His Leu Val Phe Leu Ile Gly Phe Phe Phe Phe
65                  70                  75                  80
Phe Ala Ile Phe Pro Pro Leu Leu Ile Leu Ile Glu Thr Pro Ile Phe
                85                  90                  95
Ala Gly Leu Val Leu Val Leu Gly Ser Leu
            100                 105

<210> 33702
<211> 192
<212> PRT
<213> A.fumigatus

<400> 33702
Ser Ala Thr Ala Trp Ala Arg Pro Thr Phe Lys Gln Asn Cys Asn Val
1               5                   10                  15
```

```
Asp Lys Leu Ile Asn Ile Leu Asp Gln Ala Val Ser Ala Tyr Asp Ala
            20                  25                  30
Gln Asp Leu Ala Thr Lys Ala Ile Pro Leu Leu His Thr Leu Val Thr
        35                  40                  45
Ile Tyr Glu Val Ala Pro Asp Gly Pro Arg Lys Tyr Met Gln Trp Leu
    50                  55                  60
Leu Leu Pro Glu Asp Ser Asp Arg Lys Gln Pro Ile Gly Lys Ser Asp
65                  70                  75                  80
Thr Leu Ser Ser Lys Leu Leu Arg Leu Ser Thr Thr Pro Tyr Gln Asn
                85                  90                  95
Leu Lys Ile Ala Ile Ser Glu Leu Met Phe Val Leu Ser Gly Lys Asp
            100                 105                 110
Ala Glu Asn Leu Thr Lys Asn Ile Gly Tyr Gly Phe Ala Ala Gly Leu
        115                 120                 125
Leu Ala Ser Arg Gly Ile Glu Ile Pro Gln Ser Ala Ser Glu Ala Phe
    130                 135                 140
Ala Thr Asn Ser Asn Ser Phe Asp Pro Glu Ile Asn Pro Ile Thr Gly
145                 150                 155                 160
Gln Arg Trp Asp Ala Glu Lys Gln Asp Thr Gly Pro Pro Met Ser Arg
                165                 170                 175
Glu Glu Lys Glu Arg Glu Ala Glu Arg Leu Phe Val Leu Phe Glu Arg
            180                 185                 190
```

<210> 33703
<211> 135
<212> PRT
<213> A.fumigatus

<400> 33703

```
Gly Gly Thr Arg Asn Gly Ser Lys His Thr Arg Met Val Arg Met Leu
1               5                   10                  15
Ser Cys Leu Ile Phe Lys Arg Arg Ser Phe Phe Ser Asn Val Phe Cys
            20                  25                  30
Val Met Leu Arg Leu Ser Tyr Pro His His Ser Gln Ile Ser Glu Leu
        35                  40                  45
Gln Ile Ala Thr Ser Gln Pro Leu Gly Leu Ile Met Gln Tyr Thr Phe
    50                  55                  60
Arg Thr Ile Ile Ala Leu Gly Leu Ala Phe Tyr Thr Ser Trp Ser Leu
65                  70                  75                  80
Ala Phe Ile Thr Leu Ala Gly Ile Pro Ala Phe Ser Ala Ile Val Ala
                85                  90                  95
Phe Leu Ser Ser Arg Ile Lys Pro Arg Ile Glu Ala Gln Gln Val Glu
            100                 105                 110
Leu Asn Arg Ala Ser Lys Val Ala Asn Asn Ala Thr Ser Leu Ile Asp
        115                 120                 125
Thr Val Lys Cys Leu Asn Gly
    130                 135
```

<210> 33704
<211> 126
<212> PRT
<213> A.fumigatus

<400> 33704

```
Tyr Ser His Arg Tyr Leu Gln Phe Pro Gly Leu Ala Val Glu His Leu
1               5                   10                  15
```

```
Met Thr Tyr Trp Ala Ile Leu Glu Lys Val Arg Gly Ser Gln Leu Arg
            20                  25                  30
Leu Thr Lys Met Asp Asp Asp Ile Tyr Glu His Phe Lys Arg Glu Phe
        35                  40                  45
Pro Asp Phe Asp Pro Ala Ala Pro Ile Asp Glu Asp Ser Met Lys Ser
    50                  55                  60
Lys Glu Gly Lys Glu Lys Trp Arg Lys Phe Ile Lys Glu Tyr Glu Lys
65                  70                  75                  80
Lys Ile Ser Asp Tyr Asn Phe Gly Thr Ile Leu Arg Val Ser Pro Gly
                85                  90                  95
Val Glu Tyr Asp Gln Asp Thr Thr Ile Phe Gly Arg Leu Leu Leu Cys
            100                 105                 110
Ala Asn Ser Phe Gly Lys Val Arg Ile Ala Thr Asn Arg His
        115                 120                 125
```

<210> 33705
<211> 177
<212> PRT
<213> A.fumigatus

```
<400> 33705
Trp Ser Phe Leu Thr Leu Leu Ile Ser Ser Glu Ile Thr Glu Asn Pro
1               5                   10                  15
Gly Arg Gly Arg Phe Ser Ile Ser Leu Tyr Lys Met Thr Phe Ala Leu
            20                  25                  30
Ser Ile Ser Leu Pro Ser Leu Arg Arg Ile Leu His Trp Arg Trp Ser
        35                  40                  45
Trp Met Ser Leu Phe Ser Phe Thr Thr Lys Asn His Leu Pro Thr Leu
    50                  55                  60
Ser Leu Ala Met Ala Leu Ala Leu Leu Ala Ser Ser Val Thr Pro Ile
65                  70                  75                  80
Phe Ala Ile Leu Leu Gly Asp Ile Phe His Ser Phe Thr Ser Phe Gly
                85                  90                  95
Gly Gly Asp Ile Ser Gly Asp Asp Leu Leu Arg Lys Val Lys Arg Asn
            100                 105                 110
Gly Ile Ala Leu Ser Gly Leu Gly Ile Ala Ser Trp Val Leu Asn Gly
        115                 120                 125
Thr Tyr Phe Ser Leu Phe Ile Val Phe Gly Glu Leu Gln Val Ser Asn
    130                 135                 140
Ala Arg Thr Arg Ile Phe Glu Glu Leu Leu Arg Arg Asp Gln Glu Trp
145                 150                 155                 160
Phe Glu Thr His Lys Asp Gly Ser Asn Ala Phe Leu Ser Tyr Leu Gln
                165                 170                 175
Ala
```

<210> 33706
<211> 106
<212> PRT
<213> A.fumigatus

```
<400> 33706
Arg Leu Asn Val Asn Ala Ala Ser Ile Val Ala Ile Gln Leu Phe Tyr
1               5                   10                  15
Leu Gln Trp Glu Lys Lys Ala Pro Asp Thr Phe Gln Val Pro Leu Glu
            20                  25                  30
```

```
Thr Leu Pro Thr Gly Phe Phe Ala Leu Ile Gly Lys Asn Arg Ser Ser
        35                  40                  45
Gln Lys Ser Phe Leu Leu Val Glu Ser Arg Val Thr Val Ala Leu His
    50                  55                  60
Glu Leu Ala Phe Leu Arg Glu Leu Leu Ser Phe Leu Asp Ser Thr Val
65                  70                  75                  80
Pro Ser Val Cys Gly Arg Asn Arg Leu Gln Arg Arg Ser Trp Gln Asp
                85                  90                  95
His Glu Lys Ala Asp Tyr His Asp Arg Trp
            100                 105
```

<210> 33707
<211> 70
<212> PRT
<213> A.fumigatus

<400> 33707

```
Arg Thr Asn Leu Pro Pro Pro Ser Ser Phe Val Met Pro Ala Ala Ala
1               5                   10                  15
Asp Thr Glu Glu Glu Gln Pro Met Leu Pro Leu Pro Gly Ala Pro Ser
            20                  25                  30
Ser Ser Trp Ala Gln Phe Cys Gln Arg Phe Arg Ala Leu Phe Ser Gly
        35                  40                  45
Ala Asp Pro Arg Val Cys Val Ala Phe Trp Leu Phe Gly Glu Ser Met
    50                  55                  60
Gln Thr Glu Ala Phe Pro
65                  70
```

<210> 33708
<211> 260
<212> PRT
<213> A.fumigatus

<400> 33708

```
Ile Glu Ala Tyr Leu Asp Ala Asp Asn Tyr Ala Leu Cys Leu Ile Ile
1               5                   10                  15
Ile Gly Leu Ile Asn Asn Val Leu Tyr Val Val Ile Leu Ser Ala Ala
            20                  25                  30
Leu Asp Leu Val Gly Pro Ser Val Pro Lys Gly Val Val Leu Leu Ala
        35                  40                  45
Asp Val Ile Pro Ser Phe Ala Thr Lys Leu Ile Ala Pro Tyr Phe Ile
    50                  55                  60
His Met Val Pro Tyr Pro Val Arg Ile Ile Ile Phe Val Phe Leu Ser
65                  70                  75                  80
Ala Ala Gly Met Leu Leu Val Ala Leu Ser Pro Pro Tyr Thr Asp Gly
                85                  90                  95
Gly Thr Ile Ala Thr Lys Leu Ala Gly Ile Val Leu Ala Ser Leu Ser
            100                 105                 110
Ser Gly Gly Gly Glu Leu Ser Phe Val Gly Leu Thr His Phe Tyr Gly
        115                 120                 125
Pro Phe Ser Leu Ala Ala Trp Gly Ser Gly Thr Gly Ala Ala Gly Leu
    130                 135                 140
Val Gly Ala Gly Ala Tyr Ala Leu Ala Thr Thr Ser Leu Gly Leu Ser
145                 150                 155                 160
Val Lys Ala Thr Leu Leu Ala Ser Ser Cys Leu Pro Ala Val Met Val
                165                 170                 175
```

```
Val Ser Phe Phe Met Val Leu Pro Arg Ser Pro Leu Gln Pro Ile Ser
            180                 185                 190
Ala Ala Tyr Ala Gly Tyr Arg Ala Val Glu Glu Arg Glu Glu Leu Ala
        195                 200                 205
Glu Glu Arg Glu Phe Met Glu Gly Asp Arg Asp Ala Thr Phe Asp Glu
    210                 215                 220
Gln Glu Arg Leu Leu Gly Ala Ser Val Leu Ser Asp Gln Ser Lys Lys
225                 230                 235                 240
Ala Gly Trp Gln Arg Phe Lys Arg Asp Leu Lys Arg Val Arg Gly Leu
                245                 250                 255
Phe Phe Pro Leu
            260
```

<210> 33709
<211> 79
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (62),(70),(71)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33709

```
Ile Phe Thr Val Val Cys Gly Phe Gln Ser Phe Gln Lys Lys Tyr Pro
1               5                   10                  15
Asp Val Ile Ser Glu Ile Arg Gly Gly Gly Leu Phe Leu Gly Val Gln
            20                  25                  30
Leu Ser Lys Ser His Thr Thr Lys Ala Ser Asp Leu Val Thr Ala Val
        35                  40                  45
Pro Glu Arg Gly Leu Leu Ile Ile Thr Ala Gly Glu Gly Xaa Leu Arg
    50                  55                  60
Phe Val Pro Pro Pro Xaa Xaa Thr Glu Glu Gln Ile Lys Ser Phe
65                  70                  75
```

<210> 33710
<211> 173
<212> PRT
<213> A.fumigatus

<400> 33710

```
His Ser Asn Ala Ser Met Leu Pro Leu Leu Leu Val Tyr Val Ala Glu
1               5                   10                  15
Tyr Thr Ile Asn Gln Gly Val Ser Pro Thr Leu Leu Phe Pro Leu Asp
            20                  25                  30
Glu Ser Pro Phe Ala His Phe Arg Ala Phe Tyr Pro Ala Tyr Asn Ala
        35                  40                  45
Ile Tyr Gln Val Gly Val Phe Ile Ser Arg Ser Ser Thr Pro Phe Phe
    50                  55                  60
Arg Ile His Asp Leu Tyr Leu Pro Ser Phe Leu Gln Ile Leu Asn Leu
65                  70                  75                  80
Val Leu Leu Thr Leu Gln Ala Val Phe Asn Phe Ile Pro Ser Val Tyr
                85                  90                  95
Ile Ile Phe Ile Ile Ile Phe Trp Glu Gly Leu Leu Gly Gly Leu Val
            100                 105                 110
Tyr Val Asn Thr Phe Ala Glu Ile Gly Asp Arg Val Pro Lys Glu Asp
```

```
        115                 120                 125
Arg Glu Phe Ser Leu Gly Ala Thr Thr Val Ser Asp Ala Ala Gly Ile
    130                 135                 140
Cys Ile Ala Gly Phe Val Ser Met Val Phe Glu Val Trp Leu Cys Asp
145                 150                 155                 160
Trp Gln Val Thr His Gly Arg Asp Tyr Cys Arg Arg Ile
                165                 170
```

<210> 33711
<211> 283
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (65)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33711

```
Leu Ile Asn Thr Leu Ile Ser Phe Ile Ile Ile Leu Ile Phe Ala Phe
1               5                   10                  15
Ile His Leu Phe Ser Ser Ser Pro Ser Phe Leu Ile Phe Ser Val Ser
            20                  25                  30
Arg Leu Val Asn Ser Ser Ser Asn Thr Asp Pro Ala His Pro Pro Pro
        35                  40                  45
Tyr Lys Ser Asp Ile Ile Tyr Phe Ser Ser Leu Ile Thr His Ser Ser
    50                  55                  60
Xaa Phe Tyr Val Asn Leu Thr Leu Leu Tyr Val Tyr Ile Leu Ser Arg
65                  70                  75                  80
Leu Ser Ser Leu Ala Thr Met Pro Arg Phe Asp Asp Ala Asp Phe Gly
                85                  90                  95
Val Glu Pro Ala Pro Ala Gly Ala Arg Ser Pro Arg Asp Ala Arg Gly
            100                 105                 110
Ser Ala Ser Gly Ser Leu Pro Ile Pro Asn Glu Ala Gly Asn Thr Val
        115                 120                 125
Glu Ile Pro Ala Thr Arg Ser Ser Ile Ser Asp Ala Ala Gln Phe Met
    130                 135                 140
His Asn Leu Ser Leu Ser Pro Ser Met Arg Asp Arg Arg Gly Ser Arg
145                 150                 155                 160
Asn Ser Phe Gly Thr Ser Leu Pro Ile Pro Arg Ser Pro Arg Val Ser
                165                 170                 175
Arg Leu Ser Ser Val Arg Lys Ala Asp Ala Ala Ser Val Ser Arg Asp
            180                 185                 190
Ile Leu Ala Ser Gln Val Gln Asp Met Ser Lys Glu Lys Val Ala Ala
        195                 200                 205
Ala Lys Asn Met Ala Phe Ala Phe Asp Ile Asp Gly Val Leu Ala His
    210                 215                 220
Gly Asn His Ala Ile Pro Glu Ala Lys Glu Ala Leu Lys Met Leu Asn
225                 230                 235                 240
Gly Asp Asn Glu Leu Gly Ile Lys Ile Pro Tyr Ile Leu Leu Thr Asn
                245                 250                 255
Gly Gly Gly Lys Thr Glu Ala Ala Arg Cys Glu Gln Leu Ser Glu Ile
            260                 265                 270
Leu Glu Val Pro Ile Ser Thr Asp Gln Phe Ile
        275                 280
```

<210> 33712
<211> 213
<212> PRT
<213> A.fumigatus

<400> 33712
Ala Ser Ser Cys Cys Thr Val Thr Pro Pro Ser Gln Lys Pro Pro Asn
1 5 10 15
Asn Ala Pro Pro Ser Pro Thr Tyr Pro Ser Ser His Ser Asn Thr Pro
20 25 30
Glu His Leu Val Ser Phe Asp Gln Phe Pro Ile Val Gln Phe His Arg
35 40 45
Ser Ser Ser Thr Ser Thr Thr Ser Ile Ala Pro Leu Pro Leu Cys Lys
50 55 60
Met Ser Ala Gly Val Thr Phe Thr Leu Ser Asn Gly Val Lys Ile Pro
65 70 75 80
Ala Val Gly Phe Gly Thr Phe Ala Ser Glu Gly Ala Lys Gly Glu Thr
85 90 95
Tyr Asn Ala Val Thr Cys Ala Leu Lys Thr Gly Tyr Arg His Leu Asp
100 105 110
Cys Ala Trp Phe Tyr Gln Asn Glu Asp Glu Val Gly Asp Ala Ile Gln
115 120 125
Asp Phe Leu Lys Glu Asn Pro Ser Val Lys Arg Glu Asp Ile Phe Ile
130 135 140
Cys Thr Lys Val Trp Asn His Leu His Arg Tyr Glu Asp Val Ile Trp
145 150 155 160
Ser Leu Glu Asn Ser Leu Lys Lys Leu Lys Val Asp Tyr Val Asp Leu
165 170 175
Tyr Leu Val His Trp Pro Ile Ala Ala Glu Lys Glu Thr Gln Glu Lys
180 185 190
Pro Lys Ile Gly Pro Asp Gly Lys Val Ile Leu Arg Pro Arg Val Phe
195 200 205
Cys Leu Asn Arg Tyr
210

<210> 33713
<211> 189
<212> PRT
<213> A.fumigatus

<400> 33713
Tyr Val Phe Leu Glu Asp Leu Thr Lys Asn Pro Glu Pro Thr Trp Arg
1 5 10 15
Ala Met Glu Lys Leu Tyr Glu Glu Gly Lys Ala Lys Ala Ile Gly Val
20 25 30
Ser Asn Trp Thr Ile Glu Gly Leu Glu Gln Leu Leu Lys Phe Ala Lys
35 40 45
Val Lys Pro His Val Asn Gln Ile Glu Ile His Pro Phe Leu Pro Asn
50 55 60
Glu Glu Leu Ile Gln Tyr Cys Phe Lys His Asp Ile Leu Pro Glu Ala
65 70 75 80
Tyr Ser Pro Leu Gly Ser Gln Asn Gln Val Pro Thr Thr Gly Glu Arg
85 90 95
Val Ser Glu Asn Pro Thr Leu Asn Glu Ile Ala Lys Lys Gly Gly Asn
100 105 110
Thr Leu Ala Gln Val Leu Ile Ala Trp Gly Leu Arg Arg Gly Tyr Val

```
        115                 120                 125
Val Leu Pro Lys Ser Ser Asn Pro Ala Arg Ile Glu Ser Asn Phe Lys
    130                 135                 140
Ser Ile Gln Leu Ser Asp Ala Asp Tyr Glu Ala Val Asn Asn Val Ala
145                 150                 155                 160
Lys Gly Arg His Phe Arg Phe Val Asn Met Lys Asp Thr Phe Gly Tyr
                165                 170                 175
Asp Val Trp Pro Glu Glu Thr Ala Lys Gln Met Ser Ala
            180                 185

<210> 33714
<211> 122
<212> PRT
<213> A.fumigatus

<400> 33714
Val Arg Trp Lys Leu Cys Phe His Pro Leu Leu Leu Ser Ser Ala Lys
1               5                   10                  15
Leu Ser Thr His Gly Arg Phe Glu Gln Phe Lys Glu Leu Thr Asp Gly
            20                  25                  30
Asp Lys Pro Val Val Ile Asp Phe Trp Ala Thr Trp Cys Gly Pro Cys
        35                  40                  45
Lys Ala Ile Ser Pro Leu Phe Glu Lys Met Ser Asp Asn Pro Glu Tyr
    50                  55                  60
Gly Asn Val Gly Phe Tyr Lys Val Asp Val Asp Glu Gln Glu Gln Val
65                  70                  75                  80
Ser Gln Glu Val Gly Ile Arg Ala Met Pro Thr Phe Val Leu Phe Lys
                85                  90                  95
Asn Gly Tyr Lys Ile Gly Glu Ala Val Gly Ala Ala Pro Pro Arg Leu
            100                 105                 110
Glu Gly Leu Leu Asn Thr Ala Arg Ser Leu
        115                 120

<210> 33715
<211> 177
<212> PRT
<213> A.fumigatus

<400> 33715
Ser Thr Asn Ala Pro Asp Leu Ala Thr Ala Val Ser His His Ile Arg
1               5                   10                  15
Arg Pro Ala Ser Met Arg Glu Val Gly Glu Met Trp Lys Asn Ile Leu
            20                  25                  30
Val Gly Phe Phe Pro Asn Arg Glu Tyr Ala Pro Phe Pro Phe Arg Asp
        35                  40                  45
Thr His Tyr Tyr Ile Asn Leu Asp Leu Asn Thr His Gly Tyr Leu Gly
    50                  55                  60
Leu Gly Ser Val Val Arg Thr Gln Gly Phe Asn Ala Gly Val His Phe
65                  70                  75                  80
Leu Gln Leu Asn Phe Thr Ala Ala Pro Ala Asp Gly Ser Pro Phe Ser
                85                  90                  95
Trp Glu Gly Asn Glu His Phe Leu Lys Arg Glu Met Arg Gly Ser Leu
            100                 105                 110
Gln Ser Val Pro Glu Asp Arg Lys Arg Ala Ile Tyr Gly Leu Ile Ala
        115                 120                 125
Ile Gly Thr Tyr Val Arg Leu Tyr Arg Tyr Leu Pro Asp Gly Gln Phe
```

```
    130                 135                 140
Ala Pro Val Thr Phe Val Val Gly Lys Gln Thr Leu His Val Arg Ala
145                 150                 155                 160
Asp Gln Ala Val Ile Arg Glu Phe Leu Ala Gly Val Gln Glu Glu Trp
                165                 170                 175
Met
```

<210> 33716
<211> 110
<212> PRT
<213> A.fumigatus

<400> 33716

```
Arg His Val Leu Leu Ile Ser Leu Gln Lys Gln Leu Val Ile Met Arg
1               5                   10                  15
Val Thr Val Phe Ser Leu Leu Thr Ala Leu Ser Ala Ser Leu Val Cys
            20                  25                  30
Ala Gln Gly Tyr Ser Lys Glu Cys Ser Asp Ile Tyr Leu Gln Glu Gly
        35                  40                  45
Trp Leu Val Ala Thr Cys Pro Lys Asp Asp Asn Asn Gly Arg Ile Thr
    50                  55                  60
Ser Ser Val Tyr Leu Pro Asn Lys Ile Ala Asn Asp Asn Ala Val Leu
65                  70                  75                  80
Glu Val Ser Ser Arg Leu Pro Ser Ser Pro Val Leu Leu Pro Gly Leu
                85                  90                  95
Thr Glu Ile Gln Trp Ala Val Glu Tyr Val Cys Arg Ala Trp
            100                 105                 110
```

<210> 33717
<211> 169
<212> PRT
<213> A.fumigatus

<400> 33717

```
Thr Thr Glu Ile Pro Pro Pro Ala Leu Lys Ser Asp His Arg Thr Ala
1               5                   10                  15
Ser Leu Arg Ser Gly His Asn Ser Ala Gly Ala Asn Ser Pro Arg Pro
            20                  25                  30
Ser Leu Ser Arg Arg Ser Ser Ser Ser Asn Phe Ala Thr Ser Pro Thr
        35                  40                  45
Ser Thr Ala Asn Met Pro Ser Lys Arg Pro Gln Glu Gln Ala Ala Pro
    50                  55                  60
Thr Ala Ala Ser Val Ala Ala Asp Phe Phe Gln Arg Glu Val Asp Leu
65                  70                  75                  80
His Gln Ser Thr Asp Leu His Ser Lys Val Val Val Val Val His Asp
                85                  90                  95
Ala Cys Tyr Gly His Arg Phe Ser Arg Pro Arg Thr Ser Lys Thr Ala
            100                 105                 110
Leu Ser Tyr Ile Val Glu Arg Pro Glu Arg Ile Gln Ala Cys Val Val
        115                 120                 125
Gly Val Ser Ala Ala Tyr Val Leu Met Ala Gly Arg His Ala Gly Lys
    130                 135                 140
Arg Phe Ala Pro His Pro Glu Leu Asp Leu His Gln Leu Pro Ala Pro
145                 150                 155                 160
Pro Phe Gln Ile Arg Lys Thr Ser Arg
```

165

<210> 33718
<211> 119
<212> PRT
<213> A.fumigatus

<400> 33718
Pro Asp Glu Ile Gln Met Gly Ile Phe Leu Cys Met Arg Cys Ala Ala
1 5 10 15
Leu His Arg Lys Leu Gly Thr His Ile Ser Lys Val Lys Ser Leu Thr
20 25 30
Met Asp Thr Trp Thr Ala Glu Gln Val Asp Val Ser Lys Ser Val Gln
35 40 45
Gln Arg Glu Glu Ala Gln Ala Asp Cys Leu Trp Asp Thr Glu Tyr Glu
50 55 60
Ile Thr Arg Glu Tyr Pro His Glu Gln Asp Leu Gln Ser Gln Glu His
65 70 75 80
Gln Thr Ser Gly Pro Gln Arg Tyr Arg Arg Gly Arg Cys Gln His Gly
85 90 95
Ala Val His Pro Ala Glu Ile Pro Val Ser Phe Ala Gly Gly Trp Lys
100 105 110
Thr Glu Thr Thr Lys Pro Ser
115

<210> 33719
<211> 173
<212> PRT
<213> A.fumigatus

<400> 33719
Val Asn Gln Phe Asn Asn Val Lys Arg His Lys Leu Ile Ala Tyr Gly
1 5 10 15
Thr Gln Asn Met Lys Ser His Gly Asn Thr Leu Met Asn Lys Ile Phe
20 25 30
Asn Pro Lys Asn Ile Lys Pro Pro Val Pro Lys Asp Ile Asp Glu Ala
35 40 45
Asp Ala Ser Met Glu Arg Tyr Ile Arg Gln Lys Tyr Gln Tyr Arg Ser
50 55 60
Leu Glu Asp Gly Lys Pro Lys Pro Pro Ser Arg His Asp Ser Ser Tyr
65 70 75 80
Gly Met Ser Pro Glu Gly Ser Pro Pro Pro Leu Pro Pro Lys Ser Gly
85 90 95
Arg Phe Pro Gly Pro Gly Leu Arg Ser Ala Ser Ser Thr Ser Asn Leu
100 105 110
Gln Arg Pro Ser Asn Arg Pro Phe Ala Thr Ser Pro Arg Ser Glu Arg
115 120 125
Pro Asp Ser Pro Pro Pro Arg Ser Val Ser Thr Ser Gly Ser Gln Gly
130 135 140
Phe Gly Leu Ser Ile Arg Asp Thr Ser Asp Ala Ser Phe Glu Ser Lys
145 150 155 160
Leu Ala Gln Leu Arg Glu Met Gly Phe Thr Asn Glu Arg
165 170

<210> 33720
<211> 338

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (188),(189),(191)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33720

```
Cys Cys Leu Val Asp Ile Met Gln Val Ala Asn Val Val Gln Thr Thr
1               5                  10                  15
Phe Asp Glu Tyr Ala Thr Pro Asp Leu Thr Pro Asp Arg Met Ala Ala
            20                  25                  30
Phe Tyr Arg Lys Val Gly Gly Asn Tyr Asp Ile Leu Phe Leu Glu Thr
        35                  40                  45
Lys Tyr Ser Ala Leu Ser Phe Ile Tyr Gln Arg Leu Gly Cys Phe His
    50                  55                  60
Ser Ile Gln Pro Thr Asn Asp Pro Phe Lys Pro Pro Ser Ile Pro Ala
65                  70                  75                  80
Leu Gln Pro Asn Gly Phe Val Arg Trp Gln Thr Ile Gln Leu Leu Leu
                85                  90                  95
Asp Pro Asp Glu His Ala Arg Tyr Leu Gln Asn Ala Val Ala Leu Trp
            100                 105                 110
Asp Ile Glu Ser Pro Asn Gly Gly Thr Phe Pro Lys Met Ile Pro Arg
        115                 120                 125
Asp Ala Phe Pro Ser Glu Pro Asp Pro Glu Met Val Glu Trp His Glu
    130                 135                 140
Gly Val Ser Arg Arg Phe Glu Phe Asp Tyr Trp Arg Lys Asn Val Leu
145                 150                 155                 160
Arg Ser Ser Pro Pro Asn Phe Arg Thr Tyr His Trp Gln Phe Gly His
                165                 170                 175
Lys Asp Ala Pro Leu Glu Pro Arg Gly Gly Pro Xaa Xaa Cys Xaa Pro
            180                 185                 190
Lys Ser Thr Gly Leu His His His Ser Thr Asp Asp Thr Gln Ser Gln
        195                 200                 205
Arg Ile Arg Leu Arg Gly Val Ala Ile Thr Gly Gly Gly Ala Ala Ser
    210                 215                 220
Phe Pro His Pro Gln Leu Glu Glu Ser Asn Gln Pro Ile Phe Pro Val
225                 230                 235                 240
Gln Arg Arg Arg Leu Asn Ser Arg Leu Leu Glu Arg His Arg Arg Pro
                245                 250                 255
Phe Asp Pro Asp Gln Pro Gln Asn Arg Gly Ala Ala Asn Gly Arg Thr
            260                 265                 270
Pro Ser Ser Thr Gln Gln Ala Gln Ser Pro Thr Val Ala Thr Thr Pro
        275                 280                 285
Gln Thr Pro Arg Pro Lys Thr Gln Asp Pro Gln Ser Thr Asp Asn Arg
    290                 295                 300
Gln Asp Gln Asp Asp Thr Ala Val Arg Gly Thr Tyr His Leu Pro Ala
305                 310                 315                 320
Pro Pro Ala Leu Asp Ala Thr Arg Thr Lys His Thr Pro Ala Tyr Pro
                325                 330                 335
Lys Lys
```

<210> 33721
<211> 250

<212> PRT
<213> A.fumigatus

<400> 33721
Ile Cys Thr Thr Arg Trp Glu Trp Val Gly Asp Glu Gly Leu Asp Thr
1 5 10 15
Pro Tyr Ser Asn Ser Met Thr Leu Glu Ile Ser Gly Tyr Thr Thr Ile
20 25 30
His Arg Asp Arg Ser Arg Leu Leu Leu Trp Ile Pro His His Gln Phe
35 40 45
Arg Phe Val Asp Met Phe Val Arg Leu Gly Gly Ser Pro Thr Glu Pro
50 55 60
Val Asn Leu Gln Ala Met Tyr Asn His Ser Gln Ser Arg Ser Lys Gly
65 70 75 80
Pro Leu Glu Ser Lys Ser Ile Leu Leu Glu His Pro Ala Leu Val Arg
85 90 95
Ala Met Trp Ile Leu Arg Pro Gly Arg Arg His Ile Glu Gln Thr Asp
100 105 110
Ile Ala Leu Leu Gly Met Ile Arg Arg Asp Ile Val Pro Val Leu Pro
115 120 125
Glu Asp Leu Val Gly Arg Gly Val Ser Gly Pro Pro Asp Ala Glu His
130 135 140
Leu Arg Val Arg Val Gly Thr Ala Gly Ser Lys Lys Gly Ala Glu Asp
145 150 155 160
Val Val Glu Glu Leu Arg Val Glu Lys Val Gly Gly Ile Val Val Gly
165 170 175
Val Tyr Val Ala Gly Leu Ala Val Glu Gly Ala Pro Asp Gly Glu His
180 185 190
Val Gly Gly Val Ala Gly Gly Val Val Val Gly Val Trp Gly Thr Asp
195 200 205
Gly Gly Asp Ala Gly Val Gly Leu Asp Val Ala Val Gly Asp Phe Glu
210 215 220
Phe Val Glu Gly Gly Glu Gly Gly Gly Ala Ala Val Gly Glu Glu Val
225 230 235 240
Gly Leu Trp Ala Arg Pro Leu Ala Val Gly
245 250

<210> 33722
<211> 188
<212> PRT
<213> A.fumigatus

<400> 33722
Arg Pro Val Leu His Pro Pro Arg Arg Gln His Ala Pro Gln Pro Arg
1 5 10 15
Pro Asn His Val His His Arg His Arg Arg Ser Arg Pro Leu Arg Trp
20 25 30
Arg Ile Tyr Pro Ala Asn Arg Gly Ile His Arg Lys Pro Gln Pro Pro
35 40 45
Leu Arg His Arg Leu Pro Pro Arg Pro Ser Gln Arg Pro Arg Gly Leu
50 55 60
Gln Arg Leu Pro Ala Gln Pro Leu Arg Pro Arg His Arg Pro Gln Arg
65 70 75 80
Arg Arg Pro Ser Pro Asn Leu Gln Arg Val Asp Val Pro Thr Ser Pro
85 90 95
Pro Pro Arg Gln Arg Arg Arg His Arg Leu Pro Arg Pro Leu Arg Thr

```
            100                 105                 110
Arg Asn His Pro Arg Pro His Pro Asn Gln Arg Arg Arg Pro Arg His
        115                 120                 125
Leu Phe Pro Lys His Gln Leu Gln Arg His Leu Pro Arg Arg Arg Arg
    130                 135                 140
Ala Pro Arg Leu Gly His Pro Gln Gln Gln Val Pro Gln Arg Arg Pro
145                 150                 155                 160
Leu Leu Arg Tyr His Arg Pro Ser Pro Leu Ala Ala Pro Arg Arg Arg
                165                 170                 175
Leu Arg Arg Leu Phe Ser Asn Pro Gln Ser Gln Pro
            180                 185
```

<210> 33723
<211> 399
<212> PRT
<213> A.fumigatus

<400> 33723

```
Pro His Gly Glu Pro Leu Ala Asp Leu Pro Ala Gly Cys Glu Asn Ile
1               5                   10                  15
Phe Gly Gln Ala Pro Gly Gly Gln Ser Val Thr Ala Leu Leu Ser Ser
            20                  25                  30
Ser Ala Ala Lys Gly Leu Phe Ser Gly Ala Ile Val Gln Ser Ala Pro
        35                  40                  45
Leu Asp Leu Pro Trp Phe Thr Arg Glu Val Tyr Lys Glu Val Val Thr
    50                  55                  60
Pro Gly Val Ala Lys Ala Val Gly Cys Asn Gln Thr Val Ser Glu Glu
65                  70                  75                  80
Lys Leu Leu Ala Cys Leu Arg Ser Val Pro Ala Ser Ala Phe Leu Asp
                85                  90                  95
Asn Ala Thr Glu Phe Gln Ser Ala Met Thr Ala Val Asn Lys Lys Val
            100                 105                 110
Ala Asp Glu Phe Leu His Val Ser Thr Met Leu Ala Ser Ile Glu Pro
        115                 120                 125
Leu Met Pro Met Val Asp Asp Ser Gly Ser Gly Val Ile Asp Asp Gln
    130                 135                 140
Phe Tyr Thr Leu Leu Ala Asp Asn Thr Leu Pro Asn Arg Val Pro Thr
145                 150                 155                 160
Met Phe Thr Thr Val Thr Asp Glu Ala Ala Leu Tyr Val Gly Gly Phe
                165                 170                 175
Ile Pro Gln Ile Glu Ala Ser Thr Glu Asn Leu Asn Leu Leu Phe Gly
            180                 185                 190
Ile Ala Tyr Pro Pro Gly Leu Ala Asn Ala Leu Ala Ala Ser Asn Ala
        195                 200                 205
Phe Pro Leu Asn Pro Ser Asp Pro Asp Thr Val Arg Asn Val Gly Ala
    210                 215                 220
Gln Ala Leu Thr Tyr Ser Glu Trp Thr Cys Pro Gln Ala His Leu Leu
225                 230                 235                 240
Ala Asn Gly Gly Ala Thr Ala Phe Pro Ala Leu Tyr Glu Leu Glu Ile
                245                 250                 255
Thr His Gly His Ile Gln Thr Asn Ala Gly Val Pro Ala Ile Cys Ser
            260                 265                 270
Pro Asn Thr Asn Tyr Asn Ala Thr Cys His Ala Ala Asp Val Leu Pro
        275                 280                 285
Val Trp Gly Thr Leu Asn Ser Lys Ser Arg Asn Val Asp Pro Tyr Tyr
    290                 295                 300
```

```
Asp Thr Thr Asp Leu Leu His Ser Gln Leu Leu Asp Asp Val Phe Gly
305                 310                 315                 320
Ala Phe Phe Arg Thr Arg Ser Pro Asn Pro Asp Pro Glu Met Leu Arg
                325                 330                 335
Val Arg Gly Pro Ala Tyr Ala Ala Thr Tyr Glu Ile Phe Gly Lys Asn
            340                 345                 350
Gly Tyr Tyr Ile Pro Pro Tyr His Pro Glu Gln Arg Asn Val Ser Leu
        355                 360                 365
Leu Asp Met Pro Pro Thr Trp Thr Gln Asn Pro His Gly Thr Asn Lys
    370                 375                 380
Cys Arg Val Phe Glu Glu Tyr Gly Phe Thr Phe Gln Arg Ala Phe
385                 390                 395
```

<210> 33724
<211> 72
<212> PRT
<213> A.fumigatus

<400> 33724

```
Tyr Trp Ser Leu Gly Gly Val Leu His Ile Cys Lys Tyr Phe Arg Cys
1               5                   10                  15
Ile Ser Pro Arg Cys Val Phe Phe Thr Leu Ser Pro Tyr Glu Lys Phe
            20                  25                  30
Gly Asn Lys Ser Asp Gly Ala Ala Ser His Glu Ala Asn Gln Leu Ile
        35                  40                  45
Gly Thr Pro Ser Leu Val Met Leu Leu Asn Val Phe Met Ser Lys Leu
    50                  55                  60
His Leu Thr Ile Leu Met Gln Pro
65                  70
```

<210> 33725
<211> 337
<212> PRT
<213> A.fumigatus

<400> 33725

```
Gln Ile Ser Trp Gly Arg Val Leu Gln Glu Asp Ile Ser Glu Val Leu
1               5                   10                  15
Leu Arg Gly Ala Phe Asp Gln Glu Phe Gln Trp Leu Arg Arg Lys Asn
            20                  25                  30
Gly Lys Cys Ser Thr Leu Arg Leu Gly Glu Gln Ala Ile Asp Phe Gly
        35                  40                  45
Val Gln Gln Thr Met Lys Ser Lys Met Ala Ala Lys Asp Gln Lys Arg
    50                  55                  60
Leu Asp Asn Ala Ser Ser Ser Asp Thr Lys Ile Glu Phe Glu Phe Gly
65                  70                  75                  80
Gly Ala Pro Gly Val Thr Leu Ile Met Ile Gly Phe Pro Leu Leu Met
                85                  90                  95
Tyr Tyr Met Tyr Ile Gly Ala Val Leu Tyr Asp Gly Leu Leu Pro Thr
            100                 105                 110
Pro Glu Asp Gly Gln Ser Trp Ala Asp Phe Leu Ser His Leu Val Ser
        115                 120                 125
Leu Ala Tyr Thr His Ala Tyr Pro Thr Arg Lys Ala Trp Thr Ile Tyr
    130                 135                 140
Trp Thr Phe Leu Ile Leu Glu Gly Ala Gly Tyr Leu Tyr Leu Pro Gly
145                 150                 155                 160
```

```
Val Tyr Gly Lys Gly Lys Arg Leu Pro His Leu Gly Gly Lys Gln Leu
                165                 170                 175
Pro Tyr Tyr Cys Ser Ala Val Ser Ser Trp Tyr Leu Thr Ile Ala Ala
            180                 185                 190
Ala Leu Ile Leu His Phe Thr Gly Val Phe Lys Leu Tyr Thr Leu Ile
        195                 200                 205
Asp Glu Phe Gly Pro Leu Met Ser Val Ala Ile Cys Ser Gly Ile Phe
    210                 215                 220
Val Ser Ile Val Ala Tyr Ile Ser Ala Leu Val Arg Gly Val Glu His
225                 230                 235                 240
Arg Met Thr Gly Ser His Val Tyr Asp Phe Phe Met Gly Ala Glu Leu
                245                 250                 255
Asn Pro Arg Leu Phe Gly Trp Leu Asp Phe Lys Met Tyr Phe Glu Val
            260                 265                 270
Arg Ile Pro Trp Phe Ile Leu Phe Leu Leu Thr Leu Gly Thr Ala Leu
        275                 280                 285
Lys Gln Leu Glu Glu Tyr Gly Leu Val Ala Gly Glu Val Leu Phe Leu
    290                 295                 300
Leu Met Ala His Phe Leu Tyr Ala Asn Ala Cys Ala Lys Gly Glu Glu
305                 310                 315                 320
Leu Ile Ile Thr Ser Trp Phe Val Cys Phe Pro Arg Glu Ala Ile Glu
                325                 330                 335
Cys
```

<210> 33726
<211> 140
<212> PRT
<213> A.fumigatus

<400> 33726

```
Leu Ser Asp Arg Asp Met Tyr Tyr Glu Lys Trp Gly Phe Met Leu Ile
1               5                   10                  15
Phe Trp Asn Leu Ala Gly Val Pro Met Ser Tyr Cys His Cys Thr Leu
            20                  25                  30
Tyr Leu Ala Tyr His Asp Pro Ser Thr Tyr His Trp Asn Pro Trp Val
        35                  40                  45
Leu Ala Val Trp Ala Val Ala Tyr Leu Phe Met Tyr Trp Val Trp Asp
    50                  55                  60
Thr Cys Asn Ser Gln Lys Asn Tyr Phe Arg Ala Gln Glu Arg Gly Val
65                  70                  75                  80
Thr Val Asp Arg Lys Thr Phe Pro Gln Leu Pro Trp Lys Tyr Ile Glu
                85                  90                  95
Asn Pro Gln Ser Ile Pro Thr Lys Thr Gly Asp Ser Ile Leu Cys Ser
            100                 105                 110
Gly Trp Cys Lys Ser Leu Ser Pro Gly Ala Gly Tyr Ala Ala Asp Glu
        115                 120                 125
Gly Ser Trp His Gly Ala Gln Gly Ala Leu Tyr Met
    130                 135                 140
```

<210> 33727
<211> 69
<212> PRT
<213> A.fumigatus

<400> 33727

```
Gln Met His Arg Thr Met Ala Ser Gln Val Gln Gly Thr Ala Phe Ile
1               5                  10                  15
Thr Gly Ala Ala Ser Gly Ile Gly Lys Ala Thr Ala His Val Leu Ala
            20                  25                  30
Lys Asn Gly Ile Ser Ala Val Ala Leu Val Asp Val Asn Arg Ala Leu
        35                  40                  45
Leu Glu Glu Thr Lys Ser Glu Leu Leu Ser His Ile His His Gln Val
    50                  55                  60
Gly Arg Thr Arg Ala
65
```

<210> 33728
<211> 72
<212> PRT
<213> A.fumigatus

<400> 33728

```
Arg Leu His Asp Phe Ile Arg Ala Asp Val Leu Phe Arg Ile Gly Ser
1               5                  10                  15
Ala Gly Tyr Asp Arg His Ile Thr Ile Phe Ser Asp Gln Gly Arg Leu
            20                  25                  30
Tyr Gln Val Gly Met Cys Ile Phe Arg Trp His Ala Ser Phe Leu Gln
        35                  40                  45
Ser Ala Val Pro Ala Leu Ile Val Gly Asn Ala Ala Asn Ala Ile Ile
    50                  55                  60
Ala Arg Leu Asn Asn Ala Asp Tyr
65                  70
```

<210> 33729
<211> 159
<212> PRT
<213> A.fumigatus

<400> 33729

```
Lys Ile Arg Ile Cys Leu Gln Gly Tyr His Ser Cys Lys Tyr Tyr Leu
1               5                  10                  15
Asn Arg Cys Glu Gly Glu Glu Leu Arg Arg Gly Ile Val Ser Glu Glu
            20                  25                  30
Ser Arg Cys Arg Ser Phe His Pro Leu Ala Gly Tyr Cys Ser Asn Leu
        35                  40                  45
Ile Glu Pro Ser Lys Asp Lys Leu Ile Asp Pro Ser Ser Val Ser His
    50                  55                  60
Ile Phe Arg Leu Ser Pro Ser Val Gly Cys Val Met Thr Gly Ser Ile
65                  70                  75                  80
Ala Asp Ala Arg Ala Ser Val Asp Arg Ala Arg Gly Glu Ala Ala Glu
                85                  90                  95
Phe Arg Tyr Lys Tyr Gly Tyr Glu Met Pro Cys Asp Val Leu Ala Lys
            100                 105                 110
Arg Leu Ala Asn Ile Asn Gln Val Tyr Thr Gln Arg Val Gly Leu Ser
        115                 120                 125
Val Val Phe Trp Val Ile Val Lys Ser Gln Thr Asn Arg Thr Ser Ser
    130                 135                 140
Gly Leu His Ala Ser Ala Arg Arg Cys Tyr Asp Ser Asp Phe Arg
145                 150                 155
```

<210> 33730

<211> 72
<212> PRT
<213> A.fumigatus

<400> 33730
His Met Arg Lys Arg Asp Lys Leu Ala Thr Asp His Arg Pro Phe Asp
1 5 10 15
Ile His Tyr Ser Val Glu Trp Phe Ser Ile Asn Cys Leu Val Phe Ile
20 25 30
Arg Ser Phe Asp Ser Pro Ala Pro Ile Thr Leu Leu His Thr Lys Phe
35 40 45
Ile Ile Phe Arg Ala Gly Ala Asn Leu Ser Leu Thr Leu Ser Phe Arg
50 55 60
Leu Leu Gly Phe Gly Ile Arg Gln
65 70

<210> 33731
<211> 139
<212> PRT
<213> A.fumigatus

<400> 33731
Leu Ser Ser Arg Arg Leu Thr Glu His Leu Gln Ala Tyr Met Arg Pro
1 5 10 15
Leu Gly Val Ala Met Thr Leu Ile Ser Val Asp Asp Glu Lys Gly Pro
20 25 30
Gln Leu Tyr Lys Cys Asp Pro Ala Gly Tyr Tyr Val Gly Tyr Lys Ala
35 40 45
Thr Ala Ser Gly Pro Lys Gln Gln Glu Ala Leu Asn Tyr Leu Glu Lys
50 55 60
Lys Leu Lys Asn Lys Asp Tyr Ala Glu Gly Ser Trp Glu Glu Val Val
65 70 75 80
Glu Leu Gly Ile Thr Ala Leu Ser Asn Val Leu Ser Val Asp Phe Lys
85 90 95
Lys His Glu Leu Glu Ile Gly Ile Val Gly Gly Pro Arg Ala Asp Gly
100 105 110
Arg Glu Gly Thr Asp Pro Ser Phe Arg Ala Leu Thr Glu Asp Glu Ile
115 120 125
Asp Glu Arg Leu Gln Ala Ile Ser Glu Lys Asp
130 135

<210> 33732
<211> 777
<212> PRT
<213> A.fumigatus

<400> 33732
Ile Gln Thr Pro Lys Leu Val Thr Ser Tyr Ala Val Pro Pro Gln Ser
1 5 10 15
Ser Phe Ser Cys Arg Pro Cys Ser Val Arg Arg Lys Leu Ala Lys Lys
20 25 30
Ser Val Val Lys Arg Gln Thr Phe Val Ala Val Asp Arg Pro Gly Arg
35 40 45
Glu Ile Gln Ala Phe Val Glu Glu Ile Gly Gly Thr Gly Ser Ser Ala
50 55 60
Pro Val Ile Ser Ser Ser Ser Phe Ser Val Ser Asp Ser Ser Ser Pro

65 70 75 80
Thr Val Phe Val Gly Ile Val Pro Ile Ala Pro Met Glu Asp Asp Glu
85 90 95
Gln Asp Ser Phe Asp Val Leu Thr Val His Gln Asp Gly Leu Val Arg
100 105 110
Arg Leu Thr Ser Asp Leu Lys Thr Gln Arg Trp Ser Val Asn His Thr
115 120 125
Glu Ile Ala Lys Leu Arg Ser Thr His Lys Val Asn Ser Cys Phe Leu
130 135 140
Val Asp Phe Asp Asp Ala Lys Lys Tyr Leu Phe Lys Arg Arg Gln Asp
145 150 155 160
Leu Val Ala Met Ala Leu Gly Asp Leu Thr Asp Ser Gly Val Asp Glu
165 170 175
Pro Ser Val Leu Val Leu Val Ser His Pro Thr Gly Ser Lys Gln Ile
180 185 190
Ala Leu Ser Asp Val Gln Val Gln Ile Phe Ser Val Pro Ser Ser Ala
195 200 205
Pro Ser Glu Gly Arg Ile Leu Asp Glu Ser Gln Lys Leu Arg His Leu
210 215 220
Gln Thr Val Thr Leu Pro Asn Ile Asp Glu Leu Lys Thr Phe Asp Ser
225 230 235 240
Ser Ser Leu Gln Trp Tyr Phe His Pro Gly Ser Ala Gly Leu Asn Leu
245 250 255
Ser Phe Glu Lys Gly Phe Val Asn Ile Asp Leu Ser Gln Tyr Ala Pro
260 265 270
Thr Val Thr Thr Arg Phe Ile Leu Glu Asp Glu Ser Phe Ser Ser Leu
275 280 285
Met Arg Thr Ser Pro Gln Ser Val Ile Ala Ala Gly Lys Ser Ile Val
290 295 300
Ala Leu Phe Asp Thr Gln Tyr Gln Ser Ile Gln Arg Ser Ile Ala Val
305 310 315 320
Asp Ser Val Pro Ser Gly Gly Ser Thr Ser Arg Thr Met Phe Val Ser
325 330 335
Tyr Phe Ala Lys Leu Gly Val Ala Val Ala Ile Lys Gly Asn Ala Leu
340 345 350
Phe Ala Phe Asp Leu Ser Ser Ser Ile Ser Ser Leu Asn Ser Thr Leu
355 360 365
Lys Arg Pro Arg Asp Gly Leu Leu Ile Asp Ala Ile Gly Arg Gly Ile
370 375 380
Gly Ser Pro Ala Phe Gln Leu Asp Ala Ser Ser Lys Lys Asn Arg Thr
385 390 395 400
Glu Ile Met Ala Ser Leu Gly Leu Thr Ser Ala Glu Gln Val Ser Lys
405 410 415
Trp Glu Glu Phe Thr Gln Lys Val Glu Lys Ser Ala Lys Ser Asn Asp
420 425 430
Asn Ala Ala Phe Asp Asp Ala Val Leu Asp Tyr Phe Gly Val Gly Ala
435 440 445
Pro Lys Ala Leu Pro Ala Ala Gln His Tyr Val Asn Pro Glu Met Val
450 455 460
Leu Phe Leu Leu Ser Lys Ile Phe Ser Leu Arg Glu Ala Arg Ser Lys
465 470 475 480
Asp Lys Leu Ser Ala Thr Ser Asp Ser Arg Leu Thr Ile Gly Ile Trp
485 490 495
Pro Glu Met Thr Cys Arg Trp Leu Ile Gln Leu Gly His Phe Cys Leu
500 505 510
Ser Ser Val Glu Ile Ala Leu Arg Arg Val Gln Lys Pro His Ile Leu

```
        515                 520                 525
Pro Pro Leu Pro Thr Gly Ser Phe Thr Gln Ala Val Ile Asp Ser Asp
    530                 535                 540
Arg Ser Leu His His Phe Ile Asp Val Leu Gln Gly Ser Val Leu Leu
545                 550                 555                 560
Asn Ala Asp Glu Leu Ala Tyr Ala Leu Lys Val Leu Leu Thr Met Ala
                565                 570                 575
Arg Ser His Ser Met Val Leu Glu Glu Ala Thr Lys Ser Val Thr Tyr
            580                 585                 590
Asp Asp Glu Asn Ser Asn His Thr Ser Lys Glu Val Thr Leu His Asn
        595                 600                 605
Ala Glu Ala Ser Leu Gln Asp Ile Phe Ile Gly Phe Asn Thr Thr Leu
    610                 615                 620
Gln Lys Ile His Asn Gln Pro Phe Pro Thr Ile Val Ser Ser Phe Arg
625                 630                 635                 640
Ser Ala Leu Ser Arg Ser Glu Leu Leu Ser Ile Val His His Leu Arg
                645                 650                 655
Leu Cys Leu Ala Thr Gly Gly Tyr Thr Ser Arg Phe Thr Glu Asn Pro
            660                 665                 670
Pro Ser Pro Phe Ser Pro Glu Gln Thr Thr Pro Ser Leu Ser Leu Asp
        675                 680                 685
Thr Ile Ile Asn Leu Leu Asn Ala Ala Val Asp Ala Ile Gly Pro Ser
    690                 695                 700
Gly Trp Ile Thr Ala Ala Gly Ile Asp Asp Ala Ser Thr Arg Asp Leu
705                 710                 715                 720
Asp Leu Ile Ala Asp Met Lys Ser Glu Ile Ser Ala Ala Leu Ala Gly
                725                 730                 735
Val Glu Glu Ala Thr Tyr Leu Lys Gly Ile Leu Arg Glu Tyr Leu Arg
            740                 745                 750
Phe Ala Asn Ser Phe Thr His Ser Ser Ala Thr Gly Lys Thr Gly Asp
        755                 760                 765
Val Ala Lys Gln Ala Ala Ser Gln Glu
    770                 775

<210> 33733
<211> 211
<212> PRT
<213> A.fumigatus

<400> 33733
Ala Leu Phe Asn Pro Thr Leu Arg Tyr Ala Tyr Pro Cys Thr Ile Leu
1               5                   10                  15
Thr Pro Thr Ser Pro Gly Phe Leu Ser Ser Gln Trp His Asn Thr Ser
            20                  25                  30
Arg Gly Met Phe Ala Gly Ser Cys Ile Gly Val Ile Cys Leu Val Ile
        35                  40                  45
Cys Leu Glu Phe Leu Arg Arg Val Gly Arg Glu Tyr Asp Ala Phe Ile
    50                  55                  60
Val Arg Arg Ala Arg Leu Arg Asn Gln Tyr Leu Ser Thr Thr Ala Ser
65                  70                  75                  80
Ser Gln Gly Leu Thr Arg Ala Thr Asp Ala Asp Ala Ser Ala Glu Asp
                85                  90                  95
Ser Pro Asn Ser Thr Arg Gly Val Val Gly Ala Ala Ser Lys Gly Ala
            100                 105                 110
Gly Arg Thr Leu Cys Ser Ala Phe Glu Asp Lys Thr Pro Val Arg Pro
        115                 120                 125
```

```
Thr Leu Ile Glu Gln Leu Val Arg Ala Leu Leu His Met Leu Gln Phe
    130                 135                 140
Ala Val Ala Tyr Phe Val Met Leu Leu Ala Met Tyr Phe Asn Gly Tyr
145                 150                 155                 160
Ile Ile Ile Cys Ile Phe Ile Gly Ala Phe Leu Gly Ser Phe Ile Phe
                165                 170                 175
Ser Trp Glu Pro Leu Asn Leu Gln Lys Glu Tyr Val Ile Pro Leu Pro
            180                 185                 190
Leu Pro Tyr Leu Pro Gln Met Ile Cys Lys Glu Leu Gly Leu Thr Cys
        195                 200                 205
Val Leu Val
    210
```

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Sequence Listing

<210> 33734
<211> 158
<212> PRT
<213> A.fumigatus

<400> 33734

```
Ala Ser Gly Ser Arg Asn Arg Ala Asp His Gln Thr Arg Phe Asp Phe
1               5                   10                  15
Tyr Phe Lys Ser Cys Ser Ala Gln Pro Ala Thr Met Pro Pro Lys Ala
            20                  25                  30
Arg Ile Asn Ser Lys Asn Ser Val Glu Gln Glu Gly Arg Val Leu Leu
        35                  40                  45
Ala Val Ser Ala Leu Lys Asn Lys Glu Ile Leu Asn Ile Arg Glu Ala
    50                  55                  60
Ala Arg Val Tyr Asn Val Pro Tyr Thr Thr Leu Gln Arg Arg Leu Lys
65                  70                  75                  80
Gly His Thr Phe Arg Ala Glu Leu Arg Ala Asn Gly His Lys Met Thr
                85                  90                  95
Gln Asn Glu Glu Asp Ser Leu Ile Arg Trp Ile Leu Ser Met Asp Gln
            100                 105                 110
Arg Gly Ala Ala Pro Arg Pro Ser His Val Arg Glu Met Ala Asn Ile
        115                 120                 125
Leu Leu Ala Gln Arg Gly Ser Thr Pro Thr Gln Thr Val Gly Glu Lys
    130                 135                 140
Trp Val Tyr Asn Phe Ile Asn Gln His Asp Glu Ile Lys Thr
145                 150                 155
```

<210> 33735
<211> 106
<212> PRT
<213> A.fumigatus

<400> 33735

```
Ile Thr Ile Ile Gln His Gly Ile Thr Leu Glu Asp Ile Tyr Asn Phe
1               5                   10                  15
Asn Lys Thr Ser Phe Ala Met Gly Leu Val Ala Thr Thr Lys Val Val
            20                  25                  30
Thr Arg Ala Lys Ile Leu Ser Gln Pro Phe Leu Ile Gln Leu Gly Asn
        35                  40                  45
Arg Glu Trp Val Thr Ser Ile Glu Cys Ile Asn Ser Thr Gly Trp Val
    50                  55                  60
Leu Pro Leu Cys Ile Ile Phe Lys Gly Lys Val His Ile Lys Gly Trp
65                  70                  75                  80
```

```
Tyr Gln Asp Thr Ala Leu Pro Ala Asp Trp Trp Ile Glu Val Ser Glu
                85                  90                  95
Asn Gly Trp Thr Thr Asp Gln Ile Arg Leu
            100                 105
```

<210> 33736
<211> 174
<212> PRT
<213> A.fumigatus

<400> 33736

```
Pro Ser Ser Arg Ala Ala Lys Thr Ala Leu Leu Leu Asp Gln Thr Gln
1               5                   10                  15
Leu Gly Pro Ser Thr Val Gln Val Thr Ala Ala His Thr Ile Asp Glu
            20                  25                  30
Ile Ala Gly Asp His Val Ala Thr Ala Gly Glu Ala Lys Asp Glu Asn
        35                  40                  45
Asn Gln Asp Leu Glu Gln Glu Asp Lys Pro Lys Ser Arg Ile Val Ala
    50                  55                  60
Glu Tyr Leu Ala His Gly Tyr Val Ile Ser Asp Asn Ala Ile Gln Lys
65                  70                  75                  80
Ala Ile Ala Leu Asp Lys Lys His Gly Phe Ser Ser Arg Phe Thr Ser
                85                  90                  95
Ala Leu Ala Asn Phe Asp Gln Lys Tyr His Ala Thr Asp Arg Ala Lys
            100                 105                 110
Gly Ile Asp Glu Ser Tyr Lys Ile Thr Asp Lys Ala Ala Ser Gly Trp
        115                 120                 125
Arg Gly Leu His Ser Tyr Phe Glu Lys Ala Leu Asp Thr Pro Ser Gly
    130                 135                 140
Arg Lys Leu Arg Glu Phe Tyr Val Gln Thr Asp Lys Gln Val Arg Asp
145                 150                 155                 160
Ile His Asn Glu Gly Arg Arg Leu Ala Asn Leu Lys Ser Gly
                165                 170
```

<210> 33737
<211> 245
<212> PRT
<213> A.fumigatus

<400> 33737

```
Lys Gln Thr Leu His Arg Ser Asp Thr Met Gly Leu Leu Gln Val Asn
1               5                   10                  15
Arg Leu Ser Arg Glu Leu Ser Met Leu Arg Gln Gln Thr Ala Ser Val
            20                  25                  30
Ala Ser Thr Thr Ser Ser Thr Ser Thr Thr Leu Asn Asp Cys Leu Asp
        35                  40                  45
Gly Tyr His Ser Thr Pro Tyr Leu Ile Ser Ser Ala His Pro Thr Ala
    50                  55                  60
Ser Arg Arg His Arg Ser Ser Ser Ser Leu Ser Ser Ser Tyr Val Pro
65                  70                  75                  80
Val Val Gln Gly Ser Arg Thr Gly Asn Gly Pro Ala Ile Ala Arg Ser
                85                  90                  95
Arg Glu Pro Ser Leu Ser Phe Pro Ser Ala Arg Pro Asn Asp Leu Ser
            100                 105                 110
Lys Pro Ala Arg Ala Leu Ser Thr Thr Ser Arg Gln Pro Asp Gln Val
        115                 120                 125
```

```
Leu Pro Ser Leu Ala Ala Leu Ile Gln Pro Gln Pro Gln Gln Gln Gly
    130                 135                 140
Glu Asn Val Pro Ser Asn Val Pro Gly Pro Gln Asn Ala Arg Gln Arg
145                 150                 155                 160
Ser Phe Ser Pro Gln Gln Val Pro Pro Ser Gly Asn Pro Pro Arg Gln
                165                 170                 175
Glu Ile Leu Val Gln Arg Gly Glu Leu Glu Ala Met Lys Arg Glu Asn
            180                 185                 190
Glu Ala Leu Arg Arg Arg Ile Arg Asp Leu Glu Leu Val Val Lys Lys
        195                 200                 205
Tyr Arg Glu Arg Glu Val Ala Ser Pro Glu Glu Pro Thr Asn Asp Gln
    210                 215                 220
Glu Thr Thr Leu Arg Leu Gly Lys Pro Ser Ile Ser Leu Arg Asp Asp
225                 230                 235                 240
Ala Lys Asp Gly Pro
                245
```

<210> 33738
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33738

```
Leu Leu Lys His Ile Leu Leu Tyr Ser Ser Arg Ile Ile Asp Gln Ile
1               5                   10                  15
Lys Met Thr Glu Arg Thr Thr Val His Val Ser Gly Ile Ser Ser Ala
            20                  25                  30
Thr Thr Asp Lys Glu Val Lys Asp Phe Phe Ser Phe Trp Tyr Glu Thr
        35                  40                  45
Ala Val His Arg Asp Leu Leu Thr Ser Leu Glu Ile Leu Ile Tyr
    50                  55                  60
```

<210> 33739
<211> 66
<212> PRT
<213> A.fumigatus

<400> 33739

```
Gln Pro Leu Ile Ser Leu Val Cys Ser Gln Ala Tyr Ser Phe Cys Cys
1               5                   10                  15
Leu Ile Val Tyr Tyr Ser Thr Pro Tyr Ser Ser Gln Ile Ile Thr Asp
            20                  25                  30
Pro Thr Thr Ile Gln Ala Phe Phe Val Leu Ser Leu Phe Ser Ser His
        35                  40                  45
Leu Leu Leu Phe His Ala Tyr Leu His Cys Pro Cys Leu Gln Ser Trp
    50                  55                  60
Ile Leu
65
```

<210> 33740
<211> 130
<212> PRT
<213> A.fumigatus

<400> 33740

```
Asp Pro Ser Phe Leu Leu Tyr Ile Ile Asp Lys Met His Leu Thr Glu
```

```
1               5                   10                  15
Cys Gly Ile Pro His Gln Val Asn Lys Ala Phe Cys Tyr Ser Ala Thr
            20                  25                  30
His Leu Met Phe Gln Ser Phe Val Ile Gln Leu Asp Trp Glu Gly Gln
        35                  40                  45
Ala Gly His Phe Pro Phe Ile Lys Ile Glu Glu Leu Cys Cys Asn Asp
    50                  55                  60
Asn Ala His Tyr Leu Gln Ala Ile Val Ile Glu Cys His Asp His Leu
65                  70                  75                  80
Tyr Lys Asp Ala Ala Ala Gln Asn Leu Gly Glu Phe Thr Gly Ser Tyr
                85                  90                  95
Lys Gln Phe Thr Leu His Phe Lys Gln Phe Pro Ser Leu Gly Cys Val
            100                 105                 110
Val Leu Ile Leu Tyr Lys Tyr Tyr His Gly Cys His Ala Met Glu Ala
        115                 120                 125
Ala Asp
    130
```

<210> 33741
<211> 83
<212> PRT
<213> A.fumigatus

<400> 33741

```
Tyr Ile Ile Arg Asn Thr Leu Trp Ala Ser Gly Cys His Met Leu Ser
1               5                   10                  15
Asp Ser Leu Ser His Gln Thr Arg Glu Ala His His Pro Ala Pro Gly
            20                  25                  30
Phe Ser Ser Asn Ser Ile Gln Ser Phe Glu Ile Gln Thr Pro Phe Leu
        35                  40                  45
Pro Phe Leu Trp Gly Ile Ile Leu Phe Leu Pro Asn Val Pro Gly Ala
    50                  55                  60
Phe Phe Arg Glu Thr Arg Gly Gly Val Pro Phe Arg Ile Ser Phe Ser
65                  70                  75                  80
Cys Leu Pro
```

<210> 33742
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33742

```
Gly Ile Ile Ala Gly Asn Leu Ile Ser Gly Ser Arg Ile Pro Leu Phe
1               5                   10                  15
Phe Phe Val Ala Leu Ile Glu Thr Gln Ser Asp Lys Gly Pro Leu Val
            20                  25                  30
Ala Lys Pro Met Ile Ala Pro Thr Ile Met Ala Lys Leu Lys Asn Pro
        35                  40                  45
Met Val Trp Leu Leu Lys Leu Tyr Gly Gly Ala Ala Lys Ala
    50                  55                  60
```

<210> 33743
<211> 355
<212> PRT
<213> A.fumigatus

<400> 33743
Tyr Leu Pro Arg Arg Val Arg Pro Ile Glu Thr Pro Gly Asn Ser Gln
1 5 10 15
Asn Val Gln Val Gly Thr Glu Asp Thr Leu Arg Met Asn Val Glu Phe
20 25 30
Gln Lys Thr Leu Ser Asn Leu Glu Asp Lys Leu Asn Ala Leu Ile Thr
35 40 45
Ser Leu Thr Thr Ser Pro Thr Ala Ser Gly Ala Pro Ala Ala Ala Leu
50 55 60
Ala Leu Leu Asp Ala Asp Asp Ser Leu Thr Ser Ala Ile Glu Thr Leu
65 70 75 80
Arg Arg His Gln Glu Asn Tyr Ala Arg Ile Leu Lys Leu Arg Ala Glu
85 90 95
Ala Glu Ser Leu Glu Glu Lys Val Lys Gly Ile Val Arg Asp Val Val
100 105 110
Gly Tyr Glu Lys Glu Ile Arg Arg Ile Cys Gly Asp Asp Glu Pro Ser
115 120 125
Asp Ser Asp Ala Asp Asp Val Ser Asp Asp Asp Asp Leu Asp Ser Gly
130 135 140
Gly Asp Arg Val Gln Thr Lys Pro Gly Gly Leu Arg Asn Thr Lys Glu
145 150 155 160
Ile Asp Tyr Lys Leu Leu Leu Asp Phe Ala Arg Arg Ile Ser Lys Tyr
165 170 175
Asn His Gln Ala Ala Ala Asp Ala Ala Ala Asn Ala Thr Gln Ala Ala
180 185 190
Lys Gly Arg Gly Arg Ser Leu Gln Pro Gly Asp Gln Asp Met Ala Met
195 200 205
Thr Gly Val Asn Gly Gly Pro Gly Ala Glu Glu Gly Ala Glu Pro Val
210 215 220
Ser Ser Val Thr Lys Glu Ala Thr Ser Trp Leu Asp Glu Ser Ala Lys
225 230 235 240
Met Thr Arg Gln Val Tyr Met Ile Pro Tyr Pro Met Glu Asp Arg Ile
245 250 255
Arg Met Gly Leu Met Gly Gln Ile Gln Leu Ala Ala Ala Glu Gly Arg
260 265 270
Pro Gly Phe Asn Pro Asp Gln Glu Val Glu Arg Leu Ile Arg Glu Ala
275 280 285
Glu Gly Leu Gly Ser Thr Glu Pro Val Val Pro Ala Ser Gln Pro Met
290 295 300
Gly Glu Glu Arg Arg His Ala Asn Glu Ala Ala Glu Ala Ala Ala Gln
305 310 315 320
Ala Gly Ala Ala Ser Ser Gly Thr Met Ala Ala Pro Ala Pro Ala Pro
325 330 335
Lys Pro Lys Ala Thr Leu Asp Leu Asp Leu Tyr Asp Pro Asp Asp Asp
340 345 350
Glu Met Met
355

<210> 33744
<211> 146
<212> PRT
<213> A.fumigatus

<400> 33744
Arg Pro Gln Asn Trp Asn Arg Phe Trp Lys Met Ser Ala Ile Cys Met

```
1               5                   10                  15
Ser Thr Ala Val Ser Phe Ser Gln Gly Leu Gly Pro Leu Ala Leu Ala
            20                  25                  30
Pro Met Phe Pro Gln Leu Met Lys Ser Phe Asp Ala Asp Leu Ala Ser
        35                  40                  45
Val Val Lys Phe Thr Gly Val Cys Met Leu Val Leu Gly Phe Ser Asn
    50                  55                  60
Phe Phe Trp Cys Val Leu Glu Ile Leu Asp Ser Asp Met Trp Leu Thr
65                  70                  75                  80
Ser Arg Arg Val Pro Ile Gln Ala Ala Phe Gly Arg Arg Pro Val Leu
                85                  90                  95
Ile Phe Ser Thr Leu Ile Cys Leu Phe Ser Asn Ile Trp Arg Ala Leu
            100                 105                 110
Ala Thr Ser Tyr Gly Ser Tyr Met Gly Ala Cys Ile Leu Asn Gly Phe
        115                 120                 125
Gly Ala Gly Pro Ala Glu Val Gly Thr Leu Ala Thr Thr Gln Gly Phe
    130                 135                 140
Val Cys
145
```

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<210> 33745
<211> 249
<212> PRT
<213> A.fumigatus

<400> 33745

```
Leu Pro Gln Gln Val Gly Pro Val Ile Ala Gly Pro Met Ala Glu His
1               5                   10                  15
Val Gly Trp Arg Ser Phe Phe Trp Leu Asn Thr Gly Val Leu Gly Ile
            20                  25                  30
Val Leu Val Ala Leu Ile Phe Leu Phe Pro Glu Thr Lys Trp His Arg
        35                  40                  45
Ala His Pro Ser Glu Val His Asp Gly Gln Glu Pro Val Glu Thr Pro
    50                  55                  60
Ser Ser Ala Ser Glu Pro Glu Lys Pro Ala Glu Val Ile Met Gln Arg
65                  70                  75                  80
Glu Asn Ile Ala Ser Glu Ser Gly Ala Asp Gln Asp Pro Trp Leu Gly
                85                  90                  95
Lys Gly Tyr Pro Ser Lys Gln Gln Phe Met Leu Trp Gln Pro Ser Asp
            100                 105                 110
Asn Tyr Leu Lys Thr Leu Trp Thr Cys Phe Trp Ile Pro Trp Lys Leu
        115                 120                 125
Leu Thr Phe Pro Ile Val Glu Leu Ala Ala Phe Thr Val Ser Trp Ser
    130                 135                 140
Ala Ser Cys Met Leu Thr Leu Asn Leu Thr Gln Ser Gln Ala Phe Ala
145                 150                 155                 160
Ala Pro Pro Tyr Asn Phe Asn Ser Gln Thr Ile Gly Phe Phe Asn Phe
                165                 170                 175
Ala Ile Met Val Gly Ala Ile Ile Gly Leu Ala Thr Asn Gly Pro Leu
            180                 185                 190
Ser Asp Trp Val Ser Met Arg Ala Thr Lys Lys Asn Arg Gly Ile Arg
        195                 200                 205
Glu Pro Glu Met Arg Leu Pro Ala Met Ile Pro Tyr Val Ile Ile Met
    210                 215                 220
Met Ile Gly Asn Phe Val Val Ala Phe Gly Tyr Glu Asn Lys Trp Asp
225                 230                 235                 240
```

```
Trp Lys Val Ser Phe Thr Ala Phe Cys
                245

<210> 33746
<211> 104
<212> PRT
<213> A.fumigatus

<400> 33746
Ile Ile Val Ile Ile Gly Tyr Thr Cys Ala Gly Ile Gln Val Ser Ala
1               5                  10                  15
Leu Pro Ala Ile Thr Ser Thr Tyr Ala Val Asp Ser Tyr Lys Pro Val
            20                  25                  30
Ala Gly Leu Val Phe Val Ala Ile Thr Val Asn Lys Asn Leu Trp Gly
        35                  40                  45
Tyr Gly Phe Ala Glu Phe Ile Thr Pro Trp Val Ile Lys Ser Gly Phe
    50                  55                  60
Val Arg Pro Ile Met Met Asn Met Ser Leu Thr Thr Phe Trp Cys Leu
65                  70                  75                  80
Cys Ala Ile Pro Val Tyr Phe Tyr Gly Lys Arg Phe Arg Lys Trp Thr
                85                  90                  95
Ala Lys Ser Ser Val His Ser Met
            100

<210> 33747
<211> 658
<212> PRT
<213> A.fumigatus

<400> 33747
Thr Ile Leu Thr Val Ser Thr Phe Thr Ser Gly Phe Gly Ile Glu Leu
1               5                  10                  15
Arg Pro His Val Ser Glu Thr Phe Asp Ser Trp Leu Ala Ala Leu Leu
            20                  25                  30
Cys Trp Gln Pro Ile Arg Pro Lys Gly Val Gln Asn Lys Met Thr Lys
        35                  40                  45
Pro Gln Ser Val Ala Ile Gly Val Arg Arg Ile Ala Asp Arg Arg Arg
    50                  55                  60
Asn Ser Glu Ser Thr Val Gln Lys Asp Ala Ala Ile Ile Lys Val Gly
65                  70                  75                  80
Lys Met Leu Leu Trp Asp Arg Pro Ser Thr Ser Gly Pro Arg Pro Asn
                85                  90                  95
Ser Gly His Arg Val Ser Thr Tyr Arg Gln Gln Arg Ala Leu Ser Ser
            100                 105                 110
Ser Trp Gln Lys Val Ser Cys Thr Leu Gln Glu Asn Gly Ala Phe Lys
        115                 120                 125
Leu Phe Thr Glu Thr Asp Ile Thr Leu Val Thr Cys Ile Gln Leu Ser
    130                 135                 140
Gln Leu Ser Arg Cys Ala Val Gln Gln Leu Asn Glu Ser Val Leu Glu
145                 150                 155                 160
Asp Asp Phe Cys Ile Ala Ile Tyr Pro Gln Tyr Ala Ala His Ser Ala
                165                 170                 175
Ser Gly Leu Thr Arg Pro Val Tyr Leu Ala Leu Glu Ser Arg Val Leu
            180                 185                 190
Phe Glu Val Trp Phe Val Leu Leu Arg Ala Phe Thr Ile Pro Glu Leu
        195                 200                 205
```

```
Tyr Gly Pro Glu Leu Pro Val Glu Glu Asn Ser Thr Asn Ala Ala Gly
    210                 215                 220
Ser Ser Asp Ala Ser Ser Pro Pro Thr Arg Asp Met Phe Arg Ile Glu
225                 230                 235                 240
Arg Met Leu Ser Val Arg Val Thr Glu Ala Lys Leu Gln Arg Asp Arg
                245                 250                 255
Pro Ser Glu Glu Thr Pro Arg Ser Arg Lys Pro Ser Arg Ser His Ser
            260                 265                 270
Asn Pro Val Pro Ala Pro Ala Val Ser Asp Tyr Tyr Thr Glu Val Leu
        275                 280                 285
Leu Asp Gly Glu Ile Arg Ala Lys Thr Ala Val Lys Phe Arg Thr Ser
    290                 295                 300
Asn Pro Phe Trp Arg Glu Asp Phe Thr Phe Asn Asp Leu Pro Pro Val
305                 310                 315                 320
Leu Ser Gln Val Ser Val Leu Val Lys Thr Leu Asn Pro Thr Gln Lys
                325                 330                 335
Asp Trp Thr Leu Ile Ala His Gly Ser Tyr Ala Leu His Gln Asp Ala
            340                 345                 350
Asn Ala Leu His Ala Leu Asp Asp Val Glu Ile Ser Ser His Asp Ala
        355                 360                 365
Thr Tyr Gly Arg Val Glu Ile Arg Leu Asp Asp Leu Glu Ser Gly Val
    370                 375                 380
Glu Thr Glu Lys Trp Trp Thr Ile Leu Asp Glu Arg Asp Gln Ser Val
385                 390                 395                 400
Gly Glu Met Leu Met Arg Ala Arg Met Glu Glu Thr Val Val Leu Met
                405                 410                 415
Ser His Glu Tyr Thr Pro Met Ser Glu Ile Leu His Ala Phe Thr Asn
            420                 425                 430
Gly Leu Thr Ile Asn Met Ala Gln Ile Ile Ser Ser Glu Leu Asn Gln
        435                 440                 445
Leu Ser Glu Ala Leu Leu Asn Ile Tyr Gln Val Ser Gly Gln Thr Val
    450                 455                 460
Glu Trp Ile Ser Ala Leu Val Glu Asp Glu Ile Asp Gly Val His Lys
465                 470                 475                 480
Asp Ser Thr Ala Asn Arg Leu Arg Tyr Thr Thr Arg Ile His Ser Asn
                485                 490                 495
Asp Ser Arg Glu Ser Gly Gln Asp Arg Glu Val Leu Val Arg Asp Met
            500                 505                 510
Gly Arg Thr Ala Thr Val Glu Ala Asn Leu Leu Phe Arg Gly Asn Ser
        515                 520                 525
Leu Leu Thr Lys Ala Leu Asp Leu His Met Arg Arg Leu Gly Lys Glu
    530                 535                 540
Tyr Leu Glu Glu Thr Ile Gly Glu Arg Leu Arg Glu Ile Asp Glu Ser
545                 550                 555                 560
Asp Pro Glu Cys Glu Val Asp Pro Ser Arg Val His Arg Ser Asp Asp
                565                 570                 575
Leu Glu Arg Asn Trp Arg Thr Leu Val Ser Leu Thr Thr Ser Val Trp
            580                 585                 590
Lys Ser Ile Ala Gly Ser Ala Ser Arg Cys Pro Ala Glu Leu Arg Leu
        595                 600                 605
Ile Phe Arg His Ile Arg Ala Cys Ala Glu Asp Arg Tyr Gly Asp Phe
    610                 615                 620
Leu Arg Thr Val Thr Tyr Ser Ser Val Ser Gly Phe Leu Phe Leu Arg
625                 630                 635                 640
Phe Phe Cys Pro Ala Ile Leu Ser Ser Pro Arg Gly Trp Lys Glu Pro
                645                 650                 655
```

Arg His

<210> 33748
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (60)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33748
Ala Phe Trp Tyr Phe Gln Gly Asp Leu Gln Gln Asn Lys Val Leu Ser
1 5 10 15
Tyr Gln Ser Ile Asp Thr Tyr Leu Ser Leu Ser Ile Tyr Gln Thr Lys
20 25 30
Glu Lys Lys Pro Ser Asn Lys Lys Gln Ala Asp Glu Ser Val Ser Ile
35 40 45
Phe Phe Gln Ile Glu Asn Asp Leu Ser Asn Leu Xaa Ile Thr
50 55 60

<210> 33749
<211> 227
<212> PRT
<213> A.fumigatus

<400> 33749
Phe Thr Leu Asp Ser Glu Arg His Leu Gly Val Leu Ser Asp Lys Val
1 5 10 15
Thr Thr Leu Leu Asn Val Leu Leu Glu Ile Ser Lys Ser Ser Leu Asp
20 25 30
Glu Leu Leu Leu Val Ser Val Asp Leu Ala Asn Phe Lys Asp Leu Leu
35 40 45
Asn Thr Val Gly Thr Glu Leu Asp Thr Gly Gly Glu Glu Val Asn Thr
50 55 60
Leu Val Leu Val Lys Arg Ala Leu Asn Glu Gly Gly Phe Asp Asp Thr
65 70 75 80
Leu Leu Ala Leu Ser Gly Leu Gln Glu Gly Leu Gly Glu Ala Ser Ala
85 90 95
Gly His Gly His Gly Glu Ser Ser Gly Thr Gly Thr Val Leu Gly Leu
100 105 110
Asp Asp Leu Ile Thr Thr Glu Leu Asn Ala Val Asp Glu Arg Ile Ala
115 120 125
Gly Leu Ala Leu Asn Ile Gly Val Val Gly Leu Gly Glu Gln Arg Asp
130 135 140
Asp Gly Asp Ser Gly Val Ala Thr Asn Asn Gly Asp Gly Leu Leu Gly
145 150 155 160
Gly Val Gly Leu Leu Asn Leu Gly Asp Glu Ala Gly Gly Thr Asp Asp
165 170 175
Ile Glu Gly Gly Asp Thr Glu Glu Thr Leu Arg Val Val Asp Thr Leu
180 185 190
Gly Leu Glu His Leu Gly Asp Asn Gly Asp Gly Arg Val Tyr Leu Val
195 200 205
Val Thr Leu Ala Leu Leu Ile Arg Tyr Asn Cys Leu Gly Tyr Val Arg

```
    210                 215                 220
Gly Leu Arg
225

<210> 33750
<211> 138
<212> PRT
<213> A.fumigatus

<400> 33750
Gln Glu Leu Phe Phe Thr Asn Leu Phe Leu Ser Leu Thr Asn Asn Asn
1               5                  10                  15
Leu Thr Val Pro Leu Ile Gly Phe Leu Pro Arg Leu Phe Tyr Ala Phe
            20                  25                  30
Ser Gly Glu Pro Lys Gln Leu Thr Lys Cys Thr Arg Thr Glu Phe Pro
        35                  40                  45
Pro Ala Ser Pro Val Arg Ser Ile Ala Gly Lys Asn Val Val Thr Ile
    50                  55                  60
His Leu Asn Asp Ser Val Asp Thr Ser Ala Cys His Leu Val Ala Pro
65                  70                  75                  80
Gly Glu Arg Asn His Leu Gly Gln Lys Pro Ala Arg Arg Val Ala Thr
                85                  90                  95
Arg Ala Gly Asp Trp Pro Ile Ser Ser Gly Leu Glu Lys Leu Asp Tyr
            100                 105                 110
Met Leu Pro Phe Ala Leu Ser Ile Arg Ser Tyr Pro Ile Ser Val Val
        115                 120                 125
Ser Thr Val Ser Gly Phe Gln Gln Arg Gly
    130                 135

<210> 33751
<211> 178
<212> PRT
<213> A.fumigatus

<400> 33751
Ala Ser Lys Val Ala Val Leu Gly Ala Ala Gly Gly Ile Gly Gln Pro
1               5                  10                  15
Leu Tyr Ile Leu Leu Lys Leu Asn Pro Arg Val Ser Glu Leu Ala Leu
            20                  25                  30
Tyr Asp Ile Arg Gly Gly Pro Gly Thr Ser Pro Asp Ile Arg Asn Leu
        35                  40                  45
Arg Phe Gln Ser Phe Lys Ala Gln Tyr Met Leu Thr Arg Asp Leu Leu
    50                  55                  60
Thr Gly Val Ala Ala Asp Leu Ser His Ile Asn Thr Asn Ser Thr Val
65                  70                  75                  80
Thr Gly Tyr Asp Pro Thr Pro Ser Gly Leu Arg Asp Ala Leu Lys Gly
                85                  90                  95
Ser Glu Ile Val Leu Ile Pro Ala Gly Val Pro Arg Lys Pro Gly Met
            100                 105                 110
Thr Arg Asp Gly Met Cys Ile Gly Leu Phe Asn Asp Ala Arg Thr Ile
        115                 120                 125
Thr Asp Ala Ala Met Gln Ile Ser Ser Thr Pro Met Pro Leu Leu Phe
    130                 135                 140
Val Thr Ser Pro Arg Leu Leu Leu Arg His Pro Pro Arg Pro Thr Ser
145                 150                 155                 160
Trp Leu Ser Gln Thr Pro Tyr Val Ser Gln Thr Ile Ile Ser Asp Gln
```

```
                165                 170                 175
Gln Arg


<210> 33752
<211> 201
<212> PRT
<213> A.fumigatus

<400> 33752
Arg His Asn Lys Val Asn Ser Thr Val Pro Ile Val Ala Glu Val Phe
1               5                  10                  15
Lys Ser Lys Gly Val Tyr Asn Pro Lys Arg Leu Phe Gly Val Thr Thr
            20                  25                  30
Leu Asp Val Val Arg Ala Ser Arg Phe Ile Ser Gln Ile Lys Lys Thr
        35                  40                  45
Asp Pro Ala Lys Glu Ala Val Pro Val Val Gly Gly His Ser Gly Val
    50                  55                  60
Thr Ile Val Pro Leu Leu Ser Gln Ser Asn His Pro Asp Ile Glu Gly
65                  70                  75                  80
Glu Thr Arg Asp Thr Leu Val Asn Arg Ile Gln Phe Gly Gly Asp Glu
                85                  90                  95
Val Val Lys Ala Lys Asp Gly Ala Gly Ser Ala Thr Leu Ser Met Ala
            100                 105                 110
Met Ala Gly Ala Arg Phe Ala Glu Ser Leu Leu Lys Ala Ala Gln Gly
        115                 120                 125
Glu Lys Gly Val Ile Glu Pro Thr Phe Val Glu Ser Pro Leu Tyr Lys
    130                 135                 140
Asp Gln Gly Val Asp Phe Phe Ala Ser Arg Val Glu Leu Gly Pro Asn
145                 150                 155                 160
Gly Val Glu Lys Ile Leu Glu Val Gly Lys Val Asn Ala Tyr Glu Glu
                165                 170                 175
Lys Leu Ile Gln Ala Ala Leu Thr Asp Leu Lys Lys Asn Ile Gln Lys
            180                 185                 190
Gly Arg Asp Phe Val Ala Gln Asn Pro
        195                 200

<210> 33753
<211> 154
<212> PRT
<213> A.fumigatus

<400> 33753
Gly Asp Glu Ala Ala Ala Ala Gly Gly Gly Gly Gly Gly Val Asp Arg
1               5                  10                  15
Ala Gly Ala Gly Gly Gly Gly Arg Gly Ala Glu Asp Ala Gly Gly Gly
            20                  25                  30
Gly Gly Gly Gly Ala Ala Gly Leu Glu Gly Ala Gly Gly Gly Gly Gly
        35                  40                  45
Gly Ala Gly Glu Gly Gly Phe Leu Asp Val Asn Gly Gly Gly Gly Ser
    50                  55                  60
Phe Ala Glu Pro Gly Lys Gly Gly Gly Ala Arg Gly Gly Gly Ala Ser
65                  70                  75                  80
Gly Ala Val Leu Ile Asp Val Glu Asp Glu Thr Val Glu Glu Gly Leu
                85                  90                  95
Glu Ala Gly Leu Gly Gly Gly Leu Arg Arg Leu Ala Thr Ser Gly Leu
```

```
            100                 105                 110
Ser Gly Gly Ala Asp Gly Asp Ser Val Glu Asp Gly Gly Gly Gly Gly
        115                 120                 125
Gly Gly Arg Ala Pro Gly Gly Phe Gly Ala Glu Ala Thr Gly Gly Gly
    130                 135                 140
Gly Gly Arg Glu Ala Ser Glu Ser Asp Arg
145                 150
```

<210> 33754
<211> 406
<212> PRT
<213> A.fumigatus

<400> 33754

```
Pro Arg Glu Leu Ser His Leu Ala Met Lys Gly Leu Asn Leu Ser Gly
1               5                   10                  15
Gln Lys Thr Phe Arg Ser Gln Ala Leu Val Cys Gln Phe Cys Gln Leu
            20                  25                  30
Pro Thr Arg Pro Ile Ala Arg Gln Ala Pro Phe Ala Arg Tyr Tyr Ser
        35                  40                  45
Phe Ser Thr Thr Thr Ala Ser Arg Ala Gln Ser Arg Gln Leu Arg Pro
    50                  55                  60
Lys Lys Asp Ser Arg Asn Ser Trp Ile Thr Asn Arg Leu Thr Pro Gly
65                  70                  75                  80
Arg Leu Ala Ser Thr Ser Ser Asn Thr Ser Ser Ser Phe Asp Pro Glu
                85                  90                  95
Thr Ser Leu Arg Gln Val Ser Tyr Glu Ser Ser Glu Leu Leu Lys Leu
            100                 105                 110
Asp Ser Val Pro Ser Asn Glu Ser Val Val Lys Leu Leu Gln Arg Cys
        115                 120                 125
Glu Gln Ile Ala Glu Ala Leu Val Ser Arg Glu Gln Asp Lys Val Glu
    130                 135                 140
Lys Ser Pro Ser Ala Arg Glu Glu Gly Ser Ala Ile Ser Ser Leu Leu
145                 150                 155                 160
Asp Leu Glu Glu Lys Asn Ala Ser Lys Lys His Phe Arg Ser Ile Arg
                165                 170                 175
Asp Ala Gln Pro Arg Leu Ala Glu Ser Leu Ser Gln Ile Val Thr Gly
            180                 185                 190
Leu Leu Lys Asp Glu Lys Val Phe Ile Ser Pro Glu Ala Met Ala Cys
        195                 200                 205
Tyr Thr Lys Ile His Thr Leu Leu Lys Met Ala Asp His Phe Pro Glu
    210                 215                 220
Met Phe Tyr Leu Tyr Ala His Lys Pro Val Pro Glu Glu Asn Ser Ser
225                 230                 235                 240
Pro Val Lys Tyr His Lys Ala Asn Pro Lys Ser Val Asn Ser Ala Ile
                245                 250                 255
Pro Thr Glu Leu Ala Asn Met Ala Leu Asp Ile Ala Ile Glu Gln Arg
            260                 265                 270
Asn Leu Pro Leu Val Leu Ala Ile Ile Asp Asn Thr Phe Cys Ala Pro
        275                 280                 285
Ala Phe His Arg Ala Lys Leu Phe Lys Lys Ala Ala Val Pro Leu Gly
    290                 295                 300
Gly Leu Ala Ala Thr Pro Ala Ala Cys Tyr Val Ile Ala Ser Trp Ala
305                 310                 315                 320
Ser Ser Leu Gln Thr Thr Met Asp Pro Ser Thr Ala Thr Gly Ile Ala
                325                 330                 335
```

```
Phe Ala Ala Thr Leu Ala Tyr Val Gly Gly Thr Ser Ser Ile Gly Leu
            340                 345                 350
Leu Ala Ile Thr Ser Ala Asn Asp Gln Met Glu Arg Val Val Trp Gln
        355                 360                 365
Pro Gly Val Pro Leu Arg His Arg Trp Leu Arg Glu Glu Glu Arg Ala
    370                 375                 380
Ala Leu Asp Arg Val Ala Val Ala Trp Gly Phe Lys Asp Ile Tyr Met
385                 390                 395                 400
Arg Gly Glu Glu Glu Gly
                405
```

<210> 33755
<211> 85
<212> PRT
<213> A.fumigatus

<400> 33755

```
Leu Phe Thr Leu Leu Tyr Pro Thr Cys Ile Phe Ile Phe Thr Asp Gly
1               5                   10                  15
Thr Val Tyr Val Leu Tyr Ala Ala Asp Val Tyr Pro Arg Ile Asp Glu
            20                  25                  30
Asp Trp Asn Met Cys Ser Met Pro Ala His Thr Thr Glu Phe Pro Lys
        35                  40                  45
Lys Lys Asn Tyr Val Pro Val Val Asp Ile Thr Phe Pro Ile Tyr Gly
    50                  55                  60
Ile Tyr Asn Pro Thr Ser Glu Arg Leu Lys Thr Pro Val Thr Lys Leu
65                  70                  75                  80
Ile Ala Gln Arg Ile
                85
```

<210> 33756
<211> 91
<212> PRT
<213> A.fumigatus

<400> 33756

```
Ser Tyr Gly Gly Leu Asn Pro Ser Ser Leu Tyr Phe Ile Pro Thr His
1               5                   10                  15
Leu Asn Pro Asp Trp Ile Val Phe Ile Leu Ser Ile Thr Ala Pro Arg
            20                  25                  30
Thr Lys Met Arg Pro Pro Pro Pro Arg Pro Pro Pro Leu Gly Gly Met
        35                  40                  45
Gly Gly Pro Pro Pro Pro Pro Pro Pro Ser Gly Ser Leu Pro Ser Arg
    50                  55                  60
Pro Ala Lys Gly Glu Val Lys Asp Arg Val Ser Trp Lys Pro Val Phe
65                  70                  75                  80
Leu Ser Ser Gln Val Pro Leu Leu Met Ser Trp
                85                  90
```

<210> 33757
<211> 416
<212> PRT
<213> A.fumigatus

<400> 33757

```
Ser Ala Leu Leu Ser Asp Ile Thr Lys Gly Thr Lys Leu Lys Lys Thr
```

```
1               5                  10                  15
Val Thr Asn Asp Arg Ser Ala Pro Met Ile Ala Gly Gly Gly Val Lys
            20                  25                  30
Ser Ala Ala Pro Pro Val Ala Ser Ala Pro Pro Val Pro Gly Met Pro
        35                  40                  45
Lys Pro Ser Gly Leu Ala Pro Pro Val Pro Ser Ala Asn Arg Leu Arg
    50                  55                  60
Ser Ser Ser Glu Ser Gly Gly Gly Gly Asp Ser Ser Thr Ser His Ala
65                  70                  75                  80
Pro Gln Leu Ala Gly Leu Phe Ala Gly Gly Met Pro Lys Leu Arg Ser
                85                  90                  95
Arg Gly Gly Val Asp Thr Gly Ala Asn Arg Asp Ser Pro Tyr Leu Ser
            100                 105                 110
Asp Ser Glu Ala Ser Arg Pro Pro Pro Pro Pro Val Ala Ser Ala Pro
        115                 120                 125
Lys Pro Pro Gly Ala Arg Pro Pro Pro Pro Pro Pro Pro Ser Ser Thr
    130                 135                 140
Glu Ser Pro Ser Ala Pro Pro Leu Asn Pro Leu Val Ala Asn Leu Arg
145                 150                 155                 160
Lys Pro Pro Pro Arg Pro Ala Ser Arg Pro Ser Ser Thr Val Ser Ser
                165                 170                 175
Ser Thr Ser Ile Lys Thr Ala Pro Asp Ala Pro Pro Pro Arg Ala Pro
            180                 185                 190
Pro Pro Leu Pro Gly Ser Ala Lys Leu Pro Pro Pro Pro Leu Thr Ser
        195                 200                 205
Arg Lys Pro Pro Ser Pro Ala Pro Pro Pro Pro Pro Pro Ala Pro Ser
    210                 215                 220
Ser Pro Ala Ala Pro Pro Pro Pro Pro Pro Pro Ala Ser Ser Ala Pro
225                 230                 235                 240
Arg Pro Pro Pro Pro Ala Pro Ala Arg Ser Thr Pro Pro Pro Pro Pro
                245                 250                 255
Pro Ala Ala Ala Ala Ser Ser Pro His Thr Asn Gly Val Ala Ala Ala
            260                 265                 270
Ser Ile Ala Val Gln Ala Ala Arg Asn Ala Leu Gly His Ser Asn His
        275                 280                 285
Ala Pro Ser Val Pro Pro Pro Pro Pro Pro Ala Ala Ser Ala Pro Ser
    290                 295                 300
Ala Pro Pro Pro Pro Pro Pro Pro Ser Ala Pro Pro Thr Ala Pro Ala
305                 310                 315                 320
Val His Pro Ser His Pro Pro Pro Pro Pro Ala Gln Thr Pro Thr Pro
                325                 330                 335
Pro Pro Ser Gln Pro Val Thr Arg Ser Thr Leu Asp Pro Ser Ala Tyr
            340                 345                 350
Thr Leu Thr Asn Gly Gly Leu Ser Pro Gly His Gln Asn Met Gly Ser
        355                 360                 365
His Gln Ile Ile Arg Val Glu Asp Asn Arg Phe Lys Phe Gln Ser Glu
    370                 375                 380
Gly Leu Leu Pro Lys Pro Arg Pro Phe Val Gly Gly Pro Pro Ala Ile
385                 390                 395                 400
Pro Cys Trp Val Phe Thr Thr Arg Leu Glu Gly Pro Gln Leu Ala Ile
                405                 410                 415
```

<210> 33758
<211> 64
<212> PRT
<213> A.fumigatus

<400> 33758
Gly Lys Lys Leu Leu His Ser Gly His Lys Val Arg Leu Val Lys Tyr
1 5 10 15
His Pro Ser His Thr Asp Lys Leu Thr Gln Ala Val Pro Leu Leu Ser
20 25 30
Leu Leu Leu Ala Pro His Val Asp Ile Leu Glu Pro Pro Ser Asp Gly
35 40 45
Asn Pro Ile Gln Cys Gly Ala Leu Leu Leu Ser Gln Pro Thr Met Ser
50 55 60

<210> 33759
<211> 90
<212> PRT
<213> A.fumigatus

<400> 33759
Leu Gly Ala Ala Gly Lys Phe Pro Thr Pro Val Ser His Ser Glu Asp
1 5 10 15
Met Ala Asn Lys Val Thr Glu Ile Lys Ser Thr Ile Lys Phe Gln Leu
20 25 30
Lys Lys Val Leu Cys Leu Gly Val Ala Val Gly Asn Val Gly Met Thr
35 40 45
Lys Glu Glu Leu Val Ala Asn Val Met Leu Ala Ile Asn Tyr Leu Val
50 55 60
Ser Leu Leu Lys Lys Gly Trp Gln Asn Val Gly Ser Leu Val Leu Lys
65 70 75 80
Ala Thr Met Ser Pro Pro Lys Arg Leu Tyr
85 90

<210> 33760
<211> 105
<212> PRT
<213> A.fumigatus

<400> 33760
Asn Cys Ser Gly Cys Ser Thr Ser Thr Cys Thr Ser Ser Phe Ala Trp
1 5 10 15
Phe Gly Glu Thr Ala Thr Ser Pro Val Asp Val Glu Glu Ala Ala Leu
20 25 30
Ala Ser Ser Ser Thr Ser Thr Pro Cys Ser Phe Glu Ser Ser Cys Thr
35 40 45
Thr Thr Ser Ser Ser Ala Gly Ile Phe Ser Thr Thr Thr Ala Ser Ser
50 55 60
Arg Thr Gly Thr Ile Asp Pro Ser Ser Ser Thr Ser Gly Ser Gly Ser
65 70 75 80
Phe Val Thr Ser Tyr Lys Trp Gly Ser Gly Ser Phe Tyr Arg Gly Ala
85 90 95
Ser Cys Gln Glu Arg Ser Arg Ala Gln
100 105

<210> 33761
<211> 74
<212> PRT
<213> A.fumigatus

<400> 33761
Leu Ile Gln Ala Pro Glu Glu Glu Glu Lys Phe Leu His Tyr Leu Arg
1 5 10 15
Arg Lys Ser His Gln Val Pro Trp Leu Glu Glu Phe Ile Tyr Ser Leu
20 25 30
Ser Phe Val Pro Asp Ile Val Glu Phe Gln Ala Leu Leu Ile Cys Leu
35 40 45
Ala Tyr Asn Ile Thr Thr Gly Ile Lys Arg Leu His Ala Ile Val Glu
50 55 60
His Val Ser His Pro Arg Ser Arg Trp Ile
65 70

<210> 33762
<211> 252
<212> PRT
<213> A.fumigatus

<400> 33762
Thr Ser Leu Cys Pro Tyr Gln Ala Leu Ile Trp Leu Asp Thr Thr Ser
1 5 10 15
Asn Trp Lys Glu Gly Ala Thr Ser Phe Leu Thr Ser Pro Leu Arg Thr
20 25 30
Gly Ser Trp Met Ile Ser Ser Val Pro Val Ile Gln His Arg Ala Gly
35 40 45
Leu Ala Leu Arg Gln Pro His Lys Leu Arg Glu Arg Ala Ala Glu Glu
50 55 60
Ala Asp Thr Asp Gly Pro Lys Pro Ser Glu Arg Met Val Gln Ser Ala
65 70 75 80
Cys Leu Leu His Leu Asp Tyr Gly Leu Asp Leu Asp Lys Ala Leu Ala
85 90 95
Ala Gly Asn Ser Phe Tyr Ala Leu His Glu Ile Leu Val Phe Ala Ala
100 105 110
Phe Ser Glu Asn Gln Phe Leu Asn Met Leu Glu Thr Lys Leu Leu Asn
115 120 125
Glu Leu Asp Pro Thr Phe Leu Val His Gln Lys Asn Pro Thr Leu Ser
130 135 140
Asn Leu Leu Tyr His Gln Arg Ile Leu Asp Arg His Ile Gln Arg Ile
145 150 155 160
Lys Asp Asn Leu Ala Ala Phe Lys Gly Asn Gly Ser Leu Gly Trp Pro
165 170 175
Arg Ser Ala Leu Glu Pro Gly Lys Gln Arg Ile Val Asp Asp Val Ala
180 185 190
Glu Thr Leu Ile Gly Asp Tyr Gln Tyr Leu Leu Ser Arg Ser Leu Thr
195 200 205
Leu Ser Gly Gln Cys Ser Arg Gly Met Gln Val Val Met Asn Asn Ala
210 215 220
Met Ile Lys Glu Ser Arg Asp Ala Met Ser Gln Ala Glu Gly Val Val
225 230 235 240
Lys Leu Thr Arg Leu Ala Phe Ile Phe Val Arg Leu
245 250

<210> 33763
<211> 152
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (95)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33763
Leu Ile Tyr Glu Ala Gln Leu Asp Leu Pro Thr Ala Ile Thr Ser Leu
1 5 10 15
Ala Thr Val Phe Gln Leu Gly Pro Thr Glu Thr Pro Asn Ser Thr Trp
20 25 30
Leu Gln Asn Gln Ile Gln Ala Trp Leu His Ile Asp Asp Ile Phe Gln
35 40 45
Pro Glu Phe Leu Ser Gly Ile Ile Val Val Thr Glu Asp Asn Gly Ile
50 55 60
Gln Pro Asn Leu Ser Ala Phe Ile Glu Ser Leu Pro Lys Glu Trp Lys
65 70 75 80
Pro Asp Trp Trp Ile Phe Phe Asn Lys Glu Val Gly Gly Gln Xaa His
85 90 95
Pro Gly Pro Arg Met Val Ser Tyr Gly Lys Ile His Thr Val Tyr Arg
100 105 110
Ile Tyr Asp Asp Val Asn Gly Ala Phe Met Val Ala Ile Gln Pro Pro
115 120 125
Ile Thr Pro Gly Tyr Val Asn Gly Thr Gln Lys Glu Pro Gln Trp Arg
130 135 140
Leu Arg Leu Gln Arg Ile Thr Phe
145 150

<210> 33764
<211> 60
<212> PRT
<213> A.fumigatus

<400> 33764
Leu Gly Val Leu Asp Leu Phe Gln Val Ile Gln Glu Asn Ala Pro Asp
1 5 10 15
Ala Ile Lys Ala Gly Asp Ile Lys Asn His Phe Gly Arg Lys Val Ala
20 25 30
Ile Val Cys Ser Leu Phe Leu Pro Asn Leu Leu Ala Ser Pro Glu Thr
35 40 45
His Leu Lys Val Ala Val Ile Leu Thr Ser His Gly
50 55 60

<210> 33765
<211> 74
<212> PRT
<213> A.fumigatus

<400> 33765
Leu Thr Ser Cys Arg Ser Met Ser Ile Tyr Ser Phe Leu Ile Ala Val
1 5 10 15
Arg Ser Glu Gly Gln Gln Leu Met Ser Glu Ser Gly Glu Thr Thr Ser
20 25 30
His Leu Met Gly Met Phe Tyr Arg Thr Leu Arg Met Val Asp Asn Gly
35 40 45
Ile Lys Pro Leu Tyr Val Phe Asp Gly Ala Pro Pro Lys Leu Lys Ser
50 55 60

```
Ser Pro Arg Val Thr Ile Asn Leu Tyr Val
65                  70

<210> 33766
<211> 100
<212> PRT
<213> A.fumigatus

<400> 33766
Arg Ser Ser Ser Arg Asp Gln Arg Gln Ser Asp His Leu Leu Lys Ser
1               5                  10                  15
Ala Ile Ser Ala Tyr Ala Thr Phe Thr Leu Gly Asp Ser Tyr Pro Ala
            20                  25                  30
Gly Met Val Thr Met Ile Val Ile Tyr Ser Cys His Val Leu Thr His
        35                  40                  45
Leu Ser Ala Tyr Asp Trp Phe Ile Gly Arg Gly Ser Leu Thr Leu Phe
    50                  55                  60
Phe Arg Asp Ile Ser Ala His Arg Ser Arg Ser Leu Gln Asn Lys Ser
65                  70                  75                  80
Ala Arg Gln Gly Ser Asp Arg Ser Glu Cys Ala His Ser Pro Asp Arg
                85                  90                  95
Gln Leu Val Ala
            100

<210> 33767
<211> 222
<212> PRT
<213> A.fumigatus

<400> 33767
Pro Glu Ser Ile Asp Ile Asn Ile Leu Pro Ala Pro Val Glu His Ala
1               5                  10                  15
Cys Asn Ile Ile Asn Glu Glu Leu Cys Gly Phe Val Leu Arg Asp Pro
            20                  25                  30
Phe Thr Leu Val Leu Asp Leu Trp Ile Ala Ile Gln Leu Val Trp Val
        35                  40                  45
Thr Met Leu Cys Ala Val Gln Leu Val Gln Ile Ser Arg Asn Gln Thr
    50                  55                  60
Thr Tyr Glu Asn Met Arg Gly His Ser Ile Asp Arg Ser Tyr Pro Ser
65                  70                  75                  80
Ser Arg Ala Phe Ala Ser Ala Ile Thr Ala Gly Thr Thr Ser Leu Glu
                85                  90                  95
Ala Ala Gly Leu Ser Ala Thr Gly Gln Gly Pro Asn Pro Ala Leu Ala
            100                 105                 110
Arg Gly His Ser His Arg Gly Arg Arg His Gly Cys Leu Gln Gln Trp
        115                 120                 125
Ser Ser Leu Leu Gly Ile Asp Thr Phe Phe Ala Thr Ala Arg Asp Gly
    130                 135                 140
Leu Arg Asp Gly Pro Arg Ala Asp Arg Pro Lys Asn Pro Phe Ser Arg
145                 150                 155                 160
Gly Ile Ile Thr Asn Cys Arg Asp Phe Trp Cys Asp Pro Ala Pro Tyr
                165                 170                 175
Phe Gly Lys Arg Glu Pro Gly Thr Ala Met Leu Gly Gly Glu Ile Val
            180                 185                 190
Asn Tyr Asn Gln Met Tyr Glu Val Pro Met Arg Met Tyr Ser Asp Gly
        195                 200                 205
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```
Arg Tyr Gln Ser Val Ala His Asp Asp Pro Glu Gln His Val
    210                 215                 220

<210> 33768
<211> 323
<212> PRT
<213> A.fumigatus

<400> 33768
Arg Asn Met Ser Ala Arg Gln Arg Arg Pro Ala Glu Ser Tyr Glu Asn
1               5                  10                  15
Thr Ser Asn Ser Ser Gln Pro Ala Ala Ile Ala Ser Ala Val Leu Glu
            20                  25                  30
Lys Pro Pro Lys Val Met Lys Lys Leu Val His Trp Asp Asp Leu Pro
        35                  40                  45
His Trp Gln Arg Asp Asn His His Ile His Thr Gly Tyr Arg Pro Ala
    50                  55                  60
Ser Phe Ser Phe Leu Val Ser Phe Gln Ser Leu Thr Tyr Leu His Asn
65                  70                  75                  80
Glu Thr Val Asn Ile Tyr Thr His Leu Leu Pro Ser Leu Leu Ser Ile
                85                  90                  95
Pro Ala Ala Tyr Leu Leu Tyr Gln Glu Leu Val Pro Arg Tyr Gly Thr
            100                 105                 110
Ala Thr Arg Asp Asp Ile Ile Ala Phe Ser Cys Phe Phe Ala Gly Ala
        115                 120                 125
Ala Phe Cys Leu Gly Met Ser Ala Thr Tyr His Thr Ile Ser Asn His
    130                 135                 140
Ser Pro Leu Val Ala Arg Ile Gly Asn Thr Leu Asp Tyr Ile Gly Ile
145                 150                 155                 160
Ile Gly Leu Ile Val Gly Ser Phe Val Pro Ser Ile Tyr Tyr Gly Phe
                165                 170                 175
Tyr Cys Val Pro Ala Leu Gln Arg Leu Tyr Trp Thr Met Ile Cys Ala
            180                 185                 190
Ile Gly Leu Gly Cys Ile Ile Val Ser Ile Leu Pro Lys Phe Arg Thr
        195                 200                 205
Pro Gln Trp Arg Pro Phe Arg Ala Ala Met Phe Val Gly Met Gly Leu
    210                 215                 220
Ser Ala Val Phe Pro Val Leu His Gly Leu Gln Met Phe Gly Phe Asp
225                 230                 235                 240
Gln Met Thr Arg Gln Ile Gly Leu Gly Trp Leu Leu Leu Gln Gly Phe
                245                 250                 255
Leu Tyr Ile Leu Gly Ala Thr Ile Tyr Ala Ala Arg Val Pro Glu Arg
            260                 265                 270
Leu Arg Pro Gly Lys Phe Asp Ile Leu Gly Ser Ser His Gln Ile Phe
        275                 280                 285
His Val Leu Val Val Cys Ala Ala Val Ala His Leu Thr Gly Leu Leu
    290                 295                 300
Lys Ala Phe Asp Tyr Arg His Ser Gly Val Ala Gly Ser Cys Leu Leu
305                 310                 315                 320
Glu Val Asn


<210> 33769
<211> 223
<212> PRT
<213> A.fumigatus
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<400> 33769
Pro Val Ile Leu Gly Ser Gln Cys Ser Leu Thr Arg Arg Glu Ile Asp
1 5 10 15
Thr Pro Trp Ile Gln Asn Gln Glu Lys Met Phe Trp Arg Gly Ser Thr
20 25 30
Thr Gly Gly Phe Ser Arg Ala Gly Gly Trp Arg Arg Gln His Arg Gln
35 40 45
Ile Phe Val Gly Asn Ile Asn Ser Leu Asp Asn Val Lys Val Leu Ala
50 55 60
Lys Thr Thr Asp Gly Gln Trp Gln Thr Lys Glu Val Asn Arg Ala Asp
65 70 75 80
Tyr Arg Asp Leu Phe Asp Val Lys Phe Thr Phe Ile Gly Gln Cys Asp
85 90 95
Pro Ser Asp Cys Asp Ala Gln Lys Glu Phe Phe Glu Val Val Asp Ala
100 105 110
Val Gly Gln Gln Asp Ala Trp Ala Tyr Lys Tyr Leu Val Asp Ile Asp
115 120 125
Gly Asn Ala Phe Ser Gly Arg Tyr Tyr Ala Phe Leu His Ser His Ser
130 135 140
Leu Val Cys Lys Val Ala Ile Phe Arg Glu Trp His Asp Glu Trp Ile
145 150 155 160
Lys Pro Trp Val His Tyr Val Pro Leu Thr Leu Ala Gly Asp Glu Ser
165 170 175
Val Glu Thr Met Arg Tyr Phe Val Thr Glu Asp Glu Gly Lys Ser Thr
180 185 190
Ala Ala Lys Ile Ala Gly Lys Gly Arg Asp Trp Ala Leu Lys Ala Leu
195 200 205
Arg Asn Asp Asp Met Glu Val Trp Phe Phe Arg Leu Leu Leu Glu
210 215 220

<210> 33770
<211> 159
<212> PRT
<213> A.fumigatus

<400> 33770
Ser Val Ser Cys Thr Val Ala Ala Ala Val Ser Gln Tyr Ala Val Ser
1 5 10 15
Thr Ser Arg Pro Pro Pro Pro Pro Pro Leu Gln Ala Asn Gly Arg Asp
20 25 30
Pro Arg Phe Gly Tyr Pro Leu Ala Phe Leu Asp Arg Gln Lys Leu Leu
35 40 45
Gln Ile Leu Ala Ala Gly Pro Val Gln Ser Gly Arg Val Lys Leu Gly
50 55 60
His Gln Val Val Asn Ile Glu Ser Thr Pro Asp Gly Val Thr Val Arg
65 70 75 80
Thr Ser His Gly His Val Tyr Gln Gly Asp Leu Val Val Gly Ala Asp
85 90 95
Gly Val His Ser Arg Val Arg Ala Glu Met Trp Arg Leu Ala Thr Ala
100 105 110
Ser Gln Gly Glu Ile Phe Arg Ser Glu Tyr Asn Ser Ser Tyr Pro Pro
115 120 125
His Cys Gly Phe Val Val Cys Phe Phe Pro Pro Pro Leu Ser Phe Phe
130 135 140
Leu Leu Trp Ala Met His Leu Lys Thr Asn Ala Pro Phe Gly Ser

145 150 155

<210> 33771
<211> 95
<212> PRT
<213> A.fumigatus

<400> 33771
Phe Gly Cys Glu Gly Gly Ala Arg Leu Ile Ala Ser Val Val Leu Gln
1 5 10 15
Val Leu Ala Val His Pro Asp Tyr Gln Gly Arg Gly Ile Gly Thr Arg
20 25 30
Leu Leu Met Val Gly Val Glu Glu Val Arg Arg Leu Gly Leu Pro Ala
35 40 45
Trp Leu Glu Ala Ser Glu Ala Gly Tyr Ser Val Tyr Arg Arg Cys Gly
50 55 60
Phe His Asp Ala Glu Arg Met Glu Leu Asp Phe Gly Lys Tyr Gly Leu
65 70 75 80
Ser Gly Met Glu Gln Val Tyr Cys Met Leu Met Asp Asp Glu His
85 90 95

<210> 33772
<211> 165
<212> PRT
<213> A.fumigatus

<400> 33772
Lys His Pro Thr Ser Ser Ser His Asp Pro Ser Phe Leu Arg Asn Ile
1 5 10 15
Ile Ser Met Leu Gln Ser Lys Ile Thr Leu His Pro Ala Val Gln Ala
20 25 30
Asp Ala Leu Pro Leu Ala Lys Leu His Asn Ala Ala Phe Ala Asn Asp
35 40 45
Ala Leu Leu Glu Ala Met Tyr Gly Pro Leu Thr Gln Asn Asp Pro Pro
50 55 60
Phe Ala Asn Asp Leu Arg Gln Ile Ile Ala Asp Asp Pro His Ser Arg
65 70 75 80
Ile Thr Lys Ala Ile Asp Thr Glu Ser Gly Gln Ile Val Ala Trp Ser
85 90 95
Trp Trp Ser Ile Tyr Pro Asp Ala Glu Ala His Ala Ser Ala Ala Glu
100 105 110
Val Ala Arg Glu Arg Trp Thr Thr Pro Pro Pro Thr Ser Leu Cys Pro
115 120 125
Arg Leu Tyr Leu Asp Phe Gln Asp Met Lys Ala Arg Met Arg Glu Lys
130 135 140
Trp Ile Gly Gly Arg Ala Ala Ala Ser Lys Leu Ala Ser Leu Leu Gln
145 150 155 160
Cys Leu Ile Trp Val
165

<210> 33773
<211> 558
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33773

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Gln Pro Ala Thr Xaa Asp Val His Val Asp Arg Pro Ser Phe Arg Pro
1               5                  10                  15
Gly Asp Asn Trp Gln Glu Phe Lys Gln Asp Phe Tyr Pro Arg Glu Pro
            20                  25                  30
Val Leu Ile Leu Leu Glu Asp Asn Thr Arg Leu His Gly Met Ile Arg
        35                  40                  45
Asp Lys Ala Asn Phe Ala Glu Gln Arg Tyr Pro Asp Gly Thr Leu Lys
    50                  55                  60
Ala Pro Ala Tyr Ala Thr Tyr Leu Val Lys Val Leu Asp Arg Pro Asn
65                  70                  75                  80
Glu Glu Ala Leu Leu Asp Gln Asp His Ile Thr Arg Asp Arg Lys Thr
                85                  90                  95
Phe Thr Lys Gln Met Leu Arg Ala Phe Ile Lys Asn Asn Val Thr Arg
            100                 105                 110
Glu Ser Trp Asn Gly Ala Pro Trp Leu Val Lys Pro Ser Val Ala Glu
        115                 120                 125
Glu Tyr Lys Ile Pro Thr Glu Val Pro Lys His Leu Gln Tyr Gly Ala
    130                 135                 140
Arg Val Ala Glu Lys Lys Ala Gln Lys Lys Ala Asp Gln Glu Gly Phe
145                 150                 155                 160
Phe Gly Phe Phe Ser Ser Gln Gln Leu Pro Glu Leu Lys Pro Ala Ala
                165                 170                 175
Lys Gly Gln Lys Asn Lys Leu Ser Pro Gln Asp Leu Ala Arg Ser Lys
            180                 185                 190
Glu Ala Gln Tyr Leu Glu Tyr Gln Arg Ser Leu Asn Gly Asn Pro Thr
        195                 200                 205
Phe Val Val Ser His Lys Leu Pro Asn Ala Pro Ser Arg Pro Leu Lys
    210                 215                 220
Pro Gln Asp Glu Lys Lys Ser Gln Pro Val Pro Thr Val Ile Val Lys
225                 230                 235                 240
Thr Glu Pro Pro Lys Pro Pro Thr Pro Pro Pro Ile Lys Tyr Pro Ile
                245                 250                 255
Glu Asp Leu Glu Ile Pro Pro Asp Arg Glu Lys Lys Lys Gln Arg Pro
            260                 265                 270
Pro Leu Lys Phe Leu Ala Ala Asp Glu Asp Asp Asp Pro Asn Asp Glu
        275                 280                 285
Glu Leu Leu His Asp Lys Ile Glu Met Gln Ser Val Gly Leu Leu Leu
    290                 295                 300
Glu Thr Trp Asn Thr Leu Asn Val Tyr Cys Glu Val Phe Gln Leu Asp
305                 310                 315                 320
Ser Phe Thr Phe Asp Asp Phe Leu Gln Ala Met Arg Phe Ser Ser Asp
                325                 330                 335
Glu Val Glu Cys Glu Leu Phe Val Glu Ile His Cys Ala Val Leu Lys
            340                 345                 350
Lys Leu Val Asn Ala Glu Asn Asp Asp Glu Gly Ala Val Gln Val Ser
        355                 360                 365
Leu Pro Asp Leu Pro Asp Val Glu Ser Asp Asp Ser Glu Ala Asp Glu
    370                 375                 380
Glu Asn Glu Glu Glu Glu Glu Lys Glu Pro Ser Pro Glu Pro Glu Pro
385                 390                 395                 400
Val Val Thr Arg Met Thr Thr Arg Ser Ser Leu Ala Lys Ala Glu Ala
```

```
                405                 410                 415
Glu Asn Leu Lys Ala Gln Ala Asn Arg Ser Arg Ala Asn Ser Glu Asp
            420                 425                 430
Ile Lys Ile His Arg Ala Ala Glu Met Phe Gly Asp Tyr Gly Trp Ile
        435                 440                 445
Glu Arg Leu Arg Lys Arg Asp Phe Arg His Gly Gly Trp Gln Met Val
    450                 455                 460
Met Val Gly Leu Leu His Gln Leu Ser Ala Arg Pro Arg Met Glu Lys
465                 470                 475                 480
Val Cys Asn Asp Ile Leu Lys His Leu Ala Pro Leu Asp Ala Glu Pro
                485                 490                 495
Thr Gln Glu Thr Val Gln Ser Gln Tyr Ala Thr Leu Asn Val Asn Leu
            500                 505                 510
Arg Val Gln Ala Leu Gln Ile Ile Cys Ile Leu Ser Leu Glu Thr Lys
        515                 520                 525
Ala Ile Arg Asn Tyr Leu Glu Glu Cys Ser Asn Gln Met Thr Glu Phe
    530                 535                 540
Arg Lys Glu Lys Ile Glu Tyr Gln Arg Ala Arg Lys Val Ala
545                 550                 555
```

<210> 33774
<211> 151
<212> PRT
<213> A.fumigatus

<400> 33774

```
Leu Thr Ile Phe Leu Arg Cys Arg Leu Glu Glu Leu Arg Arg Leu His
1               5                   10                  15
Gln Glu Arg Lys Ala Leu Gln Pro Glu Gln Glu Lys Ser Pro Ser Pro
            20                  25                  30
Val Pro Glu Leu Glu Ala Leu Glu Asp Ser Lys Met Ser Gly Val Asp
        35                  40                  45
Gly Asp Ser Glu Gln Val Met Asp Thr Glu Asp Asp Asp Val Pro Gln
    50                  55                  60
Gln Arg Ser Leu Arg Gly Gly Leu Asp Arg Ile Leu Glu Arg Lys Arg
65                  70                  75                  80
Lys Gln Glu Glu Glu Arg Glu Arg Lys Glu Gln Leu Ala Lys Gln Pro
                85                  90                  95
Lys Gly Ser Lys Gln Tyr Gln Arg Val Leu Lys Lys Ile Glu Asp Gln
            100                 105                 110
Lys Ala Thr Val Glu Lys Leu Glu Lys Lys Ile Glu Val Val Asp Asn
        115                 120                 125
Asp Leu Arg Glu Ala Val Cys Pro Arg Ser Thr Cys Val Arg Lys Val
    130                 135                 140
Arg Asp Glu Thr Lys Gln Gly
145                 150
```

<210> 33775
<211> 61
<212> PRT
<213> A.fumigatus

<400> 33775

```
Ser Ile Phe Arg His Ser Ser His Gln Leu Leu Asn Met Ser Leu Phe
1               5                   10                  15
Gln Pro Asp Ile Arg Pro Gln Asp Val Gly Lys His Gln Asp Thr Glu
```

```
            20                  25                  30
Asn Val Arg Glu Pro Ser Thr Asp Thr Gln Asn Asp Val Glu Ser Gly
        35                  40                  45
Asp Glu Pro Ser Val Ala Glu Ile Glu Arg Ile Tyr Arg
    50                  55                  60
```

<210> 33776
<211> 195
<212> PRT
<213> A.fumigatus

<400> 33776

```
Gly Leu Gln Phe Leu Ile Thr Phe Ser Leu Leu Arg Leu Leu Leu Gly
1               5                   10                  15
Ile Phe Ile Ala Gly Met Trp Pro Gly Met Thr Tyr Tyr Leu Thr Leu
            20                  25                  30
Phe Tyr Pro Pro Ser Arg Thr Gly Lys Arg Ile Gly Gln Tyr Phe Thr
        35                  40                  45
Ala Ala Gln Ile Ser Ala Ala Val Val Gly Leu Val Ser Ala Gly Phe
    50                  55                  60
Gln Lys Met Asp Gly Glu Arg Gly Leu Val Gly Phe Gln Trp Met Phe
65                  70                  75                  80
Leu Val Tyr Gly Ile Ile Thr Ile Ala Val Gly Ile Val Leu Leu Trp
                85                  90                  95
Trp Leu Pro Asp Arg Pro Leu Ala Pro Gly Val Glu Pro Pro Gln Arg
            100                 105                 110
Lys Tyr Phe Lys Trp Leu Gln Arg Ser Pro Pro Ala Leu Thr Gly Arg
        115                 120                 125
Asp Ala Glu Ile His Tyr His Asp Leu Arg Arg Val Tyr His Arg Pro
    130                 135                 140
Gln Trp Ser Val Arg Asp Leu Leu Arg Val Phe Leu Asp Trp Arg Leu
145                 150                 155                 160
Trp Pro Leu Leu Val Met Tyr Phe Gly Val Val Gly Val Gly Ile Gly
                165                 170                 175
Val Gln Asn Tyr Ala Thr Val Ile Ile Arg Gly Tyr Gln Pro Ile Pro
            180                 185                 190
Glu Trp Asp
        195
```

<210> 33777
<211> 168
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (138)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33777

```
Pro Gln Ser Ser His Ser Pro Asn Leu Ala Cys Lys Tyr Ser Pro Leu
1               5                   10                  15
Leu Gly Cys Leu Ser Ala Leu Gly Cys Lys Thr Asp Lys Lys Gln Met
            20                  25                  30
Asp Leu Leu Gly Ile Leu Val Val Thr Pro Phe Ser Asp Arg Phe His
        35                  40                  45
```

```
Lys His Arg Ala Leu Phe Phe Ser Phe Pro Val Cys Leu Gln Ile Val
    50                  55                  60
Gly Leu Leu Leu Thr Thr Phe Ala Gly Ser Ala Ser Asn Ser Trp Pro
65                  70                  75                  80
Arg Tyr Gly Gly Leu Leu Ile Val Gly Phe Gly Leu Gly Pro Thr Val
                85                  90                  95
Pro Ile Thr Met Ser Trp Thr Ala Glu Val Phe Gln Pro Arg His Gly
            100                 105                 110
Glu Val Gly Val Ala Ala Ala Ser Ala Val Val Ser Gly Trp Gly Asn
        115                 120                 125
Leu Gly Ser Ile Leu Thr Thr Tyr Ala Xaa Tyr Thr Gly Trp Pro Ser
    130                 135                 140
Asp Ser Ala Ala Pro Gly Arg Ala Thr Ala Ala Arg Phe Ser Ile Thr
145                 150                 155                 160
Thr Lys Pro Glu Ser Asn Thr Arg
                165
```

<210> 33778
<211> 111
<212> PRT
<213> A.fumigatus

<400> 33778

```
Val Arg Ser Ser Gln Ser Ser Arg Lys Leu Asp Tyr Arg Ile Ile Pro
1               5                   10                  15
Ala Phe Trp Val Leu Tyr Phe Leu Cys Ser Ala Ile Arg Ser Asn Val
            20                  25                  30
Gly Leu Ala Gln Thr Met Asn Met Asp Val Gly His Asp Leu Gly Ser
        35                  40                  45
Val Leu His Leu Thr Pro His Gln Ile Ser Thr Gly Leu Ala Leu Phe
    50                  55                  60
Tyr Val Cys Tyr Val Val Phe Asp Leu Pro Ser Asn Leu Val Met Thr
65                  70                  75                  80
Arg Leu Ser Pro His Val Trp Met Ser Arg Ile Val Ile Ser Val Gly
                85                  90                  95
Ile Ile Gly Ser Cys Met Ala Ala Met Lys Ala Ala Trp Ser Leu
            100                 105                 110
```

<210> 33779
<211> 237
<212> PRT
<213> A.fumigatus

<400> 33779

```
Leu Ile Ile Ser Pro Ser Ser Thr Leu Leu Pro Ala Arg Val Asn Ala
1               5                   10                  15
Ser Ala Asn Thr Ser Leu Pro Leu Arg Ser Leu Pro Leu Leu Trp Ala
            20                  25                  30
Trp Ser Arg Leu Ala Ser Arg Arg Trp Thr Ala Ser Ala Ala Ser Leu
        35                  40                  45
Ala Ser Asn Gly Cys Ser Ser Ser Thr Ala Ser Ser Pro Ser Pro Ser
    50                  55                  60
Ala Ser Ser Ser Ser Gly Gly Phe Pro Thr Gly Leu Trp Leu Pro Val
65                  70                  75                  80
Ser Asn Leu Pro Ser Ala Ser Ile Ser Ser Gly Cys Ser Ala Ala Arg
                85                  90                  95
```

```
Pro Pro Ser Gln Ala Gly Thr Gln Arg Ser Thr Thr Thr Thr Cys Gly
            100                 105                 110
Ala Ser Thr Thr Val Arg Ser Gly Pro Ser Val Thr Ser Ser Ala Cys
        115                 120                 125
Ser Trp Thr Gly Ala Cys Gly Arg Cys Trp Ser Cys Thr Leu Ala Trp
    130                 135                 140
Ser Ala Trp Ala Leu Ala Ser Arg Thr Thr Pro Pro Ser Ser Ser Gly
145                 150                 155                 160
Gly Ile Asn Pro Ser Leu Asn Gly Ile Asp Leu Ser Leu Leu Thr Ala
                165                 170                 175
Pro Ile Trp Leu Val Ser Ile Pro Pro Ser Leu Ala Val Cys Pro Pro
            180                 185                 190
Trp Ala Ala Lys Leu Thr Lys Ser Arg Trp Thr Ser Ser Ala Ser Ser
        195                 200                 205
Trp Ser Pro Pro Ser Arg Thr Ala Ser Thr Asn Thr Ala Pro Ser Ser
    210                 215                 220
Ser Pro Ser Pro Ser Ala Ser Arg Ser Ser Ala Ser Ser
225                 230                 235
```

<210> 33780
<211> 605
<212> PRT
<213> A.fumigatus

<400> 33780

```
Leu Trp Ile Ala Leu Leu Arg Thr Ser Ile Leu Phe Pro Pro Tyr Leu
1               5                   10                  15
His Val Leu Gln Ala Ala Asp Asp Ser His Pro Gly Leu Phe Leu Leu
            20                  25                  30
Ile Val Val Ala Phe Asp His Leu Ser Leu Tyr Phe Pro Leu Gly Gly
        35                  40                  45
Ala Asn Phe Gly Tyr Gly Glu Phe Pro Tyr Gly Ala Leu Leu Leu Ser
    50                  55                  60
Arg Ser Gly Val Thr His Met Lys Thr Leu Gly Leu Phe Arg Ser Leu
65                  70                  75                  80
Leu Gln Pro Ser Asn Ser His Phe Phe Arg Leu Tyr His Trp Asn Met
                85                  90                  95
Ser Glu Lys Lys Arg Asn Gly Ala Pro Arg Thr Phe Pro Lys Arg Glu
            100                 105                 110
Lys Arg Pro Pro Leu Thr His Phe Leu Cys Leu Pro Leu Val Asn Asp
        115                 120                 125
Ile Ser Leu Pro Gln Leu Glu Ser Ser Leu Ser Thr Phe Lys Ala Ala
    130                 135                 140
Ile Pro Leu Val Ser His Ser Asp Glu Glu Gly Ser Val Gln Gln Gln
145                 150                 155                 160
Val Ser Ala Glu Arg Pro Leu Ile Pro Tyr Gly Ala Val Arg Pro Val
                165                 170                 175
Gly Thr Leu His Leu Thr Leu Gly Val Met Ser Leu Pro Thr Lys Glu
            180                 185                 190
Arg Leu Glu Glu Ala Ile Glu Phe Phe His Ser Leu Asp Leu Ala Phe
        195                 200                 205
Ile Met Arg Glu Ala Glu Glu Ile Ala Lys Lys Ser Lys Trp Ser Arg
    210                 215                 220
Lys Arg Ser Ser Ser Pro Arg Gln Gln Ser Asp Phe Thr Gly Ala Val
225                 230                 235                 240
Gly Glu Gly Glu Glu Thr His Pro Ser Arg Arg Leu Glu Gln Glu Asp
```

```
                245                 250                 255
Asp Pro Ala Ser Val Ile Val Pro Arg Asp Asn Tyr Glu Pro Leu Thr
            260                 265                 270
Ile Ser Leu Glu Ser Leu His Ala Leu Pro Arg Gly Arg Ala Ala Thr
        275                 280                 285
Val Leu His Ala Ala Pro Val Asp Ser Thr Ser Arg Leu Tyr Pro Phe
    290                 295                 300
Cys Val Leu Leu Arg Asn Lys Phe Leu Glu Ala Gly Phe Leu Gln Cys
305                 310                 315                 320
Glu His Ile Lys Asn Arg Pro Gly Ser Tyr His Ile Glu Pro Gln Lys
                325                 330                 335
Pro Pro Lys Tyr Val Glu Ser Asp Thr Gly Asp Ala Thr Ser Thr Ile
            340                 345                 350
His Gln Ala Lys Pro Asn Leu Asp Gln Gly His Gln Ser Leu Thr Asn
        355                 360                 365
Ile Leu Ile Gln Asn Arg Thr Thr Leu Leu Gln Glu Met Pro Val Asp
    370                 375                 380
Leu Ala Gly Glu Leu Thr Gln Val His Ser Gln Thr Arg Glu Pro Ile
385                 390                 395                 400
Thr Thr Thr Val Gly Thr Ala Val Gln Thr Lys Ser Lys Leu Lys Val
                405                 410                 415
Arg Pro Leu Leu Leu His Ala Thr Val Val Asn Thr Ile Tyr Val Arg
            420                 425                 430
Gly Arg Arg Arg Gly Gly Gly Pro Gln Asn Ser Gly Ser Arg Arg Asn
        435                 440                 445
Ser Gln Tyr Ser Phe Asp Ala Arg Asp Ile Leu Ala His Tyr Arg Asp
    450                 455                 460
Phe Tyr Ile Asp Cys Gln Arg Thr Met Pro Arg Ser Thr Ser Val Thr
465                 470                 475                 480
Met Ala Ser His Pro Asn Glu Ile Glu Arg Gln Gln Ile Ala Asn His
                485                 490                 495
Asp Thr Gly Thr Glu Ser Ala Ser Asn Ser Ala Ser Ser Thr Asp Gly
            500                 505                 510
Ser Gly Asn Glu Ala Arg Asn Ser Pro Ser Glu Lys Arg Gln Lys Met
        515                 520                 525
Ser Ser Met Lys Arg Val His Ala Phe Pro Phe Val Trp Ala Lys Asp
    530                 535                 540
Phe Pro Leu Glu Thr Ile Cys Ile Cys Glu Met Gly Ala Lys Lys Leu
545                 550                 555                 560
Asp Pro Asp Asp Ser Gly Met Asn Ala Arg Leu Gly Glu Lys Tyr Arg
                565                 570                 575
Val Val Ala Glu Met Ser Leu Asp Phe Thr Ser Ser Gly Asn Ser Lys
            580                 585                 590
Val Val Ala Glu Gly Thr Ala Cys His Arg Asp Asn Leu
        595                 600                 605
```

<210> 33781
<211> 200
<212> PRT
<213> A.fumigatus

<400> 33781

```
Pro Ser Pro Ser Phe Ile Cys Ser Ala Leu Thr His Pro Leu Tyr Ser
1               5                   10                  15
Arg Leu Lys Val Ser Cys Thr Ala Arg Lys Pro Pro Lys Met Leu Ser
            20                  25                  30
```

```
Arg Ile Ser Arg Ser Ala Ala Ser Ser Ala Ala Arg Pro Ser Leu Arg
        35                  40                  45
Val Gly Arg Ile Ser Ala Thr Ala Pro Ala Ala Ile His Leu Gln Pro
    50                  55                  60
Arg Leu Asn Gly Val Asn Asn Ser Ala Gln Ala Pro Arg Arg Gly Phe
65                  70                  75                  80
Gln Cys Thr Ser Cys Ile Arg Lys Gly Ile Phe Pro Asp Ser Ala Asp
                85                  90                  95
Pro Pro Ala Pro Lys Pro Gln Ser Asn Asn Val Ala Gly Ala Ser Thr
            100                 105                 110
His Val Thr Glu Pro Ser Pro Leu Thr Asp Val Gln Tyr His Glu Phe
        115                 120                 125
Ala Glu His Tyr Leu Asn Val Ile Gln Asn Glu Val Glu Lys Ala Gln
    130                 135                 140
Glu Glu Gly Ser Asp Ile Glu Ala Glu Tyr Ser Val Arg Ile Ala Gly
145                 150                 155                 160
Leu Arg Ser Ile Phe Phe Phe Phe Leu Phe Arg Phe Phe Phe Gly Gln
                165                 170                 175
Leu Tyr Ala Ala Leu Ile Ile Tyr Lys Ala Ser Leu Ala Asp Leu Arg
            180                 185                 190
Cys Asp Met Arg Ser Leu Thr Leu
        195                 200
```

<210> 33782
<211> 707
<212> PRT
<213> A.fumigatus

<400> 33782

```
Leu Glu Phe Tyr Tyr Arg Ser Asn Leu Ser Ala Leu Arg Ala Phe Ser
1               5                   10                  15
Ile Gln His Asp Met Gln Ser Ala Tyr Arg Phe Ser Thr Leu Ser Ser
            20                  25                  30
Thr Phe Arg Ile Lys Ser Gly Asp Ala Ala Ala Thr Ala Leu Gly Cys
        35                  40                  45
Ile Thr Val Asp Ile Thr Pro Asp Leu Gly Thr Ser Leu Lys Asn Thr
    50                  55                  60
Leu Ala Tyr Val Pro Leu Val Ile Leu Val Leu Val Gly Ile Ala Thr
65                  70                  75                  80
Ile Ser Ala Ala Met Tyr Ser Pro Trp Gly Thr Thr Asn Phe Phe His
                85                  90                  95
Trp Thr Ser Asn Tyr Gly Arg Asp Glu Asp Val Leu Arg Leu Val Thr
            100                 105                 110
Pro Gly Phe Gly Asp Cys Met Gln Tyr Ile Gln Phe Ala Val Leu Thr
        115                 120                 125
Gly Ala Leu Ser Leu Asn Tyr Pro Gly Tyr Tyr Gln Pro Val Ile Ser
    130                 135                 140
Gln Val Ala Trp Ser Thr Leu Met Phe Asn Gln Ser Phe Val His Ser
145                 150                 155                 160
Gly Gln Gly Arg Gly Pro Val Ile Asp Gly Val Tyr Ala Val Asn Ala
                165                 170                 175
Thr Tyr Gly Leu Glu Arg Leu Glu Gln Tyr Val Gly Met Ser Thr Ala
            180                 185                 190
Ser Asp Ile Trp Pro Gly Met Met Ile Trp Leu Leu Val Ile Leu Gly
        195                 200                 205
Ile Val Thr Ala Leu Ile Gln Leu Ala Phe Ala Phe Arg Trp Leu His
```

```
    210                 215                 220
His Glu Leu Ala Asn Ile Pro Glu Glu Asp Leu Arg Ser Lys Asn Met
225                 230                 235                 240
Pro Phe Thr Val Gly Asn Val Ile Arg Ile Val Phe Asn Phe Leu Phe
                245                 250                 255
Leu Pro Val Val Ser Leu Ser Phe Phe Gln Leu Val Ile Ala Ala Asp
            260                 265                 270
Ser Pro Ala Tyr Ser Val Ala Leu Ala Val Val Val Ile Val Ala Leu
        275                 280                 285
Leu Val Phe Ser Ile Trp Thr Val Arg Leu Ile Val Ser Thr Arg Pro
    290                 295                 300
Lys Ser His Leu Phe Asp Asp Leu Pro Thr Val Leu Leu Tyr Gly Pro
305                 310                 315                 320
Leu Tyr Asn Thr Phe Cys Asp Asp Ala Ala Ala Phe Ala Ala Val Pro
                325                 330                 335
Ile Phe Ile Thr Phe Ala Arg Gly Val Ala Ile Gly Ala Leu Gln Pro
            340                 345                 350
Ser Gly Ile Ala Gln Ile Val Leu Leu Ala Ile Cys Glu Val Val Tyr
        355                 360                 365
Val Leu Thr Leu Val Ala Phe Arg Pro Phe Pro His Pro Thr Ser Met
    370                 375                 380
Asn Leu Tyr His Ala Cys Phe Ala Ile Val Arg Phe Leu Thr Ile Leu
385                 390                 395                 400
Leu Ser Val Val Phe Val Pro Ser Leu Gly Val Ser Gln Ala Ala Arg
                405                 410                 415
Gly Trp Ile Gly Tyr Ile Ile Leu Leu Leu His Ala Leu Val Leu Val
            420                 425                 430
Phe Gly Phe Phe Leu Asn Ala Leu Gln Thr Leu Ile Glu Val Ile Ala
        435                 440                 445
Arg Leu Ala Gly Ala Gly Gly Tyr Glu Gly Gly Ala Thr Arg Gly Gly
    450                 455                 460
Leu Val Lys Val Phe Gly Met Arg Gln Leu Ser Arg Arg Leu Pro Arg
465                 470                 475                 480
Arg Asp Ala Ala Gly Thr Arg Gln Ser Met Ala Ser Asp Ala Ala Met
                485                 490                 495
Leu Ala His Thr Asp Asp Arg Met Ser Ala Gln Phe Asp Gly Ser Arg
            500                 505                 510
Pro Arg Ser Leu Ser Gly Ser Leu Leu Leu Asn Arg Ala Thr Ala Ser
        515                 520                 525
Asp Gly Arg Ala Ser Gly Ile Phe Glu Ser Gly Ser Ala His Gly Gly
    530                 535                 540
Thr His Ser Arg Ala Asn Ser Ser Gly Leu Tyr Thr Pro Thr Thr Leu
545                 550                 555                 560
Gly Gly Phe Gln Gly Ala Gly Tyr Gln Thr Thr Gly Ser Asn Ser Pro
                565                 570                 575
Lys Ser Gly Leu Ile Tyr Ala Met Gln Pro His Asp Pro Tyr Tyr Arg
            580                 585                 590
Pro Pro Arg Pro Arg Arg Asn Asn Glu Arg Gly Thr Ser Phe Glu Asn
        595                 600                 605
Gly Arg Thr Val Ser His Thr Val Ser Arg Ser Gly Asn Leu Gly Asp
    610                 615                 620
Met Asp Asp Asp Leu Ile Glu Gly Pro Ser Val Ser Gly Arg Gly Thr
625                 630                 635                 640
Pro Val Pro Ala Tyr Ile Pro Ala Pro Lys Asp Asp Leu Asp Tyr Asp
                645                 650                 655
Asp Ser Arg Pro Ser Arg Lys Glu Tyr Ala Val Arg Glu Val Asp Phe
```

660 665 670
Tyr Tyr Arg Val Arg Gly Pro Pro Leu Ser Gln Ser Gly Thr Arg Lys
675 680 685
Leu Asn Thr Gly Arg Leu Leu Pro Arg Arg Arg Pro Ala Arg Arg Lys
690 695 700
Ile Lys Ala
705

<210> 33783
<211> 545
<212> PRT
<213> A.fumigatus

<400> 33783
Pro Phe Thr Ser Tyr Arg Tyr Ala Phe Val Glu Phe Glu Thr Pro Glu
1 5 10 15
Gln Ala Val Ala Ala Val Lys Gln Leu His Gly Thr Pro Leu Asp Lys
20 25 30
Lys His Thr Leu Leu Val Asn Lys Leu Met Asp Ile Glu Arg Tyr Gly
35 40 45
Arg Glu Gly Arg Ile Asp Glu Glu Tyr Lys Pro Pro Ala Ile Glu Pro
50 55 60
Phe Lys Glu Lys Glu His Leu Arg Ser Trp Leu Ala Asp Pro Asn Ala
65 70 75 80
Arg Asp Gln Phe Ala Leu Tyr Arg Gly Asp Lys Val Gly Val Phe Trp
85 90 95
Asn Asn Lys Asn His Pro Pro Glu Asn Val Val Asp Arg Ala His Trp
100 105 110
Thr Gln Leu Phe Val Gln Trp Ser Pro Lys Gly Thr Tyr Leu Ala Ser
115 120 125
Val His Pro Gln Gly Val Gln Leu Trp Gly Gly Pro Ala Phe Ser Lys
130 135 140
Gln Lys Gln Phe Pro His Pro Phe Val Gln Leu Ile Glu Phe Ser Pro
145 150 155 160
Gly Glu Ser Tyr Leu Thr Thr Trp Ser Ala Arg Pro Ile Gln Val Glu
165 170 175
Glu Gly Gln Ser Ile Leu Thr Tyr Glu Glu Glu Gly Lys Asn Ile Ile
180 185 190
Val Trp Asp Ile Ala Thr Gly Lys Pro Leu Arg Ser Phe Val Ser His
195 200 205
Asp Leu Thr Ala Gly Pro Ala Gly Asp Ala Glu Pro Lys Lys Lys Val
210 215 220
Gln Trp Pro Ala Phe Lys Trp Ser Ala Asp Glu Lys Tyr Val Ala Arg
225 230 235 240
Met Val Pro His Gln Ser Ile Ser Ile Tyr Glu Leu Pro Arg Met Asn
245 250 255
Leu Leu Gly Lys Thr Ser Glu Lys Ile Asp Gly Val Met Asp Phe Glu
260 265 270
Trp Ser Pro Ala Thr Val Thr Arg Glu Gly Val Lys Gln Tyr Glu Gln
275 280 285
Leu Leu Cys Phe Trp Thr His Glu Ile Gly Ser Ser Pro Ala Arg Val
290 295 300
Pro Met Met Ser Val Pro Ser Lys Glu Ile Val Arg Thr Arg Asn Leu
305 310 315 320
Phe Asn Val Ser Asp Val Lys Leu His Trp Gln Ser Gln Gly Leu Tyr
325 330 335

```
Val Cys Val Lys Val Asp Arg His Ser Lys Ser Lys Lys Ser Met Ala
            340                 345                 350
Thr Asn Leu Glu Ile Phe Arg Val Arg Glu Lys Gly Val Pro Val Glu
        355                 360                 365
Val Val Asp Ser Leu Lys Asp Thr Val Ile Asn Phe Ala Trp Glu Pro
    370                 375                 380
Asn Gly Asn Arg Phe Val Leu Ile Thr Thr Gly Glu Ala Val Ala Gly
385                 390                 395                 400
Ala Ala Val Ala Pro Lys Thr Ala Val Ser Phe Phe Ala Pro Glu Lys
                405                 410                 415
Lys Gly Gly Ala Ile Gly Asn Phe Lys Leu Ile Arg Thr Ile Glu Lys
            420                 425                 430
Lys Asn Ser Asn Ala Ile Tyr Trp Ser Pro Lys Gly Arg Phe Val Val
        435                 440                 445
Val Ala Thr Val His Ser Gln Thr Ser Phe Asp Met Asp Phe Trp Asp
    450                 455                 460
Met Asp Phe Glu Gly Glu Lys Pro Glu Ala Glu Lys Asp Phe Ala Ala
465                 470                 475                 480
Asn Leu Gln Leu Met Lys Thr Thr Glu His Tyr Gly Val Thr Asp Ile
                485                 490                 495
Asp Trp Asp Pro Thr Gly Arg Tyr Val Val Ser Ser Ala Ser Val Trp
            500                 505                 510
Thr His Gln Val Arg Ser Leu Leu Pro Ser Phe Leu Ser Ile Phe Leu
        515                 520                 525
Ala Leu Leu Ser Ser Ser Thr Thr Gly Ala Gly Ala Thr Arg Ala Met
    530                 535                 540
Arg
545
```

<210> 33784
<211> 823
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24),(52),(773)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33784

```
Leu Tyr Thr Arg Asp Met Val Pro Val Arg Val Gly Ala Asp Asn Ala
1               5                   10                  15
Gln Gly Ser Ser Gly Gln Leu Xaa Ile Leu Arg Glu Met Val Gln Thr
            20                  25                  30
Val Ser Arg Glu Cys Glu Pro Arg Leu Gly Met Ser Ala Ser Ala Ile
        35                  40                  45
Gln Ala Lys Xaa Pro Thr Ile Asp Thr Phe Phe Asp Ala Ile Ala Ala
    50                  55                  60
Glu Arg Leu Arg Arg Met Pro Pro Asp Gly Ser Arg Leu Asp Ala Ala
65                  70                  75                  80
Leu Arg Arg Ala Ser Ser Leu Ala Phe Ala Val Ala Ser Leu Arg Asp
                85                  90                  95
Ala Val Val Ser Phe Met Asp Gly Ala Asp Glu Ala Thr Lys Leu Val
            100                 105                 110
Trp Gly Gly Leu Leu Leu Thr Leu Glu Val Arg His Ile Gln Val Ser
        115                 120                 125
```

```
Arg Thr Lys Ala Lys Gln Phe Gln Met Gly Ile Glu Gln Val Asp Ile
    130                 135                 140
Leu Asp Ala Ile Val Ser Arg Tyr Gly Arg Val Thr Leu Gln Ile Ser
145                 150                 155                 160
Leu Leu Leu Gln Gln Glu Ser Val Phe Thr Glu Ser Thr Ser Leu Gln
                165                 170                 175
Asn Glu Val Ala Lys Thr Tyr Ala Ser Leu Leu Gln Leu Val Leu His
            180                 185                 190
Val Ala Met Glu Tyr Ser Asp Ala Ser Arg Ser Leu Ala Trp Leu Ile
        195                 200                 205
Met Gly Glu His Val Asp Glu Ala Phe Phe Gln Phe His Asn Ser Cys
    210                 215                 220
Asn Thr Asn Trp Arg Lys Leu Ser Glu Leu Ala Leu Ser Lys Arg Thr
225                 230                 235                 240
Thr Met Asp Val Ala Ser Ile Tyr Gln Phe Leu Asp Leu Gln Asp Arg
                245                 250                 255
Pro Leu Gln Met Ile Leu Glu Gly His Asn His Ser Leu Ala Asp Gly
            260                 265                 270
Ser Phe Ala Trp Phe Asp Pro His Leu Thr Thr Phe Ala Leu Ser Asn
        275                 280                 285
Arg Glu Met Met Val Ile Thr Gly Ser Pro Gly Ala Gly Lys Ser Ala
    290                 295                 300
Leu Ala Gln Trp Thr Val Glu Arg Leu Gln Val Ser Ser Glu Cys Asp
305                 310                 315                 320
Ile Trp Asn Val Ile Pro Cys Trp Val Arg Glu Asp Val Pro Ile Thr
                325                 330                 335
Thr Leu Thr Leu Thr Ile Leu Lys Gly Ile Leu Leu Gln Met Leu Asp
            340                 345                 350
Arg Cys Val Ser Ser Trp Lys Thr Gln Glu Gly Ile Leu Ala Pro Val
        355                 360                 365
Gln Gln Ala Ala Asp Met Ala Ser Thr Gly Ala Thr Asp Ser Gln Val
    370                 375                 380
Glu Asp Val Leu Trp Ser Ala Val Arg Thr Ala Thr Gln Ser His Met
385                 390                 395                 400
His Phe Ile Ile Val Leu Asp Gly Leu Asp Gln Ile Lys Asn Ala Lys
                405                 410                 415
Ala Thr Met Ala Gly Phe Leu Ala Arg Leu Gln Gly Ser Ile Ser Gly
            420                 425                 430
Thr Ser Ser Lys Leu Ile Ile Phe Ser Arg Glu Leu Pro Ala Gln Gln
        435                 440                 445
Gln Leu Gly Glu Ser Thr Gln Gln Leu Ser Leu Asn Pro Ser Leu Thr
    450                 455                 460
Gln Ser Asp Met Leu Ala Ala Val Thr Asp Ala Ile Arg Ser Asp Gly
465                 470                 475                 480
Gln Phe Tyr Gly Leu Ala Gly Asp Gln Ile Asp Met Met Ala Gln Arg
                485                 490                 495
Ile Val Ala Arg Ala Lys Gly Cys Phe Val Trp Ala Gln Leu Thr Leu
            500                 505                 510
Glu Ser Met Lys His Glu Ser Thr Phe Lys Gly Met Met Thr Ala Ile
        515                 520                 525
Gln Gln Ala Pro Gly Asn Val Ser Glu Leu Ile Gly Asn His Leu Ser
    530                 535                 540
Thr Thr Asp Ile Ala Arg Pro Asp Ile Arg Cys Leu Leu Ala Trp Leu
545                 550                 555                 560
Val Ala Ser Glu Arg Pro Leu Arg Ala Lys Glu Val Glu Glu Leu Leu
                565                 570                 575
```

```
Ser Val Asp Ala Glu Ser Leu Lys Leu Thr Pro Arg Pro Ala Gly Ala
            580                 585                 590
Glu Arg Asn Ile Phe Lys Pro Leu Gly Arg Leu Val Met Val Arg Asp
        595                 600                 605
Gly Phe Val Ala Phe Arg His Ser Met Ile Arg Glu Asn Leu Arg Gln
    610                 615                 620
Arg Ala Met Ser Ala Asp Ser Asn Tyr Ser Asp Asn Gln Gly Phe Pro
625                 630                 635                 640
Phe Asn Leu Glu Glu Ala His Tyr Asp Leu Leu Thr Arg Ser Leu Ala
                645                 650                 655
Trp Thr Arg Ile Cys Val Lys Glu Glu Val Ala Ile Ser Met Asp Lys
            660                 665                 670
Leu Pro Val Gln Gln Arg Asp Gly Leu Phe Asp Ala Tyr Ile Leu Leu
        675                 680                 685
Glu Tyr Thr Ser Arg Tyr Trp Phe Ala His Leu Leu Ser Ser Pro Met
    690                 695                 700
Thr Thr Ala Asp Arg Glu Phe Ala Phe Thr Pro Val Phe Lys Ser Ala
705                 710                 715                 720
Leu Pro Ser Ser Val Leu Phe Ala Gln Leu Glu Leu Thr Gly Arg Glu
                725                 730                 735
Ser Gln Phe Thr Arg Ser Asn Ile Leu Glu Leu Tyr Arg Leu Ser Val
            740                 745                 750
Ala Val Arg Arg Val Pro Leu Gly Glu Lys Ser Pro Ala Phe Leu Gln
        755                 760                 765
Ser Leu Ile Leu Xaa Ala Arg Ala Ala Asn Leu Ala Lys Ala Asn Leu
    770                 775                 780
Gly Ser Gln Ser Ser Val Arg Ser Met Asp Ala Gln Ser Val Ala Thr
785                 790                 795                 800
Trp Asp Val Leu Ser Asp Leu His Gly Val Gly Ala Ala Asp Ala Asp
                805                 810                 815
Arg Ser Ser Ala Ser Arg Pro
            820
```

Sequence Listing - 2005-05-26 - 13:53:52

<210> 33785
<211> 65
<212> PRT
<213> A.fumigatus

<400> 33785

```
Leu His Pro Leu Asp Pro Ser Ile Asp Ser Pro Val Asp Pro Ser Ser
1               5                   10                  15
Pro Ala Glu Lys Thr Asp Leu Glu Ser Tyr Ile Tyr Cys Gly Arg Arg
            20                  25                  30
Ser Leu His Thr Arg Asn Met Ser Thr Asp Ile Asn Val Thr Gly Tyr
        35                  40                  45
Glu Trp Thr Asp Ser Pro Lys Arg His Gly Lys Asp Asn Thr Leu Asn
    50                  55                  60
Pro
65
```

<210> 33786
<211> 143
<212> PRT
<213> A.fumigatus

<400> 33786

```
Leu Leu Ser Ala Asp Met Ala Arg Trp Arg Arg Phe Ser Arg Ile Met
1               5                  10                  15
Glu Trp Arg Asn Ala Thr Asn Pro Ser Arg Thr Met Thr Arg Arg Pro
            20                  25                  30
Arg Gly Leu Asn Met Phe Arg Ser Ala Pro Ala Gly Arg Gly Val Ser
        35                  40                  45
Leu Arg Leu Ser Ala Ser Thr Glu Ser Ser Ser Ser Thr Ser Leu Ala
    50                  55                  60
Arg Arg Gly Arg Ser Asp Ala Thr Ser His Ala Arg Arg Gln Arg Met
65                  70                  75                  80
Ser Gly Arg Ala Met Ser Val Val Leu Arg Trp Leu Pro Ile Ser Ser
                85                  90                  95
Leu Thr Leu Pro Gly Ala Cys Trp Ile Ala Val Ile Met Pro Leu Lys
            100                 105                 110
Val Asp Ser Cys Phe Ile Asp Ser Arg Val Ser Cys Ala Gln Thr Lys
        115                 120                 125
His Pro Leu Ala Arg Ala Thr Met Arg Trp Ala Ile Met Ser Ile
    130                 135                 140
```

<210> 33787
<211> 115
<212> PRT
<213> A.fumigatus

<400> 33787

```
Arg Arg Arg Arg Arg Leu Arg Phe Pro Pro Lys Gly Ser Arg Arg Val
1               5                  10                  15
Pro Asp Gly Ile Arg Thr Ala Pro Pro Val Arg Glu Glu Arg Arg Pro
            20                  25                  30
Pro Leu Ser Arg Gln Ile Leu Pro Pro Glu Pro Thr Gln Leu Pro Phe
        35                  40                  45
Asp Gly Gly Ala Asp Arg Pro Pro Thr Arg His Arg Glu Arg Arg Ser
    50                  55                  60
Arg Gly Arg Ala Ala Pro Arg Pro Gln Pro His Pro Arg Pro Cys His
65                  70                  75                  80
Ser Cys Gln Arg Arg Pro Arg Asn Ala Arg Arg Tyr Gly Gly Ser Glu
                85                  90                  95
Thr Gly Arg Cys His Val Gly Thr Gln Gly Pro Asp Ala Arg His Ser
            100                 105                 110
Ala Arg Thr
        115
```

<210> 33788
<211> 66
<212> PRT
<213> A.fumigatus

<400> 33788

```
Arg Arg Phe Ile Ile Leu Leu Phe Val Asn Gly Phe Trp Asn Val Gln
1               5                  10                  15
Phe Asp Gly Thr Val Ile Arg Gly Ser Met Val His Gly Thr Val Ala
            20                  25                  30
Gln Leu Asp Cys Leu Asn Thr Val Ser Gly Val Asn Ala Arg Met Glu
        35                  40                  45
Glu Ser Ser Ser Tyr Ala Ser Gly Gln Ala Gly Arg Cys Ile Val His
    50                  55                  60
```

Asn Leu
65

<210> 33789
<211> 396
<212> PRT
<213> A.fumigatus

<400> 33789
Thr Lys Ile Leu Pro Glu Asp Ser Ser Ser Val Met Ser Ser Thr Phe
1 5 10 15
Ser Leu Gly Glu Pro Ile Asn Lys Ser Gln Glu Gly Asp Ser Glu Val
20 25 30
Ala Lys Val Ala Asp Asn Leu Lys Thr Ser Thr Ile Glu Glu Glu Glu
35 40 45
Glu Glu Glu Ile Glu Asp Glu Ser Glu Tyr Ser Pro Ser Arg Cys Leu
50 55 60
Phe Cys Ser His Lys Ala Ser Asp Leu Gln Glu Asn Thr Glu His Met
65 70 75 80
Arg Arg Ser His Gly Met Phe Ile Pro Glu Lys Asp Tyr Leu Val Asn
85 90 95
Leu Glu Gly Leu Ile His Tyr Leu Tyr Arg Lys Ile Asn Glu Asn Ser
100 105 110
Glu Cys Leu Tyr Cys His Ala Ile Arg Asn Ser Pro Ala Gly Ile Arg
115 120 125
Thr His Met Arg Asp Lys Gly His Cys Met Ile Ala Phe Glu Thr Glu
130 135 140
Glu Glu Gln Ile Glu Ile Gly Gln Tyr Tyr Asp Phe Arg Ser Thr Tyr
145 150 155 160
Ser Asp Asp Glu Ala Gly Ser Val Thr Ser Glu Thr Pro Glu Asp Gly
165 170 175
Gly Val Lys Val Thr Ser Ser Asp Gly Asp Asp Asp Gly Trp Glu Thr
180 185 190
Glu Thr Ser Ala Ser Ser Leu Asp Asp Asp Glu Asp Asp Asp Phe Asp
195 200 205
Ser His Arg Lys Ala Ala Val Val Tyr Gln Thr Glu Tyr Glu Leu His
210 215 220
Leu Pro Ser Gly Lys Ser Val Gly His Arg Ser Leu Ala Lys Tyr Tyr
225 230 235 240
Arg Gln Asn Leu His Asn Tyr Pro Ser Met Glu Glu Arg Ile Ala Arg
245 250 255
Gln Leu Ala Ile Glu Asn Gly Glu Val Glu Glu Glu Arg Pro Arg Gly
260 265 270
Arg Asn Pro Thr Arg Ala Leu Val Thr Arg Ala Asn Gly Gly Leu Gly
275 280 285
Met Leu Gly Ala Thr Glu Asp Gln Lys Arg Val Ala Val Met Ser Glu
290 295 300
Arg Lys Asp Arg Thr Arg Ala Ile Arg Gln Glu Leu Arg Tyr Arg Asp
305 310 315 320
Arg Val Asn Arg Ala Ala Asn Asn Gln Lys His Phe Arg Val Cys Thr
325 330 335
Ser Phe Phe Phe Phe Phe Phe Phe Leu Ser Asp Leu Phe Asn Lys Lys
340 345 350
Leu Thr Leu Thr Ser Arg Thr Leu Ser Cys Asn Asp His Arg Ala Gly
355 360 365
Phe Ser Phe Leu Ser Trp Phe Asn Gly His Leu Val Val Lys Ser Met

```
    370                 375                 380
Thr Gly Ser Tyr Ser Gly Ala Cys Met Ile His Gly
385                 390                 395

<210> 33790
<211> 172
<212> PRT
<213> A.fumigatus

<400> 33790
Pro Ala Arg Thr Ala Thr Thr Thr Gly Gly Arg Gln Lys Pro Pro Pro
1               5                   10                  15
Pro Pro Trp Met Thr Thr Lys Thr Thr Thr Ser Ile Pro Thr Glu Arg
            20                  25                  30
Gln Pro Ser Cys Thr Arg Arg Asn Thr Asn Cys Thr Ser Arg Pro Gly
        35                  40                  45
Arg Ala Ser Ala Thr Ala Leu Ser Pro Asn Thr Thr Ala Arg Thr Tyr
    50                  55                  60
Thr Thr Thr Leu Arg Trp Arg Ser Gly Ser Pro Ala Asn Ser Pro Ser
65                  70                  75                  80
Arg Thr Ala Lys Ser Arg Lys Ser Gly Pro Ala Ala Ala Thr Pro Pro
                85                  90                  95
Ala Pro Leu Ser Leu Val Pro Thr Ala Ala Ser Glu Cys Ser Ala Leu
            100                 105                 110
Arg Arg Ile Arg Asn Gly Ser Leu Ser Cys Arg Asn Ala Arg Thr Gly
        115                 120                 125
Arg Ala Pro Phe Gly Lys Asn Leu Gly Thr Glu Thr Gly Ser Thr Gly
    130                 135                 140
Leu Arg Thr Thr Arg Asn Thr Ser Gly Tyr Val His Pro Phe Phe Phe
145                 150                 155                 160
Phe Phe Phe Phe Cys Pro Ile Cys Leu Thr Lys Ser
                165                 170

<210> 33791
<211> 345
<212> PRT
<213> A.fumigatus

<400> 33791
Gln Arg Thr Asn Arg Glu Ile Ile Asp Glu Ser Asp Val Phe Ile Asp
1               5                   10                  15
Val His Lys Ala Ile Arg Arg Met Ala Pro Ala Pro Lys Ser Arg Val
            20                  25                  30
Pro Lys Gly Arg Ile Val Glu Glu Pro Pro Met Leu Thr Leu Glu Ser
        35                  40                  45
Thr Gly Pro Leu Leu Glu Thr Asp Gly Gln Ser Arg Met Pro Ser Val
    50                  55                  60
Asp Arg Arg Arg Ser Ser Val Glu Ala Pro Pro Pro Arg Phe His Met
65                  70                  75                  80
Arg Leu Gln Thr Ser Asp Lys Asn Ser Asp Ser Thr Asp Gly Phe Leu
                85                  90                  95
Thr His Arg Gly Thr Thr Asp Glu Ile Arg Glu His Leu Lys His Leu
            100                 105                 110
Gly Pro Ser Asn Leu Ala Ser Arg Pro Arg Gln Thr Arg Tyr Gln Asn
        115                 120                 125
Val Lys Ile Lys Arg Ala Ser Gly Ser Pro Ser Arg Ser Gly His Thr
```

```
    130                 135                 140
Asp Met Asp Ser Gly His Ser Thr Ser Gly Ser Gln Val Val Asn Asn
145                 150                 155                 160
Thr Ser Ser Gly Leu Thr Gly Gly Ile Gly Ala Gly Leu Leu His Ser
                165                 170                 175
Gly Ile Asp Ala Arg Asp Gly Val Gln Ala Val Lys Leu Gly Tyr Gly
            180                 185                 190
Thr Met Asn His Arg Thr Ser Asp Asn Gly Ala Val Glu Leu Asp Ile
        195                 200                 205
Pro Glu Ala Val His Glu Glu Gln Asp Asp Lys Pro Pro Ser Thr Ser
    210                 215                 220
Val Ala Thr Ser Thr Thr Ser Ser Asn Arg Pro Glu Asp Arg Ala Arg
225                 230                 235                 240
Leu Gly Ser Ser Tyr Leu His Lys Gly Pro Ala Arg Ser Gly Ser Ile
                245                 250                 255
Thr Glu Gln Val Val Asp Val Asn Gly Ile Arg Lys Val Ile Leu His
            260                 265                 270
Thr Thr Ser Ser Asn Thr Ser Ser Asp Asp Glu Arg Ser Ser Asn Asn
        275                 280                 285
Gln Ala Lys Phe Pro Val Arg Gln Asp Gly Gln Leu Ile Asn Leu Asp
    290                 295                 300
Asp Asp Gln Ser Ala Pro Ala Ala Gln Pro Asn Gly His Lys Lys Lys
305                 310                 315                 320
Lys Arg Arg Arg Lys His Lys Ser Arg Thr Lys Asn Ser Asp Gly Pro
                325                 330                 335
Pro Asp Glu Glu Ala Pro Leu Leu Ser
            340                 345
```

<210> 33792
<211> 559
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (549)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 33792
Gly Cys Ile Ala Pro Ala Ile Pro Ala Ala Met Ser Pro Val Ala Pro
1               5                   10                  15
Gln Leu Pro Thr Arg Phe Pro Cys Trp Cys Arg Ala Ile Tyr Ser Trp
            20                  25                  30
Gly Gly Glu Thr Lys Arg Asp Leu Gly Phe Val Glu Gly Asp Leu Ile
        35                  40                  45
Glu Cys Leu Asn Ala Gly Asp Gly Gln Trp Trp Met Gly Arg Leu Arg
    50                  55                  60
Arg Asp Arg Arg Met Val Gly Leu Phe Pro Ser Asn Phe Val Glu Val
65                  70                  75                  80
Leu Gly Glu Asp Phe Val Pro Val Thr Arg Ala Thr Ser Pro Met Met
                85                  90                  95
Pro Ala Gly Arg Ser Pro Ile Thr Asn Pro Thr Ser Ala Pro Lys Lys
            100                 105                 110
Gln Lys Thr Val Phe Arg Lys Pro Phe Gln Ala His Lys Glu Ala Leu
        115                 120                 125
Ala Pro Ala Glu Leu Ala Arg Asn Ala Thr Thr Thr Thr Gln Ala Ser
```

```
    130                 135                 140
Ser Ser Ile Pro Gln Thr Pro Pro Arg Asn Gly Ser Ser Val Arg Ser
145                 150                 155                 160
Val Lys Pro Leu Arg Thr Pro Thr Thr Ala Val Lys Asn Gln Ser Ser
                165                 170                 175
Leu Ser Arg Pro Pro Ser Gln His Arg Pro Ser Ser Gly Gly Gly Ser
            180                 185                 190
Pro His Ala Pro Pro Val Ala Asp Pro Pro Pro Gln Ser Pro Thr Pro
        195                 200                 205
Ala Arg Glu Ser Ile Ser Arg Ser Arg Pro Pro Ser Arg Ala Pro Ser
    210                 215                 220
Pro Arg Leu Pro Tyr Asp Met Asp Leu Leu Pro Pro Ser Val Pro Val
225                 230                 235                 240
Arg His Thr Pro Leu Ala Arg Pro Pro Ser Val His Pro Pro Ser His
                245                 250                 255
Glu Ile Ser Pro Leu Gln Leu Gln Glu Arg Glu Glu Ser Pro Pro Pro
            260                 265                 270
Pro Pro Pro Pro Pro His Arg Ile Ala Val Asn Arg Arg Pro Ser Met
        275                 280                 285
Asp Met Asp Val Pro Met His Leu Asp Met Asn Asp Arg Tyr Ala Thr
    290                 295                 300
Met Ser Arg Thr Pro Ser Pro Ala Ala His Ser Asp Ala Asn Gly Asn
305                 310                 315                 320
Thr Pro Ser Pro Leu Arg Asp Ala Met Glu Asp Val Met Thr Ser Leu
                325                 330                 335
Glu Asp Met Gly Leu Ser Arg Gly Ala His Ser Pro Ser Pro Ala Pro
            340                 345                 350
Val Phe Asp Asn Pro Trp Ser Pro Glu Ala Phe Asp Ser Leu Arg Asp
        355                 360                 365
Ser Arg Pro Ala Arg His Gly His Arg Pro Leu Thr Ser Leu Gly Phe
    370                 375                 380
Glu Gly Glu Gln Asp His Gln Phe Pro Asp Ser Gln Ile His Arg Asn
385                 390                 395                 400
Thr Met Tyr Gly His Asp His Tyr Leu Asp Gly Pro Pro Gln Leu Asn
                405                 410                 415
Asn Tyr Val Gln Arg Met Glu Ser Arg Leu Arg Gln Met Gln Glu Gln
            420                 425                 430
Ser Arg Arg Gly Ser Glu Asp Ile Leu Pro Pro Glu Asp Ala Glu Gly
        435                 440                 445
Pro Pro Pro Pro Pro Pro Lys His Leu Ala His His Gly Arg His Thr
    450                 455                 460
Ser Val Pro Ala Gln Tyr Pro Tyr Leu Arg Ser Gln Arg Ser Gly Gln
465                 470                 475                 480
Asp Leu Arg Gly Asp Ala Leu Asn Arg Ser His Thr Lys Ser Ser Thr
                485                 490                 495
Thr Thr Ser Ser Ser Gly Val Gln Ser Ile Ser Thr Ala Met Thr Ala
            500                 505                 510
Ser Thr Glu Gln Thr Ser Gln Ser Leu Met Ser Gly Pro Ser Ala Gly
        515                 520                 525
Ala Phe Ser Ala Thr Ser Ala Gly Ser Tyr Ala Arg Arg Gly Leu Thr
    530                 535                 540
Thr Gly Asn Asp Xaa His Tyr Glu Val Ala Gly Pro Arg Arg Ala
545                 550                 555
```

<210> 33793
<211> 124

<212> PRT
<213> A.fumigatus

<400> 33793
Thr Glu Gln Phe Arg Val Leu Arg Glu Lys Gly Thr Glu Pro Pro Tyr
1 5 10 15
Thr Gly Glu Tyr Asp Ser His Phe Ser Ser Lys Gly Val Tyr Thr Cys
20 25 30
Ala Gly Cys Asn Ala Pro Leu Tyr Lys Ala Thr His Lys Phe Lys Ser
35 40 45
Gly Cys Gly Trp Pro Ala Tyr Phe Asp Ser Ile Pro Gly Ala Val Thr
50 55 60
Arg His Thr Asp Arg Ser Phe Gly Met Glu Arg Thr Glu Ile Val Cys
65 70 75 80
Ser Asn Cys Gly Gly His Leu Gly His Val Phe Lys Gly Glu Gly Tyr
85 90 95
Pro Thr Pro Thr Asp Glu Arg His Cys Val Asn Ser Ile Ser Leu Lys
100 105 110
Phe Thr Glu Asp Glu Glu Ala Ala Lys Ser Lys Ala
115 120

<210> 33794
<211> 67
<212> PRT
<213> A.fumigatus

<400> 33794
Arg Tyr Ile Leu Leu Asp Pro Arg Trp Ala Ser Trp Asn Leu Gly Ile
1 5 10 15
Phe Ile Cys Ile Arg Cys Ser Gly Ile His Arg Gly Met Gly Thr His
20 25 30
Ile Ser Arg Val Lys Ser Val Asp Leu Asp Ser Trp Thr Asp Glu Gln
35 40 45
Leu Gln Ser Val Ile Lys Trp Gly Asn Ala Arg Ala Asn Lys Tyr Val
50 55 60
Ser Ser Arg
65

<210> 33795
<211> 364
<212> PRT
<213> A.fumigatus

<400> 33795
His Pro Phe Gln Pro Leu Ala Val Val Gln Glu Lys Ala Lys Ile Glu
1 5 10 15
Arg Ser Ser Ser Gln Arg Val Ala Asn Thr Ser Gln Pro Pro Ile Thr
20 25 30
His Arg Pro Gln Ala Ser Ile Asp Phe Phe Gly Asp Asn Glu Pro Ile
35 40 45
Thr Pro Pro Val Arg Pro Ser Thr Thr Asp Pro Thr Pro Arg Ile Ala
50 55 60
Ala Pro Arg Gln Gln Ser Gln Ser Gln Pro Ala Thr Lys Pro Ala Arg
65 70 75 80
Pro Gly Asp Ser Leu Leu Gly Leu Asp Phe Phe Gly Ser Ala Gln Pro
85 90 95

```
Ala Ser Thr Ser Arg Pro Ala Ser Thr Ala Ser Thr Pro Gly Gly Ser
            100                 105                 110
Ala Gly Met Ser Arg Pro Asp Leu Lys Gln Ser Ile Leu Ser Leu Tyr
        115                 120                 125
Ser Lys Pro Gln Pro Pro Val Gln His Glu Arg Glu Ser Ser Phe Gly
    130                 135                 140
Asp Leu Ala Ser Pro Ala Pro Gln Ser Ser Ser Ser Asn Leu Gly Gly
145                 150                 155                 160
Leu Thr Asp Ala Phe Ser Gly Leu Ser Phe Pro Ser Thr Thr Ser Pro
                165                 170                 175
Pro Ser Lys Pro Ala Glu Lys Pro Ser Pro Phe Ala Asn Leu Thr Thr
            180                 185                 190
Phe Ala Ser Ala Lys Ser Ser Pro Ala Ala Pro Lys Ile Thr Ser Pro
        195                 200                 205
Thr Ala Ser Ala Ser Ser Gly Leu Gly Gly Gly Leu Phe Asp Ser Leu
    210                 215                 220
Thr Ser Pro Thr Ile Pro Pro Ala Lys Pro Gln Pro Gln Ser Arg Thr
225                 230                 235                 240
Asp Ser Ile Pro Pro Ser Ser His Asp Leu Gly Phe Thr Ser Phe Ala
                245                 250                 255
Thr Ala Pro Ser Pro Lys Pro Asn Pro Pro Arg Ser Ser Phe Ser Asn
            260                 265                 270
Asp Leu Phe Gly Leu Ser Ser Thr Pro Ala Pro Ala Ala Pro Ala Ala
        275                 280                 285
Ala Pro Pro Thr Met Ala Ser Pro Gln Gln Glu Leu Lys Ser Ala Phe
    290                 295                 300
Asn Leu Ser Ser Pro Ala Pro Ala Pro Ala Pro Ala Pro Ala Pro Lys
305                 310                 315                 320
Pro Val Asn Ser Thr Ser Thr Val Ser Gly Cys Asn Leu Ile Pro Asn
                325                 330                 335
Leu Glu Pro Trp Gly Gly Asn Asn Trp Ile Ile Pro Asn Arg Leu Pro
            340                 345                 350
Leu Pro His Pro Pro Gln Ala Leu Ile Lys Val Pro
        355                 360
```

<210> 33796
<211> 116
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24),(96)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33796

```
Leu Pro Cys Ser His Arg Arg Arg Lys Gly Leu Pro Ala Gln Ser Pro
1               5                   10                  15
Arg Val Ser Pro Ser Gly Val Xaa Leu Ala Leu Tyr Cys Arg Ile Arg
            20                  25                  30
Gly Ala Arg Ile Leu Leu Trp Arg Lys Glu Tyr Leu Phe Glu Leu His
        35                  40                  45
Pro Ile Ser Ser Ala Lys Gly Tyr Thr Pro Cys Ala His Leu Lys Asn
    50                  55                  60
Lys Ser Ser Pro Lys Thr Gly Gly Asn Gly Ala Gly Ala Pro Pro Arg
65                  70                  75                  80
```

```
Gly Thr Gln Glu Thr Ala Gly Ala Leu Gly Met Gly Leu Gln Ala Xaa
                85                  90                  95
Ser Gly Leu Val Leu Leu Phe Ala Phe Leu Ala Tyr Val Leu Pro Ile
            100                 105                 110
Leu Gly Gly Trp
        115
```

<210> 33797
<211> 143
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (106)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33797

```
Arg Asp Gln Leu Arg Val Asn Lys Arg Gly Pro Ser Ile Ser Ser Ser
1               5                  10                  15
Glu Glu Leu Ser Thr Ser Leu Ile Val His Gln Asp Val Tyr Val Arg
            20                  25                  30
Pro Ala Pro Cys Leu Ala Leu Leu Thr Ile Pro Ala Pro Pro Gly Asp
        35                  40                  45
Ser Ile Thr Gly Asn Thr Ile Thr Ser Asp Ser Ile Asn Ala Lys Gly
    50                  55                  60
Asp Leu Glu Lys His Asp Tyr Glu Ile Thr Ala Thr Ser Thr Glu Val
65                  70                  75                  80
Asp Asp Tyr Pro Ala Pro Thr Glu Glu Glu Lys Ala Ser Leu Arg Lys
                85                  90                  95
Val Pro Ala Ser Leu Pro Leu Val Ser Xaa Ser Leu Cys Ile Val Glu
            100                 105                 110
Phe Ala Glu Arg Ala Ser Tyr Tyr Gly Ala Lys Asn Ile Phe Ser Asn
        115                 120                 125
Phe Ile Gln Phe Pro Leu Pro Lys Gly Ile Leu Pro Val Leu Ile
    130                 135                 140
```

<210> 33798
<211> 125
<212> PRT
<213> A.fumigatus

<400> 33798

```
Pro Phe Gln Met Leu Ser His Ser Asn Asn Gln Asn Arg Thr Val Ala
1               5                  10                  15
Thr Glu Val Phe Phe Tyr Phe Leu Ile Trp Leu Leu Asn Glu Arg Gly
            20                  25                  30
Ile Gly Ser Val Ser Thr Asn Gln Gly Ala Ser Met Thr Thr Asn Gly
        35                  40                  45
Ala Pro Asn Asp Leu Leu Asn Asn Phe Asn Ala Leu Thr Ile Ile Val
    50                  55                  60
Thr Ile Pro Phe Leu Ser His Val Val Tyr Pro Thr Leu Ala Pro Tyr
65                  70                  75                  80
Lys Asn Ser Leu Ala Pro Gln Ala Gly Leu Pro Leu Asp Ser Ser Ser
                85                  90                  95
Gln Pro Ser Pro Ala Ser Ser Gln Gly Ser Ser Ser Gly Ala Cys Ser
```

```
            100                 105                 110
Ile Pro His Leu Arg Leu Ser Gly Phe Asn Cys Tyr Asp
        115                 120                 125

<210> 33799
<211> 228
<212> PRT
<213> A.fumigatus

<400> 33799
Gln Cys Arg Trp Ala Asp Val Tyr Val Gly Arg Tyr Lys Ala Ile Cys
1               5                   10                  15
Val Gly Val Ala Ile Cys Gly Val Ala His Ile Ile Gln Ile Ile Gly
            20                  25                  30
Ala Ile Pro Ser Val Leu Gln Lys Gly Pro Ala His Ala Ala Pro Pro
        35                  40                  45
Phe Ile Ile Gly Leu Leu Leu Leu Ala Leu Gly Ala Gly Ile Phe Lys
    50                  55                  60
Pro Asn Ile Ala Pro Thr Ile Leu Asp Gln Asn Arg Gln Lys Lys Gln
65                  70                  75                  80
Tyr Thr Lys Val Leu Lys Thr Gly Glu Lys Val Ile Val Asp Pro Glu
                85                  90                  95
Leu Thr Thr Thr Arg Thr Met Leu Val Phe Tyr Ala Phe Val Asn Ile
            100                 105                 110
Gly Ala Phe Tyr Met Leu Pro Thr Ala Tyr Ala Glu Lys Tyr Val Gly
        115                 120                 125
Phe Trp Leu Ser Trp Val Leu Ala Gly Ala Ile Tyr Phe Leu Leu Pro
    130                 135                 140
Val Val Leu Ala Leu Val Tyr Lys Lys Thr Tyr Lys Gln Pro Pro Ser
145                 150                 155                 160
Gly Ser Ser Asp Leu Thr Lys Ala Val Lys Ile Ile Ser Thr Ala Leu
                165                 170                 175
Arg Arg Asn Lys Tyr Arg Val Trp Lys Lys Asn Phe Phe Asp Ala Ala
            180                 185                 190
Lys Pro Arg Ala Leu Ala Ala Glu Gly Ile Glu Val Asp Trp Asp Glu
        195                 200                 205
Lys Leu Val Asp Asp Val Arg Arg Thr Leu Gly Lys Ser Ile Ser Asn
    210                 215                 220
Pro Ser Lys Cys
225

<210> 33800
<211> 115
<212> PRT
<213> A.fumigatus

<400> 33800
Arg Asp Ser Arg Lys Tyr Ile Phe Ala Ser Pro Phe Leu Phe Tyr Cys
1               5                   10                  15
Val Gly Arg Ile Val Ile Phe Leu Leu Thr Leu His Leu Glu Pro Leu
            20                  25                  30
Asp Lys Leu Leu Tyr Leu Ile Ser Val Gln Ser Ile Tyr Phe Lys Leu
        35                  40                  45
Tyr Cys Ala Asn Asn Val Phe Asp Arg His Leu Arg Pro Ile Asp Tyr
    50                  55                  60
Val Asp Asn Leu Asp Arg Arg Gln His Gly Phe Val Ile Phe Gly Gly
```

65 70 75 80
Phe Asn Pro Phe Ser Leu Gln Leu Gln Cys His His Gly Ser Phe Asn
85 90 95
Ile Asn Ile Ala Pro Ala Ala Pro Glu Lys His Phe Asp Pro Thr Ala
100 105 110
Glu Glu Gln
115

<210> 33801
<211> 187
<212> PRT
<213> A.fumigatus

<400> 33801
Ile Leu Ser Arg Leu Thr Leu Leu Glu Glu Thr Pro Glu Asn Thr Ser
1 5 10 15
Leu Pro Leu His Phe Phe Ser Thr Val Ser Ala Gly Ser Ser Tyr Phe
20 25 30
Ser Leu Pro Phe Thr Trp Asn His Trp Thr Asn Cys Tyr Ile Ser Phe
35 40 45
Leu Ser Asn Leu Tyr Thr Ser Ser Tyr Thr Val Gln Thr Met Ser Ser
50 55 60
Thr Asp Thr Ser Asp Pro Ser Thr Met Ser Thr Thr Ser Thr Ala Ala
65 70 75 80
Asn Thr Ala Ser Ser Ser Ser Ala Ala Ser Thr Pro Ser Pro Ser Asn
85 90 95
Ser Ser Val Thr Thr Ala Pro Ser Thr Ser Thr Ser Arg Arg Pro Pro
100 105 110
Arg Lys Ser Thr Leu Thr Gln Gln Gln Lys Asn Asn Lys Arg Gln Arg
115 120 125
Ala Thr Gln Asp Gln Leu Val Thr Leu Glu Leu Glu Phe Asn Lys Asn
130 135 140
Pro Thr Pro Thr Ala Ala Thr Arg Glu Arg Ile Ala Gln Glu Ile Asn
145 150 155 160
Met Thr Glu Arg Ser Val Gln Ile Trp Phe Gln Asn Arg Leu Val Glu
165 170 175
Asp Gly Phe Arg Arg Phe Leu Asn Cys Met Tyr
180 185

<210> 33802
<211> 70
<212> PRT
<213> A.fumigatus

<400> 33802
Thr Leu Ser Ser Leu His Trp Gly Ser Glu Ser Leu Ser Gln Leu Thr
1 5 10 15
Pro Leu Val Cys Phe Pro Arg Phe Ser Leu Val Phe Phe Leu Ser Ser
20 25 30
Ser Ser Phe Leu Leu Thr Pro Pro Val Ser Cys Gln Pro Ser Leu Phe
35 40 45
Phe Ser Phe Pro Leu Ser Leu Phe Phe Thr Leu His Ser Phe Val Ser
50 55 60
Ser Ile Leu Ser Leu Cys
65 70

<210> 33803
<211> 368
<212> PRT
<213> A.fumigatus

<400> 33803
Cys Ser Gln Val Ile His His Phe Thr Cys Arg Ser Leu Thr Ile Gly
1 5 10 15
Ser Trp Arg Arg Ile Gly Gln Asn Ala Met Asp Leu Val Val Phe Tyr
20 25 30
Ser Pro Glu Lys Ala Cys Met Thr Tyr Tyr Ile Asn Asn Asp Ser Ala
35 40 45
Gly Tyr Lys Ile Glu Tyr Pro Phe Ser Tyr Ile Lys Asn Ile Thr Leu
50 55 60
Glu Ser Gly Asp Ala Asn Ala Gln Pro Asn Gly Val Pro Thr Arg Pro
65 70 75 80
Ala Gly Leu Leu Val Glu Leu Asn Arg Pro Pro Leu Phe Tyr Met Asp
85 90 95
Ser Ser Asn Ser Gly Gly Phe Tyr Gln Cys Gly Asp Phe Thr Glu Asp
100 105 110
Gln Gln Ala Ser Gln Ile Leu Val His His Leu Gly Gly His Pro Lys
115 120 125
Val Leu Ser Val Gln Leu Ala Lys Leu Val Ser Leu Glu Ser Phe Gln
130 135 140
Asn Arg Leu Ala Tyr Ser Asn Leu Thr Met Ala Pro Pro Met Ser Pro
145 150 155 160
His Phe Ile Gln Arg Pro Ala Ser Gln Pro Asn Gln Phe Ala Pro Ala
165 170 175
Phe Met Asn Met Tyr Gln Asp Gln Ser Thr Leu Asn Ile Pro Val Ala
180 185 190
Arg Gly His Lys Arg Gln Arg Ser Arg Ser Val Pro Val Ala Val Asp
195 200 205
Phe Ser Ala Met Gln Met Ser His Phe Pro Ser Tyr Asn Met Pro Gln
210 215 220
Thr Pro Thr Pro Tyr His Asn Ala Asp Ser Gly Ile Phe Ala Pro Val
225 230 235 240
Pro Gln Ser Ala Gln Pro Leu Ala Leu Asn Leu Arg Ile Asp Thr Ser
245 250 255
Pro Ser Tyr Gly Phe Asp Pro Arg Gly His Pro Met Ser Ala Thr Thr
260 265 270
Thr Gly Ser Pro Ser Asp Phe Ala Ser Pro Ser Ile Phe Ala Thr Ser
275 280 285
Ala Thr Gly Glu Ser Thr Pro Val Ala Thr His Met Gly Pro Ser Phe
290 295 300
Ser Leu Pro Phe Val Ala Pro Ser Val Asp Ser Ser Ser Met Gly His
305 310 315 320
Ala Ala Pro Ser Tyr Ser Asn Val Ser His Ala Asp Pro Met Ile Ala
325 330 335
Glu His Ser Pro Pro Leu Ser Asn Met Ala His Thr Pro Gln Asp Met
340 345 350
His Thr Leu Arg Thr Asp Leu Asn Ser Gly Val Lys Glu Ala Leu Pro
355 360 365

<210> 33804
<211> 217
<212> PRT

<213> A.fumigatus

<400> 33804

```
Cys Leu Gln Val Thr Ala Thr Phe Val Asp Glu Thr Glu Glu Val Ala
1               5                  10                  15
Asp Leu Tyr Gln Val Thr Asp Ala Ser Ile Glu Val Ser Ser Val Ala
            20                  25                  30
Leu Asp Gln Arg Pro Ser Pro Arg Pro Gly Leu Ser Ser His Gly Thr
        35                  40                  45
Pro Ile Thr Asp Ala Thr Asp Ala Phe Phe Leu Trp Arg Tyr Ile Asp
    50                  55                  60
Phe Ile Gly Pro Arg Phe Asp Met Phe Asp Asp Ala Pro Arg Tyr Phe
65                  70                  75                  80
Ser Thr Val Val Pro Gln Leu Ala Leu Lys Asp Pro Leu Val Leu Leu
                85                  90                  95
Ala Cys Val Ala Val Ala Ala Arg Gln Tyr Ser Leu Val Asn Asp Gln
            100                 105                 110
Gln Gln His Ser His Glu Gln Ala Leu Thr Tyr Tyr Asn Ala Ala Ile
        115                 120                 125
His Leu Leu Ser Lys Arg Leu His Asp Ser Gly Pro Asp Pro Ala Val
    130                 135                 140
Phe Ala Ser Cys Leu Leu Ile Ala His Cys Glu Met Val Glu Ser Lys
145                 150                 155                 160
Ala Ser Ala Trp Asp Leu His Leu Lys Gly Thr Gly Asp Leu Leu Lys
                165                 170                 175
Met Tyr Gly Trp His Gly Met Ser Gly Gly Leu Ala Gln Ala Val Cys
            180                 185                 190
Pro Ile Ser Val Cys Cys Asp His Val Ala Asn Leu Gln Pro Ser Ile
        195                 200                 205
His Ser His Ser Gly Phe Thr Ala Gly
    210                 215
```

<210> 33805
<211> 147
<212> PRT
<213> A.fumigatus

<400> 33805

```
Val Gly Gly Val Trp Lys Cys His Cys Val His Asn Arg Asn Ala Asp
1               5                  10                  15
Ile Gly Tyr Glu Ala Cys Asp Gln Cys Arg Arg Ser His Val Lys Cys
            20                  25                  30
Asp Gln Ser Arg Pro Cys Ala Leu Cys Lys Arg Arg Gly Ile Glu Cys
        35                  40                  45
Ser Leu Cys Gln Glu Val Thr Phe Thr Ala Leu Glu Phe Lys Ala Pro
    50                  55                  60
Ala Ala Gly Leu Ser Arg Ser Phe Val Ser Asn Thr Val Asp Ser Pro
65                  70                  75                  80
Gly Glu Gln Ser Pro Arg Asp Gly Ser Arg Asn Thr Leu Met Pro Ser
                85                  90                  95
Ser Asn Ser Asn Leu Cys Gly Arg Asn Gly Arg Gly Arg Arg Pro Ile
            100                 105                 110
Pro Gly His Arg Cys Glu His Arg Gly Leu Glu Arg Arg Ile Arg Pro
        115                 120                 125
Ala Ser Val Ala Thr Ala Trp Thr Val Lys Pro Arg Tyr Pro His His
    130                 135                 140
```

Gly Cys His
145

<210> 33806
<211> 120
<212> PRT
<213> A.fumigatus

<400> 33806
Thr Val Thr Ser Thr Arg Val Leu Ser Arg Ser Ser Ser Ala Phe Ser
1 5 10 15
Phe Pro Leu Leu Leu Leu Thr His Leu Arg His Cys Ile Gly Ala Gly
20 25 30
Glu Ser Glu Ser Gly Ser Ser Gln Lys Ser Cys Gly Leu Arg Thr Arg
35 40 45
Asp Tyr Asp Val Pro Leu Arg Ile Gly Thr Leu Phe Val Val Leu Val
50 55 60
Thr Ser Ser Ile Gly Val Phe Leu Pro Met Leu Leu Val Lys Leu Pro
65 70 75 80
Ser Ala Lys Ile Asn Gly Val Val Ser Thr Val Ile Lys Gln Phe Gly
85 90 95
Thr Gly Val Ile Leu Ser Thr Ala Phe Val His Val Cys Leu Phe Ser
100 105 110
Ile Gln His Asp Gly Arg Ser Asn
115 120

<210> 33807
<211> 270
<212> PRT
<213> A.fumigatus

<400> 33807
Pro Glu Gln Leu Tyr Thr His Ala Asn Leu Met Phe Thr Asn Glu Cys
1 5 10 15
Leu Gly Glu Leu Glu Tyr Glu Ala Thr Thr Ser Ala Val Val Met Ala
20 25 30
Gly Ile Phe Leu Ser Phe Leu Phe Glu Tyr Ile Gly His Arg Ile Ile
35 40 45
Leu Ala Arg Ala Thr Arg Cys Ala Ser Pro Cys Pro Glu Gln Thr Gly
50 55 60
Asp Met Ser Pro Ser Ser Thr Ser Lys Glu Leu Pro Ala Ser Gln Pro
65 70 75 80
Pro Pro Pro Pro Pro Gln Gln Gln Gln Pro Pro Thr Leu Ala Ala Leu
85 90 95
Gly His His His Gly Pro Pro Leu Asp Pro Thr Asn Pro Asn Thr Lys
100 105 110
Leu Ser Val Leu Val Met Glu Ala Gly Val Val Phe His Ser Ile Leu
115 120 125
Ile Gly Leu Thr Leu Val Val Ala Gly Asp Ser Phe Tyr Lys Thr Leu
130 135 140
Leu Val Val Ile Val Phe His Gln Phe Phe Glu Gly Leu Ala Leu Gly
145 150 155 160
Ala Arg Ile Ala Met Leu Pro Gly Pro Leu Leu Gly Ser Lys Ala Leu
165 170 175
Met Ala Gly Thr Phe Ala Val Ile Thr Pro Ile Gly Met Ala Ile Gly
180 185 190

```
Leu Gly Val Leu His Ser Phe Asn Gly Asn Asp Gln Ser Thr Leu Val
        195                 200                 205
Ala Leu Gly Thr Leu Asp Ala Leu Ser Ala Gly Ile Leu Val Trp Val
    210                 215                 220
Gly Leu Val Asp Met Trp Ala Arg Asp Trp Val Met Asp Gly Gly Glu
225                 230                 235                 240
Met Met Asn Ala Arg Leu Ser Ile Val Ala Val Gly Gly Phe Ser Leu
                245                 250                 255
Ile Ala Gly Met Val Leu Met Gly Val Leu Gly Lys Trp Ala
            260                 265                 270
```

<210> 33808
<211> 157
<212> PRT
<213> A.fumigatus

<400> 33808

```
Ser Ser Ser Ser Glu Arg Glu Ser Ser Ser Pro Leu Arg Leu Phe Met
1               5                   10                  15
Tyr Val Ser Ser Pro Phe Ser Met Thr Asp Gly Ala Thr Asn Pro Asn
            20                  25                  30
Ser Ser Thr Arg Thr Pro Thr Ser Cys Ser Pro Thr Ser Val Ser Ala
        35                  40                  45
Asn Ser Asn Thr Lys Pro Pro Pro Pro Pro Ser Ser Trp Pro Gly Ser
    50                  55                  60
Ser Ser Pro Phe Ser Ser Ser Thr Ser Ala Thr Ala Ser Phe Ser Pro
65                  70                  75                  80
Ala Gln Arg Gly Ala Arg Arg Pro Val Pro Ser Arg Pro Ala Thr Cys
                85                  90                  95
Pro Pro His Pro Gln Ala Lys Asn Tyr Arg Pro Ala Asn Arg Arg Arg
            100                 105                 110
Arg Arg Arg Ser Ser Asn Asn His Arg Pro Ser Pro Arg Trp Ala Thr
        115                 120                 125
Thr Thr Ala Leu Pro Trp Thr Pro Pro Ile Pro Thr Pro Asn Ser Arg
    130                 135                 140
Cys Ser Ser Trp Lys Pro Gly Trp Ser Ser Thr Ala Ser
145                 150                 155
```

<210> 33809
<211> 169
<212> PRT
<213> A.fumigatus

<400> 33809

```
Tyr Ile Ala His Pro Ser Ser Ile Val Asn Arg Met Thr Thr Thr Ile
1               5                   10                  15
Arg Tyr Ala Thr Glu Ala Asp Ala Pro Ala Ile Ala Glu Leu Asn Ile
            20                  25                  30
Ile Cys Phe Gln Asp Gly Pro Met Tyr Arg Asn Met Leu Pro Asn Ile
        35                  40                  45
Asp Pro Leu Ser Ala Thr Pro Met Lys Leu Ser Arg Thr Tyr Asp Lys
    50                  55                  60
Leu Ala Asn Pro Arg Met His Val Leu Val Ala Thr Asp Pro Thr Ser
65                  70                  75                  80
Asn Gln Ile Leu Gly Cys Ala Arg Trp Leu Met Pro Asp Ala Ser Ala
                85                  90                  95
```

```
His Trp Arg Asp Glu Ser Glu Met Ala Ile Leu Ser Asp Asp Ala Arg
            100                 105                 110
Ala Lys Ala Ala Gln Met Thr Gln Leu Arg Pro Ala Gly Met Asn Val
        115                 120                 125
Ala Val Tyr Glu Gly Leu Phe Lys Ala Leu Glu Glu Met Arg Gly Lys
    130                 135                 140
Tyr Val Arg Glu Gly Asp Ile Gly Glu Cys Thr Phe Pro Pro Phe Phe
145                 150                 155                 160
Leu Ser Gln Tyr Leu Glu Asp Ala Gly
                165
```

<210> 33810
<211> 207
<212> PRT
<213> A.fumigatus

<400> 33810

```
Arg Thr Glu Gln Leu Thr Arg Thr Ala Leu His Ala Arg Gln Pro His
1               5                   10                  15
Val His Gln Arg Val Ser Arg Arg Thr Arg Ile Arg Ser His His Leu
            20                  25                  30
Arg Arg Arg His Gly Arg Asp Leu Pro Leu Leu Ser Leu Arg Val His
        35                  40                  45
Arg Pro Pro His His Ser Arg Pro Arg Asn Ala Val Arg Val Ala Leu
    50                  55                  60
Ser Arg Ala Asp Arg Arg His Val Pro Leu Ile His Lys Gln Arg Thr
65                  70                  75                  80
Thr Gly Gln Pro Thr Ala Ala Ala Ala Ala Ala Ala Ala Thr Thr Thr
                85                  90                  95
Asp Pro Arg Arg Ala Gly Pro Pro Pro Arg Pro Ser Pro Gly Pro His
            100                 105                 110
Gln Ser Gln His Gln Thr Leu Gly Ala Arg His Gly Ser Arg Gly Gly
        115                 120                 125
Leu Pro Gln His Pro Asp Arg Thr Asp Pro Gly Arg Gly Arg Arg Leu
    130                 135                 140
Ile Leu Gln Asp Ala Ala Gly Gly Asp Cys Leu Pro Pro Val Leu Arg
145                 150                 155                 160
Gly Ser Gly Ala Arg Gly Ala Asp Arg Asp Ala Ala Gly Pro Ala Ala
                165                 170                 175
Gly Val Glu Gly Ala Asp Gly Gly Asp Leu Cys Arg Asp His Ala Asp
            180                 185                 190
Arg Asp Gly Asp Arg Ala Gly Gly Ala Ala Leu Val Gln Arg Gln
        195                 200                 205
```

<210> 33811
<211> 139
<212> PRT
<213> A.fumigatus

<400> 33811

```
Ile Ala Ser Glu Gln Thr Arg Leu Arg Pro Leu Pro Gln His Pro His
1               5                   10                  15
Gln Asp His Ser Arg Asp Gln Arg Glu Pro Ser Asn Arg His Asn Ala
            20                  25                  30
Gln Ser Arg Ile His His Leu Ala Ala Ile His His Pro Val Pro Gly
        35                  40                  45
```

```
Pro His Val Asp Gln Pro Asn Pro His Gln Asp Pro Arg Arg Gln Arg
    50                  55                  60
Val Gln Arg Ser Gln Arg His Lys Arg Ala Leu Ile Ile Ala Val Glu
65                  70                  75                  80
Arg Val Gln His Pro Gln Pro Asp Arg His Pro Asp Arg Arg Asp His
                85                  90                  95
Gly Lys Gly Pro Arg His Gln Arg Leu Arg Pro Gln Gln Arg Ala Arg
            100                 105                 110
Gln His Arg Asp Pro Arg Pro Glu Arg Gln Thr Leu Glu Glu Leu Val
        115                 120                 125
Glu Asp Asn His His Gln Gln Arg Leu Val Glu
    130                 135
```

<210> 33812
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33812

```
Ser Leu Pro Leu Asn Glu Cys Ser Thr Pro Ser Pro Ile Ala Ile Pro
1               5                   10                  15
Ile Gly Val Ile Thr Ala Lys Val Pro Ala Ile Ser Ala Phe Asp Pro
            20                  25                  30
Ser Ser Gly Pro Gly Ser Ile Ala Ile Arg Ala Pro Ser Ala Arg Pro
        35                  40                  45
Ser Lys Asn Trp Trp Lys Thr Ile Thr Thr Ser Ser Val Leu
    50                  55                  60
```

<210> 33813
<211> 75
<212> PRT
<213> A.fumigatus

<400> 33813

```
Val Leu Phe Phe Ser Thr Glu Val Arg Ser Ser Tyr Asp Cys Trp Thr
1               5                   10                  15
Gln Leu Thr Gln Val Pro Cys Ala Gln Phe His Ser Pro Val Pro Thr
            20                  25                  30
Lys Met Gly Ser Lys Pro Ser Ser Phe Pro Arg Gly Tyr Ser Val Ile
        35                  40                  45
Leu Lys Gln Thr Val Ile Leu Asn Asn Val Met Ile Ile Glu Val Asn
    50                  55                  60
Arg His Leu His Tyr Ser Lys Asn Ser Asp Leu
65                  70                  75
```

<210> 33814
<211> 176
<212> PRT
<213> A.fumigatus

<400> 33814

```
Arg Thr Thr Ser Asp Leu Leu Arg Arg His Ile Arg Ile Tyr His Pro
1               5                   10                  15
Asn Arg Ala Pro Pro Ala Ser Arg Ala Gln Lys Ala Cys Ala Ala Cys
            20                  25                  30
His Ala Arg Lys Glu Arg Cys Tyr Gly Gly Phe Pro Cys Ser Ala Cys
```

```
        35                  40                  45
Gln Lys Arg Gly Ile Ala Cys Ser Pro Gly Lys Gly Lys Thr Pro Glu
    50                  55                  60
Glu Gln Ile Val Asp Asn Asn Val Gln Ile Ser Gln Gln Pro His Pro
65                  70                  75                  80
Pro Arg Trp Ile Ala Leu Asp Tyr Val Asp Ile Tyr Phe Asp Asn Phe
                85                  90                  95
His Pro Lys Trp Pro Phe Leu His Arg Gly Thr Phe Asp Val Thr Lys
            100                 105                 110
Glu Pro Cys Val Leu Ile Gln Ser Val Val Met Ile Gly Leu Trp Ile
        115                 120                 125
Glu Gly Ser Lys Lys Ser Arg Glu Ala Ala Thr Asp Leu His Arg Ser
    130                 135                 140
Leu Ser Thr Ala Ile Arg Thr Gln Met Val Arg Ala Tyr Lys Asn Pro
145                 150                 155                 160
Gly Asn Leu Pro Leu Leu Thr Thr Phe Phe Phe Leu Phe His Pro Ser
                165                 170                 175
```

<210> 33815
<211> 191
<212> PRT
<213> A.fumigatus

<400> 33815

```
Lys Thr Asp Leu Ser Leu Leu Ser Asp Thr Met Pro Pro Gln Pro Leu
1               5                   10                  15
Ser Gly Ser Ser Leu Pro Pro Phe Gln Cys Asp His Pro Gly Cys Gly
            20                  25                  30
Ala Lys Tyr Arg Arg Lys Glu His Leu Asn Arg His Ala Ala Ser His
        35                  40                  45
Ser Arg Gly Asp Cys Phe Ser Cys Pro Tyr Cys Glu Ser Thr Leu Thr
    50                  55                  60
Arg Arg Asp Ala Lys Pro Cys Ile Leu Leu Ala Leu Ile Asp Arg His
65                  70                  75                  80
Thr Asn Glu Arg Pro Val Thr Ser Cys Ala Gly Ile Ser Gly Phe Ile
                85                  90                  95
Thr Arg Ile Glu Arg Leu Arg Arg Arg Gly His Arg Arg Leu Ala Leu
            100                 105                 110
Arg Val Thr Pro Gly Lys Asn Ala Val Met Val Asp Phe Pro Ala Val
        115                 120                 125
His Val Arg Asn Gly Val Ser Pro Val Leu Leu Gly Arg Glu Lys Leu
    130                 135                 140
Gln Lys Ser Arg Leu Ser Thr Thr Thr Phe Arg Ser Arg Asn Asn Pro
145                 150                 155                 160
Ile Arg Leu Gly Gly Ser Leu Leu Thr Thr Ser Ile Phe Ile Leu Ile
                165                 170                 175
Ile Ser Ile Gln Asn Gly His Phe Cys Thr Glu Gly His Leu Thr
            180                 185                 190
```

<210> 33816
<211> 83
<212> PRT
<213> A.fumigatus

<400> 33816

```
Ala Val Met His Pro Cys Trp Met Pro Arg Ser Ile Asp Ile Met Pro
```

```
1               5                   10                  15
Leu Gly Gly Ser Arg Pro Asp Glu Tyr Thr Leu Leu Ser Val Arg Val
            20                  25                  30
Val Phe Ser Arg Arg Pro Thr Ser Ala Gly Tyr Tyr Asn Asn Thr Ile
        35                  40                  45
Tyr Gln Leu Leu Pro Ile Thr Ile Arg Ala Gln Tyr Lys Thr Thr Ser
    50                  55                  60
Ser Tyr Ser Phe Leu Ser Pro Met Ala Phe Gly Ala Ser Thr Arg Met
65                  70                  75                  80
Pro Leu Phe
```

<210> 33817
<211> 307
<212> PRT
<213> A.fumigatus

<400> 33817

```
Ile Cys His Gln Asn Val Thr Asn Ala Gln Ala Tyr Ile Glu Leu Ala
1               5                   10                  15
Ala Gly Asp Arg Ile Gln Leu His Trp Thr Ala Trp Pro Glu Cys His
            20                  25                  30
His Gly Pro Val Ile Asp Met Leu Ala Ser Cys Gly Glu Ser Cys Thr
        35                  40                  45
Thr Val Asp Lys Thr Ser Leu Lys Phe Phe Lys Ile Asp Gly Val Gly
    50                  55                  60
Leu Val Asp Asn Ser Ala Val Pro Gly Thr Trp Gly Asp Asp Gln Leu
65                  70                  75                  80
Ile Ala Asn Ser Asn Ser Trp Met Val Glu Ile Pro Lys Cys Ile Ala
                85                  90                  95
Pro Gly Asn Tyr Val Leu Arg His Glu Leu Ile Ala Leu His Ser Ala
            100                 105                 110
Phe Glu Thr Gly Gly Ala Gln Asn Tyr Pro Gln Cys Phe Asn Leu Lys
        115                 120                 125
Val Thr Gly Ser Gly Thr Asp Ser Pro Ala Gly Thr Leu Gly Thr Glu
    130                 135                 140
Leu Tyr Thr Glu Ser Asp Pro Gly Leu Leu Val Asp Ile Tyr Lys Ser
145                 150                 155                 160
Ile Ala Ser Tyr Ala Val Pro Gly Pro Ala Met Tyr Thr Gly Ala Val
                165                 170                 175
Ser Ile Thr Gln Ser Thr Ser Ala Ile Thr Ala Thr Ser Thr Ala Thr
            180                 185                 190
Val Gly Ser Gly Ala Asp Ser Thr Pro Val Pro Ser Ser Ala Ala Ser
        195                 200                 205
Ser Glu Tyr Ser Thr Val Ala Val Gln Val Pro Thr Thr Lys Ala Gln
    210                 215                 220
Tyr Thr Pro Val Pro Ser Ser Ser Pro Ser Thr Phe Val Thr Ser Pro
225                 230                 235                 240
Ala Pro Thr Thr Ser Val Pro Ser Gly Ser Ser Val Pro Val Thr Ser
                245                 250                 255
Asn Thr Ala Ala Pro Leu Pro Thr Ala Ala Pro Gly Gly Thr Gln Thr
            260                 265                 270
Val Tyr Gly Gln Cys Gly Gly Gln Asn Trp Thr Gly Pro Thr Val Cys
        275                 280                 285
Ala Ser Gly Ala Thr Cys Lys Thr Trp Asn Pro Tyr Tyr Ser Gln Cys
    290                 295                 300
```

Val Pro Asn
305

<210> 33818
<211> 202
<212> PRT
<213> A.fumigatus

<400> 33818
Ser Pro Cys Ile Ala Arg Leu Arg Gln Ala Gly Arg Arg Thr Thr Pro
1 5 10 15
Ser Ala Ser Thr Ser Arg Leu Leu Asp Pro Val Leu Thr His Gln Leu
20 25 30
Val Pro Trp Ala Arg Ser Cys Thr Pro Ser Pro Thr Pro Val Ser Trp
35 40 45
Trp Thr Ser Thr Ser Gln Ser Pro Arg Thr Pro Ser Pro Val Leu Pro
50 55 60
Cys Thr Pro Ala Pro Ser Pro Ser Pro Ser Leu Pro Arg Pro Ser Pro
65 70 75 80
Arg Pro Ala Pro Gln Pro Ser Ala Gln Ala Pro Thr Ala Pro Pro Cys
85 90 95
Pro Arg Leu Leu Arg Pro Pro Ser Thr Arg Pro Ser Pro Cys Arg Phe
100 105 110
Pro Pro Pro Arg Pro Ser Thr Pro Leu Ser Pro Pro Ala Arg Leu Arg
115 120 125
Pro Leu Ser Arg Arg Leu Arg Leu Pro Leu Leu Ser Pro Ala Ala Ala
130 135 140
Pro Ser Leu Ser Arg Leu Thr Pro Arg Leu Pro Cys Leu Leu Leu Leu
145 150 155 160
Leu Ala Val Leu Arg Leu Ser Met Val Ser Ala Val Asp Arg Thr Gly
165 170 175
Leu Asp Pro Leu Phe Val Leu Leu Ala Arg Pro Ala Arg Pro Gly Thr
180 185 190
Leu Ile Thr Pro Ser Val Cys Leu Thr Arg
195 200

<210> 33819
<211> 101
<212> PRT
<213> A.fumigatus

<400> 33819
Leu Ala Tyr Arg Ala Val Pro Leu Cys His Val Leu Ala Arg Leu Ser
1 5 10 15
Arg Pro Val Cys Asn Pro Gln Asn Lys Thr Pro Ser Pro Val His Glu
20 25 30
Leu Ser Ser Val Met Arg Arg His Arg Val Asn Ile Ser Asn Ala Ala
35 40 45
Ile Leu Gly Leu Gln Lys Asp Leu Asn Ile Glu Asn Thr Lys Tyr Asn
50 55 60
Thr Ala Leu Thr Ile Phe Phe Val Pro Tyr Val Leu Phe Glu Ile Pro
65 70 75 80
Ser Asn Ile Leu Leu Lys Lys Leu Lys Pro His Val Trp Cys Met Ser
85 90 95
Phe Val Phe Leu Arg
100

<210> 33820
<211> 122
<212> PRT
<213> A.fumigatus

<400> 33820
Leu Ser Val Pro Ala Ile Lys Thr Gln Leu Tyr Ser Val Ala Pro Trp
1 5 10 15
Ala Ala Ala Phe Gly Phe Ser Met Leu Ile Ala Thr Leu Ser Asp Lys
20 25 30
Phe Arg His Arg Tyr Ile Phe Ala Met Ile Pro Met Leu Ile Ala Met
35 40 45
Gly Gly Phe Gly Ile Leu Leu Asn Val His Gly Val Ala His Arg Asn
50 55 60
Val Gln Tyr Gly Ala Leu Phe Met Val Thr Gly Gly Cys Tyr Ser Ser
65 70 75 80
Met Ala Val Val Val Cys Trp Tyr Ala Met Asn Leu Ser Gly His Arg
85 90 95
Arg Arg Gly Val Gly Thr Ala Trp Gln Ile Gly Phe Gly Asn Ser Lys
100 105 110
Leu Gln Phe Leu Gln Cys Val Arg Gly Ala
115 120

<210> 33821
<211> 75
<212> PRT
<213> A.fumigatus

<400> 33821
Leu Leu Phe Gly Tyr Ile Gly Val Ser Glu Thr Asp Asn Gly Lys Ala
1 5 10 15
Glu Gly Glu Ile Tyr Ser Glu Ser Ala Asp Leu Pro Pro Leu Ser Thr
20 25 30
Thr Thr Glu Arg Lys Leu Met Ala Lys Ile Asp Trp His Ile Val Pro
35 40 45
Cys Leu Cys Val Met Tyr Leu Leu Ala Phe Leu Asp Arg Tyr Ala Ile
50 55 60
Leu Lys Thr Lys Pro Leu Ala Pro Cys Met Asn
65 70 75

<210> 33822
<211> 82
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (43)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33822
Pro Val Gly Gly Ile Ile Ala Thr Tyr Ser Phe Leu Ala Lys Asp Ala
1 5 10 15
Pro Leu Tyr Arg Asn Gly Tyr Ile Ile Ser Leu Ser Phe Leu Cys Phe
20 25 30

```
Ser Ala Ala Cys Cys Thr Ala Tyr Leu Ala Xaa Val Trp Tyr Asp Asn
        35                  40                  45
Arg Lys Arg Asp Arg Ala Met Ala Asn Gly Ala Thr Ile Glu Leu Thr
    50                  55                  60
Glu Gln Glu Gln Glu Gln Leu Gly Asp Leu Ala Pro Asn Tyr Arg Tyr
65                  70                  75                  80
Thr Tyr
```

<210> 33823
<211> 186
<212> PRT
<213> A.fumigatus

<400> 33823

```
Val Cys Phe Leu Arg Glu Arg Leu Thr Gln Ser Met Thr Asn Arg Asp
1               5                  10                  15
Val Ala Gly Phe Tyr Leu Leu Gly Met Trp Tyr Lys Arg Ser Glu Ala
            20                  25                  30
Gln Lys Arg Phe Ser Phe Phe Phe Ser Ser Thr Thr Leu Ala Gly Ala
        35                  40                  45
Phe Gly Gly Leu Leu Ala Ser Gly Leu Gly Glu Met Ala Gly Leu Arg
    50                  55                  60
Gly Tyr Asn Gly Trp Arg Trp Val Phe Ile Ile Glu Gly Val Leu Thr
65                  70                  75                  80
Cys Val Val Ser Leu Val Trp Phe Phe Val Leu Pro Asp Phe Pro Glu
                85                  90                  95
Asp Val Lys Trp Leu Asn Asp Glu Glu Arg Glu Phe Ile Arg Ala Lys
            100                 105                 110
Leu Ala Lys Asp Val Gly Ala Ala Gly Arg Asp Val Lys Leu Thr Val
        115                 120                 125
Arg Asp Val Leu Ala Val Phe Lys Asp Cys Glu Trp Arg Ala Ser Leu
    130                 135                 140
Gly Val Leu Ile Phe Ala Asp Ser Phe Leu Asp Lys Ile Phe Ile Gly
145                 150                 155                 160
Gly Phe Met Tyr Phe Gly Gln Ile Val Thr Ala Tyr Gly Glu His Asp
                165                 170                 175
Ser Thr Trp Leu Leu Asn Gly Phe His Ser
            180                 185
```

<210> 33824
<211> 82
<212> PRT
<213> A.fumigatus

<400> 33824

```
Thr Met Glu Lys Glu Gln Ile Lys Val Asp Leu Gly Asp Ser Gln Arg
1               5                  10                  15
Ile Thr Ala Met Asp Glu Lys Gln Pro Val Pro Thr Glu Leu Gly Val
            20                  25                  30
Met Gly Asp Thr Thr Leu Glu Gln Asn Gly Phe Lys Ile His Pro Gln
        35                  40                  45
Pro Thr Ser Asp Pro Leu Asp Pro Leu Asn Trp Ser Arg Leu Glu Lys
    50                  55                  60
His Thr Ile Leu Gly Ile Val Met Phe Lys Ser Val Leu Ala Lys Leu
65                  70                  75                  80
```

Asn Val

<210> 33825
<211> 126
<212> PRT
<213> A.fumigatus

<400> 33825
Glu Ser Ser Cys Ser Ser Gln Ser Ser Gln Ser Ser Thr Tyr Ser Gln
1 5 10 15
Pro Leu Leu Ile Phe Asp Gly Arg Tyr Phe Leu Phe Thr Tyr Ile Thr
20 25 30
Thr Thr Thr Val Pro Ser Phe Pro Glu Leu Gln Ser Gln Phe Ser Ile
35 40 45
Ser Tyr Ser Glu Val Asn Trp Thr Val Ala Ile Pro Ala Leu Gly Leu
50 55 60
Ser Val Gly Pro Leu Phe Trp Thr Ser Leu Gly Asp Ile Tyr Gly Arg
65 70 75 80
Arg Thr Ile Phe Ile Thr Gly Thr Val Ile Ala Leu Val Ser Thr Ile
85 90 95
Gly Val Ala Val Ala Gly Ser Tyr Ser Gly Tyr Met Ala Ala Arg Phe
100 105 110
Phe Gln Gly Phe Gly Val Ser Pro Ala Ala Thr Val Gly Met
115 120 125

<210> 33826
<211> 63
<212> PRT
<213> A.fumigatus

<400> 33826
Ile Asp Glu Ser Leu Met Met Ala Leu Leu Val Leu Ser Arg Cys Ala
1 5 10 15
Lys Phe Gln Leu Phe Tyr Asn Glu Val Leu Thr Ile Tyr Ser Leu Thr
20 25 30
Glu Ser Thr Gln Ser Gly Phe Asp Cys Asn His Leu Ser Ser Phe Phe
35 40 45
Ser Asn Arg Ser Asp Val Ile Phe Asp Gly Ile Ile Asp Ser Pro
50 55 60

<210> 33827
<211> 100
<212> PRT
<213> A.fumigatus

<400> 33827
Val Lys Leu Val Ile Phe Val Cys Ser Pro Pro Thr Phe Ser Leu Leu
1 5 10 15
Thr Ser Ser Tyr Phe Pro Lys Tyr Ser Trp Asn Ile Arg Pro Thr Ala
20 25 30
Tyr Ala Leu His Pro Thr Asp Leu Pro Glu Val Glu Ala Thr Met Val
35 40 45
Ala Leu Gln Ala Val Gln Ala His Asn Ala Ala Leu Thr Ser Leu Ala
50 55 60
Ser Gly Pro Val Ala Val Phe Gly Met Phe Ala Phe Tyr Ile Ile Leu

```
65                  70                  75                  80
Pro Ser Thr Met Glu Gln Leu Leu Gln Ile Phe Leu Phe Arg Lys Lys
                85                  90                  95
Pro Ser Ser Arg
            100
```

<210> 33828
<211> 325
<212> PRT
<213> A.fumigatus

<400> 33828

```
Tyr Pro Pro Val Gly Gly Thr Ser Gly Ile Ala Leu Ser Thr Ala Leu
1               5                  10                  15
Ala Phe Thr Arg Tyr Thr Thr Ser Pro Lys Ile Tyr Leu Val Gly Arg
            20                  25                  30
Ser Gln Ser Ala Ala Asp Thr Ala Ile Ala Ser Ile Lys Arg Ile Asn
        35                  40                  45
Pro Ser Ala Gln Pro Thr Phe Leu Gln Ala Asp Ile Ser Leu Leu Lys
    50                  55                  60
Asn Val Asp Ser Val Cys Ala Glu Leu Ala Ser Arg Glu Lys Ser Ile
65                  70                  75                  80
Asn Leu Leu Phe Met Thr Pro Gly Tyr Leu Thr Leu Lys Gly Arg Asp
                85                  90                  95
Glu Thr Ala Glu Gly Leu Asp Arg Lys Phe Val Leu His Tyr Tyr Ala
            100                 105                 110
Arg Met Arg Phe Ile Thr Asn Leu Leu Pro Arg Leu Ser Ala Ala Ala
        115                 120                 125
Gln Asp Pro Ser Val Asp Ala Gly Ala Arg Leu Ser Arg Val Val Ser
    130                 135                 140
Val Leu Asp Pro Met Val Ser Val Arg Ala Gly Gly Ala Gly Thr Leu
145                 150                 155                 160
Asp Phe Ser Asp Leu Ser Leu Lys His Thr Phe Thr Leu Gln Lys Cys
                165                 170                 175
Gly Trp His Ala Ser Leu Met Gly Asn Phe Phe Leu Glu Ser Met Ala
            180                 185                 190
Glu Arg His Pro His Thr Ser Phe Val His Ala Tyr Pro Ser Gly Val
        195                 200                 205
Ala Thr Gly Val Met Arg Glu Leu Pro Ala Gly Arg Val Leu Ser Ala
    210                 215                 220
Val Leu Thr Pro Leu Leu Arg Pro Phe Met Val Pro Leu His Glu Ser
225                 230                 235                 240
Gly Glu Arg His Leu Phe Ala Ala Thr Ser Gly Arg Phe Pro Ser Lys
                245                 250                 255
Ala Glu Gly Glu Gly Ser Glu Gly Asp Ile Ala Ala Gly Ser Asp Gly
            260                 265                 270
Thr Lys Gly Ser Gly Cys Tyr Trp Leu Asn Trp Asp Gly Glu Val Phe
        275                 280                 285
Pro Pro Asn Lys Lys Ile Gln Arg Thr Arg Met Gln Gly Ala Val Asp
    290                 295                 300
Lys Val Val Gln His Thr Glu Glu Val Phe Lys Gln Val Cys Glu Glu
305                 310                 315                 320
Gly Asn Thr Tyr Pro
                325
```

<210> 33829

<211> 261
<212> PRT
<213> A.fumigatus

<400> 33829
Arg Ser Cys Val Pro Glu Thr Asn Leu Glu Pro Ala Asp Thr Asn Arg
1 5 10 15
Ser Asn Arg Ala Ala Glu Gly Pro Gln Thr Leu Val Gly Ser Asp Ser
20 25 30
Pro His Ser Ser Ala Pro Ser Thr Pro Glu Asp Ser Ser Arg Ala Gly
35 40 45
Asn Arg Arg Ser Glu Ala Val Lys Ile Ala Gly Glu Asp Tyr Phe Leu
50 55 60
Pro Asp Gly Arg Ile Pro Glu Ala Arg Ser Ser Pro Ala Thr Pro Gln
65 70 75 80
Pro Val Val Thr Lys Thr Leu Val Phe Ser Pro Arg Ile Gln Phe His
85 90 95
Glu Thr Trp Pro Ser Gly Glu Tyr Asp Arg Arg Gly Asp Ile Ala Thr
100 105 110
Cys Asn Arg Leu Thr Pro Leu Leu Ala Gln Gln Ile Lys Glu Glu Leu
115 120 125
Asn Asn Phe Lys Met Val Ser Pro His Arg Asp Lys Ser Ile Pro Ala
130 135 140
Leu Val Pro Thr Cys Ile Leu Thr Leu Asn His Arg Lys Trp Lys Phe
145 150 155 160
Thr Arg Pro Arg Arg Ser Thr Leu Ile Ser Cys Glu Ala Leu Ala Arg
165 170 175
Asp Asp Ile Val Trp His Val Ser Tyr Cys Thr Ser Ala Ile Val Thr
180 185 190
Arg Pro Pro Ser Gly Val Ala Phe Cys Asn Trp His Phe Lys Pro Gln
195 200 205
Ala Leu Ala Cys Val Ser Phe Phe Phe Arg Pro Met His Asp Gly Arg
210 215 220
Ala Phe Ala Lys Arg Ala Ala Leu Val Leu Phe Arg Leu Pro Ile Ile
225 230 235 240
Pro Arg Pro Cys Val Phe Pro Leu Val Pro Ala Phe Val Gly Val Met
245 250 255
Pro Thr Gln Pro Phe
260

<210> 33830
<211> 65
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2),(31),(35)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33830
Arg Xaa Thr Ser Pro Gly Lys Arg Ala Glu Val Cys His Phe Asn Ser
1 5 10 15
Ala Tyr Thr Asn Leu Tyr His Ser Ala His Ile Asp Arg Arg Xaa Thr
20 25 30
Pro Gln Xaa Cys Thr Thr Leu Gly Pro Ser Ser Pro Val Val Lys Thr

```
        35                  40                  45
Lys Glu Asn Lys Asp Ile Met Met Gln Lys Lys Arg Val Arg His Ala
    50                  55                  60
Arg
65
```

<210> 33831
<211> 350
<212> PRT
<213> A.fumigatus

<400> 33831

```
Tyr Asp Ser His Phe Ala Phe Pro Cys His Tyr Asp Phe Glu Trp Pro
1               5                  10                  15
Ala Ala Glu Met Met Glu Pro Ala Val Ser Asn Gly Gly Pro Val Ala
            20                  25                  30
Glu Asp Asn Ile Ile Asn Arg Arg Gly Gly Glu Ser Ile Tyr Gln Ser
        35                  40                  45
Cys Val Asn Leu Lys Lys Arg Leu Ala Glu Val Pro Asn Phe Glu Pro
    50                  55                  60
His Leu Arg Glu Met Glu Glu Glu Asp Glu Arg Leu Gly Asn Thr Asp
65                  70                  75                  80
Pro Val Ala Ser Leu Trp Asn Cys Leu Arg Asn Gly Tyr Pro Leu Leu
                85                  90                  95
Thr Ile Tyr Asn Ala Ser Asp Pro Pro Glu Leu Leu Glu Ile Asp Pro
            100                 105                 110
Ser Lys Val Pro Glu Ala Lys Arg Pro Lys Ala Ala Thr Phe Lys Phe
        115                 120                 125
Leu Gln Ala Ser Leu Gln Glu Leu Ala Phe Pro Gln Gln Asp Cys Phe
    130                 135                 140
Leu Ile Thr Asp Leu Tyr Gly Asp Ser Thr Thr Gly Phe Ile Lys Val
145                 150                 155                 160
Ile Lys Met Val Asn Arg Val Leu Asp Ile Leu Glu Met Gln Gly Gln
                165                 170                 175
Leu Lys Arg Ser Leu Asp Ser Thr Thr Ser Ala Pro Ala Lys Gly Ala
            180                 185                 190
Val Lys Leu Thr Lys Arg Glu Phe Ile Leu Lys Glu Leu Leu Glu Thr
        195                 200                 205
Glu Arg Asp Tyr Val His His Leu Gln Asn Leu Gln Ala Leu Lys Lys
    210                 215                 220
Glu Leu Glu Glu Thr Gly Ala Leu Thr Gly Asp Ala Ser His Gln Ile
225                 230                 235                 240
Phe Leu Asn Leu Asn Asn Leu Leu Asp Phe Ala Gln Arg Phe Leu Ile
                245                 250                 255
Arg Met Glu Gln His Tyr Ala Leu Pro Glu Asp Lys Gln Asn Trp Gly
            260                 265                 270
Glu Leu Phe Ile Gln His Glu Glu Ala Phe Arg Gln Tyr Glu Pro Phe
        275                 280                 285
Ile Ser Asn Gln Met Arg Cys Asp Glu Val Cys Leu Lys Glu Trp Asp
    290                 295                 300
Lys Ile Arg Ser Ala Pro Arg Pro Leu Asp Leu Gln Gln Met Val Ala
305                 310                 315                 320
Gln Pro Ala Thr Leu Asn Ser Phe Phe Val Lys Pro Phe Gln Arg Met
                325                 330                 335
Thr Lys Tyr Pro Leu Met Leu Met Val Cys Cys Phe Gln Ile
            340                 345                 350
```

<210> 33832
<211> 95
<212> PRT
<213> A.fumigatus

<400> 33832
Cys Val Arg Thr Val Ile Asn Leu Trp Leu Gln Glu Leu Arg Lys Gln
1 5 10 15
Thr Glu Asp Pro Asp Leu Gln Ala Asp Ile Thr Lys Ala Ile Asp Thr
20 25 30
Ile Gln Ser Val Leu Asp Ser Ala Asn Asp Ala Ile Asp Lys Glu His
35 40 45
Leu Ala Ser Ala Phe Leu Asp Leu Asp Glu Arg Val Asp Asp Trp Lys
50 55 60
Ala Leu Lys Ile Asp Ser Phe Gly Glu Leu Leu Arg Phe Gly Thr Phe
65 70 75 80
Thr Val Leu Gln Val Phe Thr Thr Pro Arg Ala Ser Met Cys Glu
85 90 95

<210> 33833
<211> 121
<212> PRT
<213> A.fumigatus

<400> 33833
Phe Lys Val Leu Gly Gly Ile Ala Asp Thr Val Ala Gln Leu Ile Thr
1 5 10 15
Ala Phe Lys Ala Arg Ser Thr Val Arg Thr Arg Gln Asp Gly Asp Leu
20 25 30
Ile Ser Ile Glu Ile His Glu Met Asp Lys Glu Arg Pro Pro Pro Val
35 40 45
Gly Glu Leu Gly His Ala Lys His Ile Pro Pro Pro Leu Asp Phe Glu
50 55 60
Arg Leu Thr Arg Phe Met Ser Tyr Gly Phe Phe Met Ala Pro Ile Gln
65 70 75 80
Phe Lys Trp Phe Gly Phe Leu Ser Arg Ala Phe Pro Leu Thr Lys Lys
85 90 95
Ser Pro Thr Leu Pro Ala Leu Lys Arg Val Ala Val Asp Gln Leu Met
100 105 110
Phe Ala Pro Phe Gly Met Asp Ile Ser
115 120

<210> 33834
<211> 115
<212> PRT
<213> A.fumigatus

<400> 33834
Ser Ala His Val Arg Ser Phe Arg Tyr Gly His Leu Leu Thr Ser Lys
1 5 10 15
Ile Arg Ala Trp Ala Asp Phe Asp Lys Gly Leu Ala Cys Phe Phe Thr
20 25 30
Phe Met Thr Val Ala Glu Gly Gly Gly Lys Arg Ala Leu Thr Arg Lys
35 40 45
Phe Gln Asp Val Tyr Leu Pro Thr Leu Lys Ala Asn Tyr Val Leu Trp

```
    50                  55                  60
Pro Ala Val Gln Ile Leu Asn Phe Arg Val Val Pro Ile Gln Phe Gln
65                  70                  75                  80
Ile Val Ser Glu Val Ser Ala Arg Leu Ile Cys Met Val Leu Thr Ile
                85                  90                  95
Ile Cys His Ser His Leu Tyr Leu Ala Ser Val Ser Leu Gly Pro His
            100                 105                 110
Thr Cys Pro
        115
```

<210> 33835
<211> 96
<212> PRT
<213> A.fumigatus

<400> 33835

```
Gln Thr Lys Ala Thr Tyr Pro Ala Val Gly Pro Lys Leu Ile Glu Glu
1               5                   10                  15
Ala His Arg Glu His Ile Arg Ser Gly Asp Phe Ser Leu Tyr Phe Val
            20                  25                  30
Cys Leu Val Tyr Pro Lys Val Tyr Ser Leu Cys Ser Ser Phe Pro Arg
        35                  40                  45
Ala Ser Leu Ala Asp Thr Ala Tyr Asn Leu Ile Glu Thr Pro Tyr Thr
    50                  55                  60
Met Ser Leu Thr Asn Lys Leu Ala Ile Thr Asp Val Asp Leu Lys Asp
65                  70                  75                  80
Lys Arg Val Leu Ile Arg Val Arg Cys Ala Glu Thr Ala Ser Met Ser
                85                  90                  95
```

<210> 33836
<211> 116
<212> PRT
<213> A.fumigatus

<400> 33836

```
His Val Pro Arg Ala Trp Gln Val Asp Phe Asn Val Pro Leu Asn Glu
1               5                   10                  15
Lys Lys Glu Val Thr Asn Pro Gln Arg Ile Val Gly Ala Leu Pro Thr
            20                  25                  30
Ile Lys Tyr Ala Ile Glu Gln Gly Ala Lys Ala Val Val Leu Met Ser
        35                  40                  45
His Leu Gly Arg Pro Asp Gly Lys Lys Asn Pro Lys Tyr Ser Leu Lys
    50                  55                  60
Pro Val Val Pro Glu Leu Glu Lys Leu Leu Gly Lys Ser Val Ile Phe
65                  70                  75                  80
Thr Glu Asp Cys Val Gly Lys Glu Val Glu Glu Thr Val Asn Lys Ala
                85                  90                  95
Ser Gly Gly Gln Val Ile Leu Leu Glu Asn Leu Arg Phe His Pro Glu
            100                 105                 110
Glu Glu Gly Ser
        115
```

<210> 33837
<211> 706
<212> PRT
<213> A.fumigatus

<400> 33837

```
Ser Gly Thr Glu Gly Ser Pro Ser Ser Arg Lys Asp Ser Asn Phe Ser
1               5                  10                  15
Gln His Val Ala Ser Thr Phe Ala Gly Ser Leu Arg Asn Leu Tyr Leu
            20                  25                  30
Ala Asp Asn Arg Leu Glu Asp Asp Ile Phe Arg Glu Leu Ser Leu Ile
        35                  40                  45
Pro Glu Leu Arg Val Val Asn Leu Ser Tyr Asn Glu Leu Thr Glu Leu
    50                  55                  60
Pro Gln Gly Leu Leu Lys Arg Trp Pro Phe Leu Thr Glu Leu Tyr Leu
65                  70                  75                  80
Ser Gly Asn Glu Leu Thr Ser Leu Pro Ser Asp Asp Leu Glu Glu Gly
                85                  90                  95
Ser Asn Leu Lys Val Leu Asn Leu Asn Ala Asn Arg Phe Gln Val Leu
            100                 105                 110
Pro Ala Glu Leu Cys Lys Val Ser Lys Leu Ala Ile Leu Asp Val Gly
        115                 120                 125
Ser Asn Ala Leu Lys Tyr Asn Val Ser Asn Trp Pro Tyr Asp Trp Asn
    130                 135                 140
Trp Asn Trp Asn Arg Asn Leu Lys Tyr Leu Asn Phe Ser Gly Asn Lys
145                 150                 155                 160
Arg Leu Glu Ile Lys Pro Asn Ile Thr Ser Ala Gly Thr Thr Thr Ala
                165                 170                 175
Asn Gly Thr Asp Leu Thr Asp Phe Asn Ser Leu Thr His Leu Arg Val
            180                 185                 190
Leu Gly Leu Met Asp Val Thr Leu Thr Thr Pro Thr Ile Pro Glu Glu
        195                 200                 205
Asn Glu Asp Arg Arg Val Arg Thr Ser Ala Ser Leu Ala Gly Ser Leu
    210                 215                 220
Ala Tyr Gly Met Ala Asp Phe Leu Gly Lys Ser Glu His Leu Ser Ile
225                 230                 235                 240
Ile Asp Met Ile Val Pro Arg Leu Lys Pro Asp Asn Val Glu Thr Leu
                245                 250                 255
Val Gly Leu Phe Asp Gly Gln Ala Gln Ser Thr Gly Gly Ser Arg Ile
            260                 265                 270
Ala Lys Phe Leu His Glu Asn Phe Thr Ser Thr Phe Ser Ser Glu Leu
        275                 280                 285
Lys Arg Leu Arg Val Glu Glu Glu Glu Thr Pro Leu Asp Ala Leu Arg
    290                 295                 300
Arg Thr Phe Leu Ala Leu Asn Lys Asn Met Ala Ala Ala Ala Tyr Lys
305                 310                 315                 320
Ser Ile Asp Asp Arg Ser Val Arg Gln Phe His Arg Gly Ser Pro Ala
                325                 330                 335
Thr Lys Leu Leu Asn Gln Asp Asp Ile Arg Ser Gly Gly Val Ala Thr
            340                 345                 350
Val Leu Tyr Leu Asn Asn Met Asp Leu Tyr Val Ala Asn Val Gly Asp
        355                 360                 365
Ala Gln Ala Ile Leu Val Lys Ser Asp Gly Thr Leu Lys Tyr Leu Thr
    370                 375                 380
Lys Asn His Asp Pro Ala Glu Pro His Glu Arg Ala Arg Ile Arg Ala
385                 390                 395                 400
Ala Gly Gly Phe Val Ser Arg Asn Gly Arg Leu Asn Asp Ile Leu His
                405                 410                 415
Val Ser Arg Ala Phe Gly His Phe Gln Leu Met Pro Ala Val Val Ala
            420                 425                 430
```

```
Ala Pro His Thr Met His Val Gln Leu Thr Glu Gln Asp Glu Met Ile
        435                 440                 445
Ile Leu Ala Ser Lys Glu Leu Trp Asp Tyr Val Thr Pro Asp Val Val
    450                 455                 460
Val Asp Val Thr Arg Ala Glu Arg Arg Asp Leu Met Ile Ala Ala Gln
465                 470                 475                 480
Lys Ile Arg Asp Leu Ala Ile Ser Phe Gly Ala Asn Asn Lys Leu Met
                485                 490                 495
Val Met Ile Leu Gly Val Ser Asp Leu Lys Lys Arg Glu Lys Phe Lys
            500                 505                 510
Phe Arg Gly Thr Ser Leu Ser Met Gly Pro Pro Ala Phe Pro Glu Glu
        515                 520                 525
Gln Ile Ile Pro Ser Thr Lys Arg Thr Lys Lys Pro Arg Asp Met Pro
    530                 535                 540
Gly Asp Ser Arg Leu Ala Arg Phe Asp Tyr Val Asp Ala Pro Ile Gly
545                 550                 555                 560
Glu Leu Ala Ile Ile Phe Thr Asp Ile Lys Lys Ser Thr Ser Leu Trp
                565                 570                 575
Glu Thr Cys Pro Asp Ala Met Arg Ser Ala Ile Gln Ile His Asn Asp
            580                 585                 590
Ile Leu Arg Arg Gln Leu Gly Ile Ile Gly Gly Tyr Glu Val Lys Thr
        595                 600                 605
Glu Gly Asp Ala Phe Met Val Ala Phe Ser Thr Thr Thr Ala Ala Leu
    610                 615                 620
Leu Trp Cys Phe Asn Cys Gln Thr Gln Leu Leu Glu Ala Glu Trp Pro
625                 630                 635                 640
Thr Glu Ile Leu Glu Gln Pro Gln Cys Gln Val Gln Tyr Asp Met Glu
                645                 650                 655
Asn Asn Ile Ile Phe Arg Gly Leu Ser Val Arg Met Gly Ile His Trp
            660                 665                 670
Gly Glu Pro Val Cys Glu Lys Asp Pro Val Thr Asn Arg Met Asp Tyr
        675                 680                 685
Phe Gly Pro Met Val Asp Arg Ala Leu Phe Thr Thr Arg Arg Arg His
    690                 695                 700
Arg Lys
705
```

<210> 33838
<211> 89
<212> PRT
<213> A.fumigatus

<400> 33838

```
Thr Arg Lys Tyr Ser Ile Ile Phe Arg Tyr Leu Ala Thr Ile Tyr Ile
1               5                   10                  15
His His Val Pro Phe Asp Ala Ser Gly Arg Leu Leu Ser Asn Leu Val
            20                  25                  30
Arg Asp Ile Tyr Tyr Arg Val Ala Met Cys Cys Ser Leu Ser Leu Ile
        35                  40                  45
Val Pro Pro Asn Phe Ala Gly Leu Pro Trp Lys Ser Arg Ser Glu Lys
    50                  55                  60
Thr Leu Asn Leu Gly Thr His Met Gly Ala Pro Ser Ser Cys Arg Val
65                  70                  75                  80
Arg Tyr Trp Pro Leu Gln Gln Ile Leu
                85
```

<210> 33839
<211> 238
<212> PRT
<213> A.fumigatus

<400> 33839
Ile Asn Ile Ser Phe Leu Leu Pro Phe Leu Gln Thr Gly Glu Thr Ala
1 5 10 15
Ala Val Phe Lys Gly Pro Thr Ala Pro Val Thr Ser Val Cys Phe Ser
20 25 30
Pro Asp Gly Arg Leu Leu Phe Ala Gly Cys Trp Asp Lys Thr Ile Trp
35 40 45
Ser Trp Asp Val Ala Ser Gly Gln Pro Gln His Arg Tyr Glu Gly His
50 55 60
Thr Asp Phe Val Arg Ser Val Ile Ser Ser Ser Leu Arg Gly Gln Asp
65 70 75 80
Leu Leu Val Ser Gly Gly Ala Asp Ala Gln Ile Leu Val Phe Asp Ile
85 90 95
Ala Ser Gly Lys Arg Leu Tyr Thr Leu Lys Gly His Ala Lys Gly Val
100 105 110
Gln Asp Leu Ile Met Asp Pro Thr Ser Leu Asp Leu Glu Ser Lys Ser
115 120 125
Leu Val Leu Phe Ser Ala Gly Ser Asp Arg Glu Ile Arg Trp Phe Asp
130 135 140
Ile Thr Cys Gly Ser Gln Asp Leu Thr Ala Met Asp Pro Leu Leu Ala
145 150 155 160
His Asp Thr Ser Val Tyr Lys Leu Phe Phe Asp Ser Asp Gly Asp Leu
165 170 175
Trp Thr Ala Ser Ala Asp Lys Thr Ala Lys Cys Leu Val Arg Glu Asp
180 185 190
Gly Trp Lys Ala Asn Leu Thr Leu Pro His Pro Asp Phe Val Arg Asp
195 200 205
Val Val Val Tyr Glu Gln Gly Gly Trp Val Ile Thr Ala Cys Arg Asp
210 215 220
Glu Glu Val Arg Val Trp His Arg Ser Val Ser Gln Cys Leu
225 230 235

<210> 33840
<211> 68
<212> PRT
<213> A.fumigatus

<400> 33840
Asn Ser Gln Thr Gly Gln Leu Tyr His Thr Phe Ser Gly His Phe Glu
1 5 10 15
Glu Val Thr Gly Leu Val Leu Ile Gly Ser Thr Ile Val Ser Val Ser
20 25 30
Ile Asp Ala Thr Ile Arg Gln Trp Ser Leu Arg Pro Asp Asp Leu Arg
35 40 45
Thr Ala Val Glu Lys Ala Lys Arg Val Lys Ala Glu Glu Glu Glu Gln
50 55 60
Ser Glu Gln Asn
65

<210> 33841
<211> 157

<212> PRT
<213> A.fumigatus

<400> 33841
Ser Thr Lys Pro Met Gln Cys Val Phe Phe Leu Cys Tyr Arg His Asp
1 5 10 15
Cys Gly Asn Leu Asp Asn Leu Leu Thr Ser Met Lys Gln Ser Met Ser
20 25 30
Arg Pro Gly Pro Ala Pro Gln Gly Pro Ser Gln Ser Gln Pro Pro Gln
35 40 45
Gln Ser Gln Ala Pro Arg Pro Asn Pro Pro Gly Tyr Pro Gln Gln Pro
50 55 60
Gln Phe Pro Gly Phe Tyr Pro Pro Tyr Gly Gln Arg Phe Gly Ala Pro
65 70 75 80
Gly Phe Pro Pro Gly Pro Gly Phe Pro Asn Met Pro Tyr Gly Ala Pro
85 90 95
Pro Gly Trp Tyr Pro Pro Pro Gly Gln Gly Phe Pro Pro Gly Pro Gly
100 105 110
Gln Phe Pro Pro Gln Met Pro Ile Thr Ala Pro Gly Pro Gln Ser Pro
115 120 125
Pro Gln Asn Arg Ala Gly Ala Pro Gly Ala Gly Pro Val Asn Val Pro
130 135 140
Lys Ala Thr Ser Glu Leu Pro Val Gly Asp Arg Gln Thr
145 150 155

<210> 33842
<211> 131
<212> PRT
<213> A.fumigatus

<400> 33842
Thr Val Leu Leu Ala Arg Pro Leu Thr Asn Leu Leu Ile Pro Ser Tyr
1 5 10 15
Val Gly Thr Leu His Glu Ile Asn Pro Glu Ala Ser Thr Ile Ala Leu
20 25 30
Glu Asn Val Val Ser Phe Gly Thr Glu Gly Arg Arg Gly Asn Pro Ala
35 40 45
Glu Glu Ile Pro Pro Ser Ala Ser Val Tyr Glu Tyr Ile Val Phe Arg
50 55 60
Gly Ser Asp Val Lys Asp Ile Ser Val Ala Glu Glu Lys Lys Glu Asn
65 70 75 80
Ala Gln Pro Glu Pro Pro Arg Val Pro Asp Asp Pro Ala Ile Leu Gly
85 90 95
Val Ser Ser Thr Gly Pro Leu Asn Ser Phe Pro Leu Pro Phe Ile Ser
100 105 110
Trp Glu Pro Met Leu Ala Ser Arg Ser Asn Leu Thr Arg Ser Gly Trp
115 120 125
Leu Ile Arg
130

<210> 33843
<211> 432
<212> PRT
<213> A.fumigatus

<400> 33843

```
Lys Leu Ala Asp Ser Ala Ile Pro Ala Gly Leu Ser Ser Thr Lys Cys
1               5                  10                  15
Arg His Leu Met Pro Pro Glu Asn Asp Pro Ser Tyr His Asn Ile Gly
            20                  25                  30
Val Thr Leu Ser Val Asn Met Pro Gly Leu Gly His Glu Thr Gly Asp
        35                  40                  45
Arg Ala Arg Asn Ala Ser Gly Ile Lys Asn Leu Tyr Ala Lys Thr Asp
    50                  55                  60
Ala Ser His Tyr Lys Gln Ile Asp Pro Glu Thr Leu Glu Pro Ile Gly
65                  70                  75                  80
Leu Ala Ala Gln Lys Asp Leu His Pro Glu Leu Thr Gly Pro Leu Ser
                85                  90                  95
Ala Ala His Ala Arg Ser Asp Pro Val Thr Gly Asn Val Tyr Asn Phe
            100                 105                 110
Asn Leu Ala Phe Gly Pro Glu Gly Ser Ile Tyr Arg Ile Phe Cys Val
        115                 120                 125
Ser Ala Ser Thr Gly Thr Thr Ser Ile Leu Ala Gln Phe Pro Gly Thr
    130                 135                 140
Pro Ala Tyr Leu His Ser Leu Leu Ile Thr Asp Asp Tyr Val Ile Leu
145                 150                 155                 160
Cys Val Trp Asn Ser His Val Asn Pro Thr Lys Leu Glu Asn Ser Phe
                165                 170                 175
Val Glu Ala Ile Gln Pro Phe Asp Ala Ser Lys Pro Ala Thr Trp Tyr
            180                 185                 190
Val Val Asp Arg Lys Gly Ser Arg Gly Leu Leu Ala Thr Tyr Lys Ser
        195                 200                 205
Arg Pro Phe Phe Cys Phe His Thr Ile Asn Ala Trp Gln Glu Pro Ser
    210                 215                 220
Ala Asp Asp Pro Lys Gln Thr Asp Ile Val Ala Glu Leu Val Thr Phe
225                 230                 235                 240
Asp Asp Leu Thr Ile Met Lys Lys Ala Tyr Tyr Glu Asn Met Leu Ser
                245                 250                 255
Ser Ser Pro Ser Ala Lys Thr Phe Val Gln Gly Lys Arg Asp Gly Cys
            260                 265                 270
Arg Ser Ala Leu Thr Ser Phe Arg Leu Ala Arg Ile Pro Ser Ala Pro
        275                 280                 285
Thr Ser Glu Val Gln Glu Ala Ser Ile Asn Trp Thr Ala Cys Gln Gly
    290                 295                 300
Tyr Ala Pro Glu Leu Pro Thr Met Asn Pro Arg Tyr Val Thr Gln Lys
305                 310                 315                 320
His Arg Tyr Thr Tyr Ala Val Thr Asp Cys Gly Glu Ser Thr Phe Phe
                325                 330                 335
Asp Gly Ile Met Lys Tyr Asp Ser Val Ala Lys Glu Thr Ile Val Trp
            340                 345                 350
Lys Gln His Gly His Ser Pro Gly Glu Ala Ile Phe Val Ala Asn Pro
        355                 360                 365
Ala Gly Ala Asp Glu Asp Asp Gly Val Leu Leu Ser Val Val Leu Asp
    370                 375                 380
Gly Lys Thr Gly Lys Ser Tyr Leu Leu Cys Leu Asp Ala Arg Asp Met
385                 390                 395                 400
Ser Glu Leu Gly Arg Ala His Leu Asn Gly Pro Val Gly Phe Gly Phe
                405                 410                 415
His Gly Gln Tyr Val Pro Thr Gly Gly Gly Leu Pro Thr Gly Asp Tyr
            420                 425                 430
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<210> 33844

<211> 67
<212> PRT
<213> A.fumigatus

<400> 33844
Lys Gln Pro Arg Lys Thr Phe Asp Pro Ala Ala Ile Leu Lys Ala Arg
1 5 10 15
Asp Leu Ile Lys Leu Leu Ser Arg Ser Val Pro Val Gln Gln Val Ser
20 25 30
Phe Arg Ser Asp Thr Ala Pro Asn Pro Ser Val Thr Thr Asp His Arg
35 40 45
Gly Pro Gly Pro Glu Asn Pro Arg Arg Arg Arg Arg Met Arg His His
50 55 60
Gln Asp Pro
65

<210> 33845
<211> 221
<212> PRT
<213> A.fumigatus

<400> 33845
Tyr Gly Arg Gly Asp Gly Ser Val Gln Gly Ala Glu Gly Gly Pro Pro
1 5 10 15
Gly Gly Gln Arg Leu His Gly Gln His Pro Pro Asn Leu Pro His Gln
20 25 30
Gly Ala His Asp Gln Ala Arg Ala Gly Gln Gly Pro His Ala Arg Gln
35 40 45
Arg Ile Leu Gly Pro Val Pro Ala Gln Leu Gln Glu Ala Tyr Val Val
50 55 60
Glu Ala Pro Arg Ser Leu Gln Gly Tyr Gly Gln Ile Glu Glu Gly Val
65 70 75 80
His Thr Val Pro Thr Ser Ala Gly Lys Glu Gln Gly Gly Ser Ala Asp
85 90 95
Arg Val Arg Arg Val Leu Pro Val Gln Gly Gly Gln Gly Ala Arg Pro
100 105 110
Glu Arg Gly Gly Tyr Gly Ala Ala Ala Pro Glu Ala Arg Gly Glu Asp
115 120 125
Glu Gly Ala Gly Lys Val Val Tyr Ser Pro Arg Gly Ala Arg Gly Arg
130 135 140
Gly Glu Lys Glu Gly Glu Glu Arg Glu Glu Glu Ala Glu Ala Arg Gly
145 150 155 160
Arg Gly Gly Ala Arg Gly Gln Leu Arg Glu Glu Gly Lys Glu Glu Glu
165 170 175
Lys Glu Glu Gln Val Glu Gly Arg Leu Phe Gly Gln Arg Ser Ile Glu
180 185 190
Ala Leu Val Pro Gln Leu Pro Leu Cys Phe Ile Arg Arg Ser His Ser
195 200 205
Ala Pro Ala Ile Phe Phe Arg Leu Phe Ala Leu Gln Ile
210 215 220

<210> 33846
<211> 266
<212> PRT
<213> A.fumigatus

<400> 33846
Val Phe Ala Val Thr Arg Pro Pro Thr Pro Ala Ser Gln Leu Thr Thr
1 5 10 15
Val Val Gln Ala Leu Lys Ile Leu Glu Asp Gly Val Ala Cys Asp Ile
20 25 30
Ile Lys Ile Arg Asn Gln Val Arg Asn Lys Glu Arg Phe Val Lys Arg
35 40 45
Arg Gln Arg Leu Leu Gly Pro Ser Gly Ser Thr Leu Lys Ala Leu Glu
50 55 60
Leu Leu Thr Ser Thr Tyr Ile Leu Val Gln Gly Asn Thr Val Ala Ala
65 70 75 80
Met Gly Pro Tyr Lys Gly Leu Lys Glu Val Arg Arg Val Val Asn Asp
85 90 95
Cys Met Ala Asn Ile His Pro Ile Tyr His Ile Lys Glu Leu Met Ile
100 105 110
Lys Arg Glu Leu Ala Lys Asp Pro Thr Leu Ala Asn Glu Ser Trp Asp
115 120 125
Arg Phe Leu Pro Asn Phe Lys Lys Arg Thr Leu Ser Lys Arg Arg Val
130 135 140
Pro Tyr Lys Val Thr Asp Lys Ser Lys Lys Val Tyr Thr Pro Phe Pro
145 150 155 160
Pro Ala Pro Glu Lys Ser Lys Val Asp Leu Gln Ile Glu Ser Gly Glu
165 170 175
Tyr Phe Leu Ser Lys Glu Ala Lys Glu Arg Ala Gln Lys Glu Glu Val
180 185 190
Met Glu Arg Gln Arg Gln Lys Arg Glu Glu Lys Met Lys Glu Arg Ala
195 200 205
Lys Ser Phe Ile Pro Pro Glu Glu Leu Glu Ala Glu Glu Lys Lys Lys
210 215 220
Glu Lys Lys Glu Lys Lys Lys Arg Lys Arg Glu Ala Glu Ala Glu Pro
225 230 235 240
Glu Asp Ser Ser Glu Lys Lys Glu Lys Lys Lys Lys Lys Lys Ser Lys
245 250 255
Ser Lys Asp Ala Ser Ser Asp Ser Glu Ala
260 265

<210> 33847
<211> 73
<212> PRT
<213> A.fumigatus

<400> 33847
Ser Thr Ser Pro Ser His Gly Gly Gly Met Val Leu Lys Glu Gly Glu
1 5 10 15
Met Asp Ile Thr Gly Met Ala Arg Ile His Phe Tyr Phe Leu Ser Gly
20 25 30
Glu Asn His Asp Asp His Leu Gln Met Lys Glu Lys Gln Asp Asn Thr
35 40 45
Val Gln Val Ala Leu Val Leu Leu Gln Cys Asp Glu Tyr Asp Glu Ser
50 55 60
Asn Cys Ile His Val Cys Asn Thr Ser
65 70

<210> 33848
<211> 424
<212> PRT

<213> A.fumigatus

<400> 33848

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Asp Phe Glu His Leu Ala Asp Gln Asp Asp Val Ala Asp Thr Gln Ala
1               5                  10                  15
Leu Gly Gln Ala Ser Glu Glu Gln Ala Lys Ala Leu Asp Gln Asn Lys
            20                  25                  30
Gly Val Glu Ser Asp Val Lys Pro Gly Asp Asn Asp Met Leu Pro Asp
        35                  40                  45
Ala Gly Glu Glu Pro Gln Asp Val Ala Glu Glu Asn Arg Leu Glu Asp
    50                  55                  60
Asp Met Gln Ile Asp Gly Glu Gly Val Pro Thr Glu Gly Gln Thr Val
65                  70                  75                  80
Gly Ala Leu Ile Pro Asp Arg Ser Arg Thr Gln Glu Arg Thr Thr Asp
                85                  90                  95
Pro Thr Gly Gln Leu Glu Ala Asn Glu Gly Leu Asp Glu Val Asp Ala
            100                 105                 110
His Leu Ala Ala Ile His Leu Ser Ser Thr Leu Pro Pro Leu Thr Pro
        115                 120                 125
Arg Glu Glu Ala Gln Arg Leu Trp Ser His Tyr Glu Asn Ala Thr Asn
    130                 135                 140
Asn Leu Ser Leu Ser Leu Thr Glu Gln Leu Arg Leu Ile Leu Ala Pro
145                 150                 155                 160
Thr Leu Ala Thr Lys Leu Arg Gly Asp Phe Arg Thr Gly Lys Arg Leu
                165                 170                 175
Asn Ile Lys Arg Ile Ile Pro Tyr Ile Ala Ser Gln Tyr Lys Arg Asp
            180                 185                 190
Lys Ile Trp Met Arg Arg Ser Ile Pro Ser Lys Arg Asn Tyr Gln Ile
        195                 200                 205
Met Leu Ala Val Asp Asp Ser Lys Ser Met Leu Glu Ser Gly Ser Gly
    210                 215                 220
Gln Leu Ala Phe Glu Thr Leu Ala Leu Val Ala Lys Ser Leu Ser Met
225                 230                 235                 240
Leu Glu Val Gly Asp Leu Cys Val Leu Gly Phe Gly Asn Glu Asp His
                245                 250                 255
Val Arg Val Ala His Glu Phe Gly Lys Pro Phe Ser Ser Glu Ala Gly
            260                 265                 270
Thr Gln Val Phe Gln His Phe Ser Tyr Gln Gln Thr Gly Thr Asn Val
        275                 280                 285
Arg Lys Leu Ile Ala Asp Ser Ile Ala Leu Phe Arg Glu Ala Arg Trp
    290                 295                 300
Lys Gln Ser Pro Ala Gly Gly Asn Ala Asp Leu Trp Gln Leu Glu Leu
305                 310                 315                 320
Ile Ile Ser Asp Gly Ile Cys Glu Asp His Asp Thr Ile Arg Arg Leu
                325                 330                 335
Val Arg Gln Ala Gln Glu Glu Arg Ile Met Ile Val Phe Ile Ile Val
            340                 345                 350
Asp Ala Val Lys Gly Ser Ser Ile Leu Asp Leu Thr Gln Ala Ser Phe
        355                 360                 365
Glu Pro Asp Thr Glu Ser Gly Thr Gly Glu Met Lys Leu Lys Met Lys
    370                 375                 380
Arg Tyr Leu Glu Gly Phe Pro Phe Pro Tyr Tyr Leu Val Val Arg Asp
385                 390                 395                 400
Val Arg Glu Leu Pro Ala Val Leu Ala Thr Ala Leu Lys Gln Trp Phe
                405                 410                 415
Ala Glu Val Val Asp Val Ser Ser
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420

<210> 33849
<211> 81
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7),(28)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33849
Ser Leu Phe Lys Glu Phe Xaa Ala Phe Glu Trp Ala Arg Ser Ser Glu
1 5 10 15
Lys Gly Pro Cys Trp Ser Arg Tyr Arg His His Xaa Phe Gln Ala Ser
20 25 30
Lys Glu Phe Leu Gln Leu Gly Thr Cys Gly Thr Leu Tyr His Asp Arg
35 40 45
Gly Pro Ile Val Ile Phe Arg Asn Ala Val Leu Asn Ser Tyr Gln Asp
50 55 60
Asn Ala Gln Pro Val His Pro Lys His Gly Ser Cys Ile Val Leu Arg
65 70 75 80
Leu

<210> 33850
<211> 425
<212> PRT
<213> A.fumigatus

<400> 33850
Ile Pro Ile Lys Thr Thr Pro Ser Gln Ser Thr Pro Asn Met Ala Leu
1 5 10 15
Val Ser Tyr Ser Asp Ser Glu Ala Ser Asp Ser Glu Gln Glu Thr Lys
20 25 30
Val Thr Gln Pro Ser Ile Lys Ser Gln Ala Pro Thr Pro Ala Asn Pro
35 40 45
Pro Lys Ser Ser Ser Gly Ala Asn Phe Val Val Asp Arg Ser Asn Pro
50 55 60
Arg Lys Ile Arg Val Ala Leu Pro Asp Ile Lys Pro Glu Asn His Thr
65 70 75 80
Ala Asp Asp Glu Asp Gly Pro Ala Arg Lys Arg Val Lys Ile Gly Gly
85 90 95
Gly Gly Ala Phe Ser Gly Phe Asn Ala Leu Leu Pro Pro Pro Lys Arg
100 105 110
Ala Asn Val Thr Val Glu Lys Asp Lys Lys Thr Ala Ala Pro Ala Arg
115 120 125
Lys Val Phe Ser Leu Lys Thr Gly Ala Ala Pro Gly Phe Asp Arg Glu
130 135 140
Ala Asp Glu Asp Phe Arg Arg Glu Gln Val Phe Asp Ser Leu Ala Gly
145 150 155 160
Asn Gly Asp Gly Asp Asp Glu Met Ile Pro Lys Pro Gly Ser Leu Arg
165 170 175
Ser Glu Gln Pro Ser Asn Asn Asp Ala Ala Glu Ala Arg Val Asp Gly
180 185 190

```
Glu Arg Lys Glu Glu Ile Lys Leu Lys Gly Asn Pro Met Met Phe Lys
        195                 200                 205
Pro Leu Ser Val Gly Arg Ala Ser Gln Lys Lys Lys Lys Gln Pro Thr
    210                 215                 220
Lys Pro Val Ser Thr Pro Leu Pro Thr Ala Asn Glu Thr Thr Ala Leu
225                 230                 235                 240
Gln Ser Ser Gln Pro Pro Asn Glu Gln Pro Ala Gln Pro Ala Thr Pro
                245                 250                 255
Val Pro Gln Lys Pro Lys Ile Ser Leu Phe Ser Leu Ser Thr Glu Glu
            260                 265                 270
Thr Thr Thr Ser Lys Met Pro Glu Pro Gln Ala Gln Ala Ala Thr Tyr
        275                 280                 285
Glu Pro Leu Val Tyr Thr Thr Asp Leu Glu Thr Thr Pro Ala Gly Pro
    290                 295                 300
Glu Pro Glu Pro Glu Pro Val Thr Ala Pro Ser Gln Pro Pro Thr Asp
305                 310                 315                 320
Gln Thr Leu Gly Asn Ile Ala Asp Asp Leu Asn Leu Ser Arg Ala Gln
                325                 330                 335
Arg Arg Gln Leu Phe Gly Arg Thr Ala Asp Pro Ser Lys Ser Arg Ile
            340                 345                 350
Leu His Phe Asn Thr Asp Lys Glu Tyr Ile Ala Asn Gln Glu Leu Ala
        355                 360                 365
His Gln Thr Asp Leu Ala Ala Ala Gln His Asn Pro Val Arg Ala Ile
    370                 375                 380
Ala Pro Gly Lys His Thr Leu Gln Gln Leu Val Asn Ala Ala Ser Thr
385                 390                 395                 400
Gln Arg Glu Ala Leu Glu Glu Ser Phe Ala Ala Gly Arg Arg Asn Lys
                405                 410                 415
Lys Glu Ala Gly Ser Lys Tyr Gly Trp
            420                 425
```

<210> 33851
<211> 73
<212> PRT
<213> A.fumigatus

<400> 33851

```
Gln Val Asn Cys Arg Lys Met Gly Val His Leu Ile Gln Pro Leu Val
1               5                   10                  15
Ser Leu Lys Leu Thr Gly Arg Val Arg Cys Ser Leu Leu Cys Thr Gly
            20                  25                  30
Ser Val Arg Tyr Gln Cys Ala Tyr Gly Leu Pro Phe Gly Arg Asn Ser
        35                  40                  45
Phe Ser Ile Tyr Leu His Val Ile Leu Gln Ser Ile Leu Leu Arg Asn
    50                  55                  60
Ile Leu Arg Leu Phe Ala Ser Val Arg
65                  70
```

<210> 33852
<211> 107
<212> PRT
<213> A.fumigatus

<400> 33852

```
Arg Leu Val Glu Arg Pro Val Val Leu Asn Phe Arg Gln Ile Leu Gln
1               5                   10                  15
```

```
Lys Phe Asn Gln Ile Thr Ala Pro Ile Thr Leu Val Cys Ala Gly Asn
            20                  25                  30
Arg Arg Lys Glu Gln Asn Thr Val Arg Lys Ser Lys Gly Phe Ser Trp
        35                  40                  45
Gly Pro Ala Gly Leu Ser Thr Ala Leu Phe Thr Gly Pro Leu Met Ala
    50                  55                  60
Asp Val Leu Arg Tyr Ala Lys Pro Leu Arg Gln Ala Lys Tyr Val Cys
65                  70                  75                  80
Met Glu Gly Ala Asp Lys Leu Val Ser Ile Pro Pro Gly Ile Ala His
                85                  90                  95
Ala Ile Leu Trp Ser Thr Asp Leu Ala Ile Ala
            100                 105
```

<210> 33853
<211> 326
<212> PRT
<213> A.fumigatus

<400> 33853

```
Pro Leu Ala Glu Arg Cys Thr Arg Thr Thr Val Ser Pro Glu Met Ala
1               5                   10                  15
Ala Ser Asp Pro Met Trp Trp Arg Asp Glu Arg Tyr Ala Ile Tyr Asp
            20                  25                  30
Leu Asn Val Asn Ser Ala Ala Ala Tyr Pro Gln His Asn Glu Val Leu
        35                  40                  45
Asp Leu Ala Thr Ala Gly Pro Ser Tyr Thr Ala Lys Gly Tyr Ala Tyr
    50                  55                  60
Ala Gly Gly Gly Arg Arg Val Thr Arg Val Glu Ile Ser Leu Asn Lys
65                  70                  75                  80
Gly Lys Cys Met Leu Ser Asn Leu Tyr His Phe Leu Thr Lys Leu Thr
                85                  90                  95
Cys Leu Ala Ala Trp Arg Leu Ala Asn Ile Gln Tyr Ala Glu Asp Arg
            100                 105                 110
Tyr Arg Asp Phe Asp Gly Glu Leu Phe Gly Gly Lys Val Asp Met Pro
        115                 120                 125
Trp Arg Glu Thr Cys Tyr Cys Trp Cys Phe Trp Ser Leu Asp Ile Pro
    130                 135                 140
Val Pro Asp Leu Glu Ala Ser Asp Ala Leu Leu Val Arg Ser Met Asp
145                 150                 155                 160
Glu Ala Met Ser Val Gln Pro Arg Asp Met Tyr Trp Ser Val Leu Gly
                165                 170                 175
Met Met Asn Asn Pro Trp Phe Arg Val Thr Ile Thr Lys Gln Asn Gly
            180                 185                 190
Thr Leu Leu Phe Glu His Pro Thr His Pro Val Met Ala Gly Gly Trp
        195                 200                 205
Met Glu Arg Val Lys Lys Ala Gly Gly Asp Leu Thr Asn Gly Asn Trp
    210                 215                 220
Gly Glu Arg Gln Glu Gly Glu Ile Leu Ala Glu Pro Glu Pro Val Lys
225                 230                 235                 240
Glu Ile Asn Met Lys Lys Glu Gly Leu Asn Arg Thr Ile Ser Leu Glu
                245                 250                 255
Glu Phe Lys Lys Ser Asn Glu Glu Gly Ala Gln Trp Phe Ile Val Lys
            260                 265                 270
Gly Glu Val Tyr Asp Gly Lys Pro Phe Leu Glu Gly His Pro Gly Gly
        275                 280                 285
Ala Gln Ser Ile Ile Ser Ser Ile Gly Leu Asp Val Thr Glu Asp Phe
```

```
    290                 295                 300
Ser Glu Ile Arg Gly Phe Ser Asn Ser Cys Leu Leu Arg Lys Arg Arg
305                 310                 315                 320
Ala Asn Ile Ile Tyr Arg
                325
```

<210> 33854
<211> 79
<212> PRT
<213> A.fumigatus

<400> 33854

```
Pro Asn Gly Tyr Tyr Gly Thr Ser Val Lys Leu Asn Trp Ala Met Asp
1               5                   10                  15
Pro Asn Lys Leu Ile Met Leu Ala His Lys Met Asn Gly Glu Pro Leu
            20                  25                  30
Arg Pro Asp His Gly Arg Pro Leu Arg Ala Val Val Pro Gly Gln Ile
        35                  40                  45
Gly Gly Arg Ser Val Lys Trp Ile Lys Lys Leu Ile Leu Thr Asp Ala
    50                  55                  60
Pro Ser Asp Asn Trp Tyr His Ile Tyr Asp Asn Arg Val Leu Pro
65                  70                  75
```

<210> 33855
<211> 109
<212> PRT
<213> A.fumigatus

<400> 33855

```
Glu Asn Ala Gly Leu Thr Ser Phe Thr Asp Ser Glu Thr Ala Lys Ala
1               5                   10                  15
Met Met Pro Asp Tyr His Ile Gly Thr Met Asp Glu Ala Ser Leu Lys
            20                  25                  30
Met Leu Lys Glu Ala Arg Lys Glu Glu Glu Pro Ser Lys Pro Arg Ala
        35                  40                  45
Leu Phe Leu Gln Pro Arg Ser Trp Thr Lys Ala Lys Leu Ala Ala Lys
    50                  55                  60
Arg Asp Val Ser Trp Asp Thr Arg Ile Phe Thr Phe Glu Leu Glu His
65                  70                  75                  80
Gln Lys Gln Lys Leu Gly Leu Pro Ile Gly Gln His Met Met Ile Arg
                85                  90                  95
Val Gln Asp Ser Thr Thr Lys Glu Lys Ile Ile Arg Ser
            100                 105
```

<210> 33856
<211> 73
<212> PRT
<213> A.fumigatus

<400> 33856

```
Ser Arg Arg Ser Thr Lys Gln Arg Met Lys Asn Ile Ile Ser Glu Ser
1               5                   10                  15
Leu Ala Ser His Ser Arg Val Leu Thr Ala Arg Arg Arg Gly Pro Ser
            20                  25                  30
Arg Val Ser Pro Tyr Leu Leu His Lys Phe Tyr Gly Gly Pro Thr Tyr
        35                  40                  45
```

```
Met Asn Trp Ile Ala Gly Lys Ile Leu Asn Ser Thr Gln Glu Gly Ala
    50                  55                  60
Thr Gly Ala Gly Glu Phe Leu Trp Ser
65                  70
```

<210> 33857
<211> 95
<212> PRT
<213> A.fumigatus

<400> 33857

```
Val Ile Phe Ser Ser Thr Ala Ser Pro Leu Leu Leu Thr Arg Cys Asn
1               5                   10                  15
Phe Gln Lys Ile Val Tyr Ala Lys Gly Thr Ser Asp Val Ile Ala Arg
            20                  25                  30
Leu Arg Gly Thr Tyr Asn Val Pro Thr Thr Thr Ala Thr Gln Ala Thr
        35                  40                  45
Gly Ala Ser Thr Asp Leu Gln Lys Ser Ile Phe Ser Gly Pro Pro Gly
    50                  55                  60
Ser Thr Ala Leu Pro Pro Lys Pro Ala Gly Gln Val Asn Gly Glu Ala
65                  70                  75                  80
Gln Ala Ala His Gly Thr Lys Arg Pro Arg Glu Glu Glu Ser Asp
                85                  90                  95
```

<210> 33858
<211> 158
<212> PRT
<213> A.fumigatus

<400> 33858

```
Ser Ser Val Lys Pro Lys Trp Tyr Thr Leu Lys Ser Lys Arg Lys Pro
1               5                   10                  15
Ala Lys Lys Lys Asp Ser Thr Val Ser Gly Glu Ile Leu Leu Gln Phe
            20                  25                  30
Ala Leu Ile Asp Pro Ser Asn Ala Ser Ala Pro Pro Thr Glu Ile Tyr
        35                  40                  45
Gln Arg Phe Arg Ser Leu Val Cys Ser Ser Glu Glu Asp Asp Asp Leu
    50                  55                  60
Pro Pro Val Pro Thr Asn Glu Ser Asp Glu Ala Asp Arg Asp Glu Glu
65                  70                  75                  80
Thr Ser Asp Glu Thr Asp Asp Leu Thr Lys Pro Glu Ile Val Glu Lys
                85                  90                  95
Arg Arg Lys Arg Leu Arg Leu Ala Arg Leu Lys Arg Lys Ser Leu Ala
            100                 105                 110
Ala Arg Ala Tyr Gln Phe Ser Gly Val Gly Asn Gly Val Gln Gly Ile
        115                 120                 125
Val Phe Met Glu Ile Val Gln Val Thr Asp Leu Pro Pro Glu Arg Asn
    130                 135                 140
Gly Met Ser Leu Asp Leu Pro Ser Leu Arg Arg Leu Leu Ile
145                 150                 155
```

<210> 33859
<211> 455
<212> PRT
<213> A.fumigatus

<400> 33859

```
Leu Leu Ala Val Thr Tyr Pro Glu Leu Lys Gln Ala Glu Leu Asn Ala
1               5                  10                  15
Pro Gln Ala Val Ile Thr Cys Glu Arg Lys Ser Ile His Ser Thr Ala
            20                  25                  30
Ser Ala Leu Phe Arg Thr Leu Pro Gln Cys Ile Pro Met Asn Pro Ser
        35                  40                  45
Gln Phe Gly Leu Val Ser Ser Ile Tyr Thr Leu Gly Gly Leu Leu Gly
    50                  55                  60
Ala Leu Leu Ala Gly Pro Val Ser Thr Lys His Gly Arg Leu Phe Ala
65                  70                  75                  80
Leu Arg Ala Thr Thr Ile Phe Phe Ile Leu Gly Pro Ala Ala Glu Thr
                85                  90                  95
Phe Ala Pro Gly Ile Pro Ile Leu Ser Val Gly Arg Leu Leu Ser Gly
            100                 105                 110
Val Gly Ala Gly Ala Ala Ile Val Val Gly Pro Ile Tyr Ile Ser Glu
        115                 120                 125
Ile Ala Pro Pro Asn Ala Lys Gly Phe Phe Gly Ala Phe Thr Gln Ile
    130                 135                 140
Met Thr Asn Val Gly Ile Leu Phe Thr Gln Thr Leu Gly Tyr Phe Phe
145                 150                 155                 160
Ser Lys Gly Asn Gln Trp Arg Ala Ile Leu Ala Val Ala Gly Leu Leu
                165                 170                 175
Gly Gly Ser Glu Leu Leu Gly Leu Phe Phe Val Ser Glu Ser Pro Thr
            180                 185                 190
Trp Leu Ala Glu His Gln Gln Ala Asn Leu Ala Arg His Val Leu Gln
        195                 200                 205
Arg Ile Arg Gly Lys Gly Ser Asp Ile Glu Glu Glu Ile Glu Gly Trp
    210                 215                 220
Lys Ser Ser Glu Arg Pro Thr Gly Pro Glu Glu Glu Ser Leu Leu Thr
225                 230                 235                 240
Pro Pro Ser Gly Asn Leu Pro Pro Lys Gln Pro Pro Val Thr Ile Leu
                245                 250                 255
Gln Ala Val Thr Asp Pro Tyr Tyr Arg Pro Ala Ile Val Ala Val Ile
            260                 265                 270
Gly Val Met Val Ala Gln Gln Phe Thr Gly Ile Asn Ser Ile Ile Met
        275                 280                 285
Tyr Ser Val Ser Leu Leu Gln Ser Leu Leu Pro Thr Gly Ala Ala Leu
    290                 295                 300
Leu Thr Val Met Ile Ser Ala Leu Asn Leu Val Ile Thr Leu Ala Cys
305                 310                 315                 320
Ser Pro Leu Pro Asp Lys Ile Gly Arg Lys Thr Cys Leu Leu Leu Ser
                325                 330                 335
Ile Ser Gly Met Gly Cys Asn Ser Val Leu Leu Ala Phe Gly Ile Tyr
            340                 345                 350
Phe Asn Gln Lys Ile Leu Ser Ala Ile Ala Ala Leu Leu Phe Val Ala
        355                 360                 365
Ser Phe Ala Val Gly Leu Gly Pro Val Pro Phe Ile Leu Ala Ser Glu
    370                 375                 380
Leu Val Gly Pro Glu Ala Val Gly Ala Thr Gln Ser Trp Ala Leu Ala
385                 390                 395                 400
Ala Asn Trp Thr Ala Thr Phe Ile Val Ala Gln Phe Phe Pro Val Leu
                405                 410                 415
Asn Asp Ala Leu Gly Gly Arg Gly Lys Ile Tyr Trp Ile Phe Ala Val
            420                 425                 430
Leu Ala Cys Leu Leu Gly Ser Phe Ile Tyr Arg Trp Val Pro Glu Thr
```

435 440 445
Lys Gly Lys Ala Asn Ala Asp
450 455

<210> 33860
<211> 496
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (440)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33860
Lys Gly Tyr Arg Thr Thr Val Lys Met Gln Pro Lys Ala Val Gln Asp
1 5 10 15
Ala His Ala Ser Phe Pro Ala Gly Lys His Ala Ala Asp Glu Thr Glu
20 25 30
His Leu Leu Pro His Asp Pro Pro Ala Glu Ile Asn Ile Trp Gly Ser
35 40 45
Arg Arg Arg Pro Arg Ser Trp Trp Ala Leu Val Ala Ile Ser Leu Leu
50 55 60
Leu Leu Thr Met Thr Val Leu Ser Leu Ala Val Phe Phe Thr Leu Gly
65 70 75 80
Phe Gly Ala Gly Ala Ala Pro His Val Pro His Gly Arg Leu Ser Ser
85 90 95
Pro Ile Lys Asn Val Val Val Leu Val Gln Glu Asn Leu Ser Phe Asp
100 105 110
Asn Tyr Ala Gly Gly Leu Thr Tyr Ser Pro Ser Ile Asp Gly Leu Val
115 120 125
Asn Arg Lys Tyr Cys Asn Pro Ala Asn Ile Ser Asp Pro His Ser Pro
130 135 140
Met Val Cys Ala Gln Pro Thr Ala Lys Asn Ile Ala Pro Asp Asp Pro
145 150 155 160
Asp His Ser Ile Thr Gly Gly Asn Gln Gln Val Tyr Ser Thr Tyr His
165 170 175
Pro Asp Ser Asp Phe Asp Ala Pro Asn Met Gln Gly Phe Val Ala Glu
180 185 190
Gln Ile Ala Ala Tyr Gly Ile Asp Gly Asn Leu Ser Arg Ala Gly Glu
195 200 205
Val Ile Asn Tyr Tyr Thr Pro Glu His Ile Pro Val Phe Asn Ala Met
210 215 220
Ala Glu Asn Phe Val Leu Phe Asp Arg Trp Phe Ala Ala Val Pro Gly
225 230 235 240
Pro Thr Asn Pro Asn Arg Ala Tyr Leu Thr Ser Gly Thr Ser His Gly
245 250 255
His Gly Thr Asn Asp Pro Asp Phe Asp Arg Ser Ala Leu Pro Gln Arg
260 265 270
Ser Ile Phe Glu Gln Leu Ser Glu His Asn Ile Ser Trp Ile Asn Tyr
275 280 285
Ser Asn Thr Thr Gly Phe Leu Pro Asp Ala Leu Phe Tyr Arg Trp Thr
290 295 300
Ala Val Ser Gly Leu Gly Glu Thr Asn Val Arg Pro Ile Asp Gln Phe
305 310 315 320
Tyr Arg Asp Ala Lys Ala Gly Thr Leu Pro Gln Phe Thr Trp Ile Asn

```
                325                 330                 335
Pro Glu Cys Cys Ser Tyr Met Ser Phe His Pro Pro Ser Pro Ile Asn
            340                 345                 350
Met Gly Glu Gly Trp Ile Lys Ser Val Tyr Glu Ala Leu Arg Ser Ser
        355                 360                 365
Pro Gln Trp His Glu Thr Leu Phe Ile Leu Thr Phe Asp Glu His Gly
    370                 375                 380
Gly Phe Ala Asp His Val Pro Pro Pro Glu Asn Val Pro Ala Gly Asp
385                 390                 395                 400
Asp Leu Thr Tyr Thr Glu Thr Ala Arg Asp Gly Lys Pro Ser Thr Phe
                405                 410                 415
Ala Phe Asp Arg Leu Gly Ile Arg Val Pro Thr Val Leu Met Ser Pro
            420                 425                 430
Trp Val Gly Lys Gly Val Val Xaa Asn Arg Pro Ala Asp Gly Asn Gly
        435                 440                 445
Glu Phe Thr His Thr Ser Ile Leu Lys Phe Val Ala Asp Leu Trp Gly
    450                 455                 460
Leu Glu Tyr Leu Ser Pro Arg Val Ala Trp Ser Ala Ser Phe Ala His
465                 470                 475                 480
Leu Ile Thr Asp Thr Phe Ser Gly Gly Tyr Ala Arg Gln Pro Tyr Pro
                485                 490                 495
```

<210> 33861
<211> 193
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33861

```
Tyr Thr Ala Phe Arg Met Xaa Gly Ile Val Phe Ser Ser Ile Gly Ala
1               5                   10                  15
Gly Met Leu Thr Thr Leu Gly Val His Thr Ser Ser Ala Lys Trp Ile
            20                  25                  30
Gly Phe Gln Val Leu Tyr Gly Phe Gly Leu Gly Thr Cys Asn Gln Ile
        35                  40                  45
Pro Asn Met Ala Ala Gln Thr Val Leu Pro Arg Glu Gln Val Ala Ile
    50                  55                  60
Gly Ala Ser Leu Met Phe Phe Ala Gln Gln Leu Phe Gly Ala Val Phe
65                  70                  75                  80
Thr Ser Val Gly Glu Asn Val Leu Ser Asn Gln Leu Ala Lys Arg Leu
                85                  90                  95
Ala Ile Ser Ser Gln Thr Val Gln Asn Thr Gly Ala Thr Gln Leu Leu
            100                 105                 110
Glu His Val Pro Val Asp Asp Arg Val Ala Ser Leu Gly Ala Tyr Asn
        115                 120                 125
Asp Ser Leu Gln Val Val Phe Gln Val Gly Leu Ile Met Ala Cys Leu
    130                 135                 140
Ala Ile Leu Gly Ala Val Pro Met Glu Trp Arg Thr Val Lys Lys Glu
145                 150                 155                 160
Gln Leu Ser Ser Thr Ser Asp Arg Asn Asp Gly Gln Ala Glu Glu Gly
                165                 170                 175
Ala Pro Gly Asn Ala Gln Ser Thr Met Asp Tyr Lys Gln Gly Thr Val
```

180 185 190
Asn

<210> 33862
<211> 120
<212> PRT
<213> A.fumigatus

<400> 33862
Thr Ala Ser Thr Ala Thr Arg Pro Ile Ser Pro Ile Pro Thr Arg Gln
1 5 10 15
Trp Cys Ala His Ser Pro Arg Arg Arg Thr Ser Pro Arg Met Ile Arg
20 25 30
Thr Thr Val Ser Pro Ala Gly Ile Ser Lys Cys Thr Ala Pro Thr Ile
35 40 45
Gln Thr Pro Thr Ser Thr Pro Pro Thr Cys Lys Ala Ser Ser Arg Ser
50 55 60
Arg Ser Pro His Thr Ala Ser Thr Ala Thr Ser Arg Ala Pro Ala Arg
65 70 75 80
Ser Ser Thr Thr Ile Pro Pro Ser Thr Ser Pro Ser Ser Thr Pro Trp
85 90 95
Pro Arg Thr Leu Cys Ser Ser Thr Ala Gly Ser Leu Leu Phe Pro Ala
100 105 110
Gln Pro Thr Pro Thr Ala Pro Ile
115 120

<210> 33863
<211> 138
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33863
Ser Pro Ala Ser Gly Asn Ile Arg Pro Phe Gly Xaa Ser Glu Leu Ser
1 5 10 15
Phe Leu Pro Ser Ala Pro Val Cys Ser Pro Leu Ser Gly Ser Ile Arg
20 25 30
Gln Ala Pro Asn Gly Leu Val Phe Arg Cys Cys Met Val Leu Ala Ser
35 40 45
Ala Arg Ala Thr Arg Tyr Gln Thr Trp Arg Arg Arg Gln Cys Ser Pro
50 55 60
Ala Ser Arg Trp Pro Ser Ala Arg Arg Ser Cys Ser Leu Arg Asn Ser
65 70 75 80
Cys Leu Ala Pro Ser Leu Arg Arg Ser Ala Arg Thr Cys Ser Ala Thr
85 90 95
Ser Trp Pro Ser Val Trp Arg Ser Val Arg Lys Arg Ser Arg Ile Pro
100 105 110
Val Pro Pro Ser Phe Trp Ser Thr Phe Leu Ser Thr Thr Val Leu His
115 120 125
Arg Trp Gly Leu Ile Met Thr Arg Cys Arg
130 135

<210> 33864
<211> 318
<212> PRT
<213> A.fumigatus

<400> 33864
His Ile Ala Leu Leu Ala Ile His Thr Arg Gly Thr His Asn Ser Pro
1 5 10 15
Thr Cys His Val Ala Ala Pro Ser Val Arg Cys Gln Ala Val Ser Pro
20 25 30
Arg Glu Gln Leu Arg Asn Gly Val Arg Phe Phe Asp Ile Arg Val Gln
35 40 45
Pro Gln Phe Pro Glu Asp Pro Ser Lys Asp Glu Leu Ile Leu Val His
50 55 60
Ser Val Phe Pro Ile Ser Leu Thr Gly Asn Lys Tyr Phe Arg Asp Leu
65 70 75 80
Met Arg Asp Val Asn Glu Phe Leu Asn Glu Asn Pro Ser Glu Thr Leu
85 90 95
Ile Ile Ser Leu Lys Arg Glu Gly Pro Gly Asn His Thr Asp Glu Gln
100 105 110
Leu Ser Arg Ile Val Arg Asp His Tyr Ala Arg Pro Asp Ser Arg Trp
115 120 125
Tyr Thr Glu Pro Lys Ile Pro Thr Leu Gly Glu Val Arg Gly Lys Val
130 135 140
Val Leu Leu Arg Arg Phe Asn Ile Ile Glu Glu Leu Lys His Glu His
145 150 155 160
Asp Gly Arg Gly Trp Gly Ile Asp Gly Ser Asp Trp Ala Asp Asn Thr
165 170 175
Pro Asn Ala Thr Cys Ser Ser Gly Gln Leu Cys Ile Gln Asp Phe Tyr
180 185 190
Glu Val Leu Glu Thr Lys Asn Ile Asp Val Lys Ile Lys Tyr Val Thr
195 200 205
Glu His Cys Glu Arg Ser Ser Gly His Cys Tyr Pro Phe Gly Ala Leu
210 215 220
Pro Asp Pro Glu Ala Ser Lys Ala His Pro Phe Tyr Ile Asn Phe Leu
225 230 235 240
Ser Ala Ser Asn Phe Trp Lys Val Gly Thr Trp Pro Glu Lys Ile Ala
245 250 255
Ala Lys Leu Asn Pro Ala Thr Val Asp Tyr Leu Cys Arg Arg His Ser
260 265 270
His Leu Asp Gly Asp Trp Ser Thr Gly Ile Leu Val Thr Asp Trp Val
275 280 285
Gly His Glu Gly Asp Trp Asp Leu Val Arg Cys Ile Val Gly Met Asn
290 295 300
Ala Lys Leu Lys Met Arg Gln Met Arg Glu Glu Gln Glu His
305 310 315

<210> 33865
<211> 76
<212> PRT
<213> A.fumigatus

<400> 33865
Asp Ala Leu Asn Thr Ala Val Ala Tyr Leu Val Ala Ala Ile Pro Leu
1 5 10 15

```
Leu His Gly Leu Ser Ala Ser Ala Ala Phe Cys Cys Asn Ala Ile Ala
            20                  25                  30
Ser Ser Thr Phe Pro Ala Leu Tyr Ser Ser Tyr Thr Leu Asp Ala Val
        35                  40                  45
Arg Gly Asn Thr Phe Ala Asn Ala Ala Met Gln Pro Ala Asp Pro Thr
    50                  55                  60
Leu Asn Pro Ala Ser Arg Lys Ser Asp Cys Pro Pro
65                  70                  75
```

<210> 33866
<211> 92
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7),(13),(15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33866

```
Arg Arg Ala Cys Glu Asn Xaa Arg Ser Leu Arg Asp Xaa Arg Xaa Gly
1               5                   10                  15
Ile Arg Asp Pro Ile Arg Glu Ala Gln Asn Gly Gly Ser Gly Val Val
            20                  25                  30
Ile Tyr Phe Arg Lys Glu Gly Arg Ala Leu Gly Glu Val Val Lys Tyr
        35                  40                  45
Leu Val Tyr Asn Ala Arg Lys Arg Gly Gly Asp Thr Ala Asp Lys Tyr
    50                  55                  60
Phe Thr Arg Thr Glu Asn Ile Ala Gly Val Arg Asp Val Arg Tyr Thr
65                  70                  75                  80
Val Gln Asn Asp Pro Glu Phe Val Leu Met Ile Val
                85                  90
```

<210> 33867
<211> 125
<212> PRT
<213> A.fumigatus

<400> 33867

```
Met Arg Phe Gln Ala Leu Met Pro Asp Ile Leu His Trp Leu Gly Ile
1               5                   10                  15
Lys Lys Ile Asp Arg Met Leu Ser Met Ser Asn Met Lys His Asp Ala
            20                  25                  30
Ile Val Gln Ser Gly Ile Lys Ile Leu Lys Arg Val Pro Ile Pro Glu
        35                  40                  45
Glu Leu Ile Pro Ser Asp Ser Arg Val Glu Ile Asp Ala Lys Ile Asn
    50                  55                  60
Ala Gly Tyr Phe Thr Thr Gly Lys Gln Tyr Thr Met Glu Glu Leu Ala
65                  70                  75                  80
Ser Val Arg Gly Arg Gly Trp Glu Lys Trp Glu Asp Val Thr Val Ser
                85                  90                  95
Arg Ala Leu Ser Val Asp Glu Ala Ser Leu Thr Leu Ser Ser Ile Asn
            100                 105                 110
Leu Leu Tyr Ile Arg Leu Phe Thr Ser Ser Thr Leu Ser
        115                 120                 125
```

<210> 33868
<211> 372
<212> PRT
<213> A.fumigatus

<400> 33868
Ser Tyr Thr Glu Tyr Lys Thr Pro Ala Leu Pro Leu Ser Ala Thr Pro
1 5 10 15
Leu Thr Leu Gln Thr Ile Ser Leu Thr Leu Ser Phe Pro Glu Ser Thr
20 25 30
Leu Gln Gln Ala Asn Cys Asn Ser Thr Met Gly Ser Ser Gln Pro Pro
35 40 45
Thr Val Ser Pro Gln Pro His Val Pro Lys Pro Gly Val Trp Cys Pro
50 55 60
Ala Val Thr Phe Phe Asp His Thr Thr Asp Thr Leu Asp Leu Asp Ser
65 70 75 80
Gln Lys Lys Tyr Tyr Ala Tyr Leu Ser Lys Thr Gly Leu Ala Gly Leu
85 90 95
Val Ile Leu Gly Thr Asn Ser Glu Ala Phe Leu Leu Thr Arg Glu Glu
100 105 110
Arg Ala Gln Leu Ile Ala Ala Ala Arg Glu Ala Val Gly Pro Asp Tyr
115 120 125
Pro Leu Met Ala Gly Val Gly Ala His Ser Thr Lys Gln Thr Leu Glu
130 135 140
Leu Ala Ala Asp Ala Ala Ala Ala Gly Ala Asn Tyr Leu Leu Val Leu
145 150 155 160
Pro Pro Ala Tyr Phe Gly Lys Ala Thr Thr Met Ser Val Val Lys Arg
165 170 175
Phe Phe Ala Asp Val Ala Ala Arg Ala Pro Leu Pro Val Ile Ile Tyr
180 185 190
Asn Phe Pro Gly Val Cys Asn Gly Val Asp Ile Asp Ser Glu Thr Met
195 200 205
Thr Ala Ile Val Arg Glu Ser Ala Ala Ala Ser Pro Ser Gly Val Ser
210 215 220
Asn Val Val Gly Val Lys Leu Thr Cys Ala Ser Val Gly Lys Ile Thr
225 230 235 240
Arg Leu Ala Ala Thr Phe Ser Gln Asp Glu Phe Ala Val Tyr Gly Gly
245 250 255
Gln Ser Asp Phe Leu Leu Ala Gly Leu Ser Val Gly Ser Ala Gly Cys
260 265 270
Ile Ala Ala Phe Ala Asn Val Phe Pro Arg Thr Ala Ser Arg Val Tyr
275 280 285
Glu Leu Tyr Arg Ala Gly Lys Val Asp Glu Ala Met Ala Leu Gln Gln
290 295 300
Lys Ala Ala Leu Ala Glu Ser Pro Cys Lys Ser Gly Ile Ala Ala Thr
305 310 315 320
Lys Tyr Ala Thr Ala Val Phe Ser Ala Ser Gln Ala Gly Ile Glu Ala
325 330 335
Ala Gly Glu Lys Leu Arg Pro Arg Thr Pro Tyr Glu Glu Pro Gly Glu
340 345 350
Gly Val Lys Gln Leu Val Arg Glu Val Met Ala Glu Val Ala Glu Ile
355 360 365
Glu Arg Ser Ile
370

<210> 33869

<211> 86
<212> PRT
<213> A.fumigatus

<400> 33869
Tyr Val Ala Asp Asn Pro Ser Glu Ile Val Ala Gly Asn Gln His Trp
1 5 10 15
Gly His Ala Thr Ser Lys Asp Leu Tyr Gln Trp Thr Asn His Pro Ile
20 25 30
Ala Ile Ala Pro Ser Gln Pro Gly Glu Trp Ile Tyr Ser Gly Ser Ala
35 40 45
Val Met Asp Ser Asn Asn Thr Ser Gly Phe Phe Pro Asp Gln Asp Asp
50 55 60
Gly Val Val Ala Ile Tyr Thr Leu Ala Thr Glu Met Val Leu Thr Pro
65 70 75 80
Gly Arg Val Val Arg Thr
85

<210> 33870
<211> 122
<212> PRT
<213> A.fumigatus

<400> 33870
Leu Ile Leu Pro Ser Leu Leu Thr Val Gly Thr Gly Val Pro Arg Leu
1 5 10 15
Gly Val Phe Ala Ala Val Leu Thr Ile Arg Ser Ser Asp Pro Cys Trp
20 25 30
Gly Thr Val Gly Tyr Lys Tyr Pro Ser Ile Leu Leu Ile His Pro Gly
35 40 45
Trp Asn Val Lys His Arg Ser Phe Asn Gln Thr Ile Lys Met Arg Ala
50 55 60
Ser Phe Ile Leu Phe Ser Ala Ala Val Ala Ala Ala Gln Thr Ala Lys
65 70 75 80
Tyr Ser Gly Pro Val Arg Pro Gln Val His Phe Ser Pro Pro Ser Gln
85 90 95
Phe Met Asn Asp Pro Asn Gly Leu Phe Tyr Asp His Lys Arg Glu Val
100 105 110
Tyr His Leu Tyr Tyr Gln Cys Glu Leu Asn
115 120

<210> 33871
<211> 160
<212> PRT
<213> A.fumigatus

<400> 33871
Leu Arg Ser Gln Thr Ser Ser Thr Pro Asn Gly Val Val Ala Ala Phe
1 5 10 15
Lys Pro Val Leu Ile Glu Gly Thr Met Leu Arg Ala Leu Ser His Asp
20 25 30
Ser Leu His Arg Leu Arg Glu Glu Gln Pro Pro Lys Leu Thr Tyr Cys
35 40 45
Glu Asp Glu Ser Asp Asp Glu Ser Asp Gly Tyr Gly Ser Lys Ser Lys
50 55 60
Lys Ser Lys Ala Ser Glu Pro Ser Arg Gly Gln Ala Ile Gly Pro Arg

```
65                  70                  75                  80
Leu Gly Glu Ala Pro Lys Pro Asn His Val Tyr Leu Gln Trp Glu Ala
                85                  90                  95
Arg Val Val Asp Ala Tyr Ile Lys Val Asp Gln Gly Asp Lys His Thr
            100                 105                 110
Gly Tyr Leu Asp Phe Asp Ala Ser Lys Ala Thr Ala His Gly Glu Trp
        115                 120                 125
Ala Tyr Pro Ala Met Trp Ser Lys Glu Ser Lys Leu Ala Ser Ser Ile
    130                 135                 140
Tyr Asn Arg Gly Asp Gln Pro Arg Glu Asn Pro Thr Thr Trp Asn Tyr
145                 150                 155                 160
```

<210> 33872
<211> 133
<212> PRT
<213> A.fumigatus

```
<400> 33872
Val Asn Leu Gly Gly Cys Ser Ser Arg Arg Arg Cys Ser Glu Ser Trp
1               5                   10                  15
Asp Ser Ala Arg Ser Met Val Pro Ser Met Arg Thr Gly Leu Asn Ala
            20                  25                  30
Ala Thr Thr Pro Phe Gly Val Glu Asp Val Cys Asp Leu Asn Gln Val
        35                  40                  45
Ala Leu Asp Lys Arg Arg Glu Val Tyr Asp Ser Ala Asn Ala Lys Gly
    50                  55                  60
Asp Val Leu Ser Gly Leu Gln Gly Ala Glu Thr Val Cys Gly Ile Thr
65                  70                  75                  80
Thr Ser Gln Ser Thr Asn Glu Thr Leu Glu Asp Ser Lys Gly Met Lys
                85                  90                  95
Ile Arg Ser Tyr Lys Glu Pro Leu Gly Val Val Ala Ala Val Phe Pro
            100                 105                 110
Phe Ser Val Leu Pro Asp Met His Ser Ser Met Val Gly Thr Asp Glu
        115                 120                 125
Arg Arg Ser Pro Pro
    130
```

<210> 33873
<211> 115
<212> PRT
<213> A.fumigatus

```
<400> 33873
Tyr Ser Pro Ser Trp Pro Arg Lys Pro Ala Phe Leu Pro Ala Leu Leu
1               5                   10                  15
Val Ser Ser Thr Asp Ile Pro Arg Pro Ser Thr Ser Ser Trp Ile Ala
            20                  25                  30
Pro His Glu Leu Thr Ala Met Ile Ser Phe Leu Gly Gly Tyr Arg Ala
        35                  40                  45
Gly Glu Tyr Val Tyr Thr His Gly Cys Ala Thr Gly Lys Arg Val Gln
    50                  55                  60
Ala Asn Leu Gly Val Met Asn His Ala Ala Val Leu Phe Asn Ala Asn
65                  70                  75                  80
Arg Leu Ser Met Pro Tyr Val Glu Leu Leu Ala Ala Ser Ala Arg Gln
                85                  90                  95
Leu Cys Met Ala Leu Gly Thr Val Val Met Ile Gly Val Ser Asp Lys
```

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          100                 105                 110
Trp Leu Pro
        115

<210> 33874
<211> 121
<212> PRT
<213> A.fumigatus

<400> 33874
Asn Pro Arg Ala Cys Pro Gly Ala Thr Met Ile Leu Ala Glu Leu Ala
1               5                  10                  15
Lys Glu Ala Gly Phe Pro Pro Gly Val Ile Ser Ile Ile His Gly Tyr
            20                  25                  30
Ser Lys Ala Val Asn Leu Ile Leu Asp Ser Pro Ser Arg Ala His Gly
        35                  40                  45
His Asp Gln Leu Ser Trp Arg Leu Ser Cys Trp Arg Val Arg Leu His
    50                  55                  60
Ser Trp Val Arg His Trp Gln Ala Cys Thr Gly Gln Pro Trp Cys His
65                  70                  75                  80
Glu Pro Arg Cys Arg Ala Phe Gln Arg Lys Gln Thr Ile Asn Ala Leu
                85                  90                  95
Cys Gly Ala Ser Cys Ser Val Cys Thr Pro Ala Leu His Gly Ser Arg
            100                 105                 110
His Ser Gly His Asp Trp Arg Glu Arg
        115                 120

<210> 33875
<211> 136
<212> PRT
<213> A.fumigatus

<400> 33875
Gly Leu Ile Gly Leu Ile Ala Phe Thr Asn Gln Asn Ile Ser Ser Ala
1               5                  10                  15
Ser Gly Asn Gly Asp Cys Pro Asn Ser Asp Gly Asp Tyr Arg Leu Thr
            20                  25                  30
Leu Val Asp Ser Asn Gly Phe Val Asn Ala Asn Gly Ser Ser Asn Leu
        35                  40                  45
Lys Asn Met Val Leu Gly Ala Thr Pro Ile Val Thr Val Phe Tyr Pro
    50                  55                  60
Glu Ser Asn Leu Ser Gln Pro Asp Ile Gln Tyr Val Ala Val Lys Pro
65                  70                  75                  80
Glu Asp Thr Ser Gly Leu Leu Gly Gln Val Ser Gly Ser Leu Ala Ser
                85                  90                  95
Gly Phe Thr Ala Pro Thr Val Phe Ala Leu Gly Thr Leu Val Ile Thr
            100                 105                 110
Leu Ala Phe Phe Ser Gly Ile Phe Gly Phe Ser Pro Arg His Met Glu
        115                 120                 125
Arg Leu Ser Glu Val Ile Gln Asp
    130                 135

<210> 33876
<211> 62
<212> PRT
<213> A.fumigatus
```

<400> 33876
Ser Leu Leu Ile Leu Ala Thr Pro Cys Ser Leu Ile Pro Gln Asn Ile
1 5 10 15
Ile Cys Thr Pro Asp Gln Thr Ser Phe Val Ser Met Ser Gln Pro Trp
20 25 30
Asp Tyr Ile Ala Lys Leu Val Cys Ile Gly Asp Ser Gly Thr Gly Lys
35 40 45
Ser Ser Val Ser Val Ser His Ser Phe Thr Arg Leu Leu Tyr
50 55 60

<210> 33877
<211> 220
<212> PRT
<213> A.fumigatus

<400> 33877
Asn Cys Ala Asp Leu Arg Val Val Val Lys Leu Thr Ile Arg Leu Cys
1 5 10 15
Glu Gly Arg Phe Ser Ser Ser His Asp Val Thr Ile Gly Val Glu Phe
20 25 30
Gly Ser Arg Ile Val Pro Val Gly Pro Pro Ala Ser Lys Ser Leu Gly
35 40 45
Val Asp Ser Asp Val Ser Asp Ser Ser Ala Leu Thr Leu Ser Thr Ala
50 55 60
Arg Ala Met Val Ala Ser His Glu Ser Val Ala Ser Gly Leu Pro Ser
65 70 75 80
Pro Pro Arg Lys Pro Leu Gly Asp Arg Ser Gln Lys Lys Met Lys Leu
85 90 95
Ser Leu Trp Asp Thr Ala Gly Gln Glu Thr Tyr Lys Ser Ile Thr Arg
100 105 110
Ser Tyr Phe Arg Gly Ala Ser Gly Ala Leu Leu Val Phe Asp Ile Thr
115 120 125
Arg Pro Ser Thr Phe Thr Ser Cys Thr Gln Trp Leu Gln Asp Leu Arg
130 135 140
Gln Ile Ala Glu Asp Gly Ile Val Val Ile Leu Val Gly Asn Lys Ser
145 150 155 160
Asp Leu Ala Glu Val Lys Ser Asp Val Asn Gln Arg Arg Val Thr Arg
165 170 175
Gln Glu Ala Glu Glu Trp Cys Arg Met Asn Asn Val Val Arg Tyr Val
180 185 190
Glu Thr Ser Ala Lys Ser Gly Glu Ser Val Glu Arg Ala Phe Leu Glu
195 200 205
Val Ala Glu Arg Ile Tyr Arg Asn Ile Glu Ala Gly
210 215 220

<210> 33878
<211> 484
<212> PRT
<213> A.fumigatus

<400> 33878
Arg Ala Thr Pro Leu Ser Phe Ala Ser Phe Leu Leu Val Ser Val Cys
1 5 10 15
Leu Thr His Ile Gly Asn Ile Asp Ala Ser Arg Phe Leu Ala Gln Ser
20 25 30

```
Gln Ser Arg Leu Gly Pro Pro Ile Asp Asp Ala Arg His Asn Gly Ser
        35                  40                  45
Asp Arg Leu Asn Ala Arg Ser Gly Ile Pro Arg Leu Ser Ser Ser Arg
    50                  55                  60
Ala Phe Phe Arg Met Thr Leu Asp Pro Tyr His Gln Ala Thr Ser Gln
65                  70                  75                  80
Val Ser Asn Leu Pro Phe Gly Ser Arg Asn Ala Pro Gln His Ala Pro
                85                  90                  95
Leu Phe Phe Ser Ala Thr Asp Asp Phe Arg Asp Glu Asp Asp Glu Ala
            100                 105                 110
Glu Arg Glu Arg Glu Ile Ala Asp Phe Tyr Ala Leu Gln Arg Ser Arg
        115                 120                 125
Arg His Phe Gly Ser Ser Gln Leu Lys Glu Ser Ser Glu Ile Gly Gly
    130                 135                 140
Asp Gly Asp Ser Ser Ile Ser Leu Glu Gln Gln Leu Leu Gln Asp Asp
145                 150                 155                 160
Arg Tyr Val Lys Arg Gly Arg Ile Arg Ser Ser Trp Arg Ala Arg Ser
                165                 170                 175
Lys Ser Met Asp Arg Glu Ser Gly Arg Ala Phe Glu Ser Ile Ala Met
            180                 185                 190
Thr Ala Asp Asp His Gly Gly Pro Asp Glu Val Arg Arg Ser Arg Ser
        195                 200                 205
Leu Lys Glu Asn Leu Val Asn Val Arg Leu Glu Asp Thr Leu Arg Ser
    210                 215                 220
Asp Glu Asp Val Asp Lys Ala Gly Ser Val Glu Gly Leu Asp Asp Ser
225                 230                 235                 240
Pro Pro Ser Val Gln Leu Phe Arg Glu Gln Ala Ser Ser Glu Pro Arg
                245                 250                 255
Ile Leu Gly Ile Glu Thr Phe Leu Gly Pro Ser Glu Val Asp Lys Gln
            260                 265                 270
Gln Leu Phe Asp Asp His Glu Pro Ser Ser Ile Ala Asp Tyr Gly Leu
        275                 280                 285
Glu Pro Tyr Ser Val Gly Glu Thr Gln Ser Gly Ala His Asp Thr Phe
    290                 295                 300
Trp Gly Lys Leu Phe Leu Ile Ser Leu Gly Cys Leu Leu Ala Thr Ser
305                 310                 315                 320
Phe Leu Ile Tyr Leu His Thr Ser Ala Pro Ser Gly Asp Lys Ser Arg
                325                 330                 335
Trp Gly Asp Thr Ile Tyr His Thr Val His Gly Ser Phe Tyr Leu Leu
            340                 345                 350
Gly Ile Tyr Thr Val Val Ser Val Phe Ile Ser Leu Leu Trp Leu Ala
        355                 360                 365
Ser Leu Arg Tyr Tyr Val Arg Pro Leu Val Tyr Ala Met Ile Phe Ala
    370                 375                 380
Val Pro Val Ile Leu Tyr Ala Phe Ser Leu Tyr Pro Phe Ile Ser Ser
385                 390                 395                 400
Phe Lys Gly Ile Trp His Gly Thr Ser Ile Gln Asp Lys Ala Met Arg
                405                 410                 415
Val Val Ser Leu Leu Pro Phe Ile Val Ser Ser Phe Trp Ile Tyr Asn
            420                 425                 430
Val Val Arg Ser Arg His Ala Ile Ala Lys Ala Ile Asp Ile Leu Glu
        435                 440                 445
Phe Ala Cys Arg Ile Leu Ala Ala Asn Leu Glu Leu Leu Leu Leu Gly
    450                 455                 460
Leu Gly Ile Leu Ile Cys Ile Val Ser Trp Thr Trp Val Trp Met Leu
465                 470                 475                 480
```

Met Phe Val Phe

<210> 33879
<211> 122
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33879
Ala Gly Ser Pro Cys Ser Pro Xaa Thr Phe His Thr Thr Ser Thr Ile
1 5 10 15
Val Gln Val Val Leu Ser Cys Leu Asp Ile Ala Ile Asn Pro Leu Ser
20 25 30
Asn Phe Glu Glu Ser Ala Phe Asp Ala Phe Thr Gly Leu Cys Thr Gly
35 40 45
Phe Asn Val Ala Asn Asn Ile Val His Ala Ala Pro Leu Leu Cys Phe
50 55 60
Leu Ser Gly Asp Thr Pro Leu Ile His Val Gly Phe His Phe Arg Glu
65 70 75 80
Ile Ala Leu Ile Ser Asn Gln Asn Tyr Asn Asn Thr Ile Phe Cys Asn
85 90 95
Leu Pro Lys Ile Leu Gln Pro Leu Gly Ala Arg Gly Glu Cys Arg Gly
100 105 110
Thr Ser Asp Val Lys Asn Glu Glu Gly Pro
115 120

<210> 33880
<211> 76
<212> PRT
<213> A.fumigatus

<400> 33880
Cys Trp Arg Pro Asn Trp Asn Asn Thr Arg Ser Glu Phe His Ala Asn
1 5 10 15
Ser Asn Ile Met Thr Gly Gly Glu Ala Ser Phe Thr Glu Ser Asn Ser
20 25 30
Gln Leu Tyr Asn Asn Thr Gln Val Ser Thr Val Leu Ser Glu Val Gln
35 40 45
Tyr Asn Asn Arg Val Asn Glu Cys Asp Thr Leu Thr Leu Asp Phe Pro
50 55 60
Val Pro Glu Ser Pro Ile Gln Thr Ser Leu Ala Met
65 70 75

<210> 33881
<211> 439
<212> PRT
<213> A.fumigatus

<400> 33881
Asp Cys Cys Leu Ser Ile Leu Gln Ala Leu Cys Arg Leu Arg Arg Cys
1 5 10 15

```
Asn Ser Gly Asn Met Ile Leu Pro Ile Ser Ser Phe Leu Tyr Leu Cys
            20                  25                  30
Val Leu Phe Ile Gln Ser Gly Ala Ile Ala Leu Ala Gln Val Pro Gln
        35                  40                  45
Asp Val Leu Ser Pro Lys Arg Pro Phe Pro Gln Glu Ser Thr Val Pro
    50                  55                  60
Gly Ile Ser Ser Glu Glu Trp Pro Leu Thr Pro Pro Gly Leu Ile Gly
65                  70                  75                  80
Glu Thr Glu Asp Ser Ile Arg Ser Thr Leu Arg Asp Leu Val Asp Ala
                85                  90                  95
Leu Lys Val Met Gln Glu Glu Tyr Phe Glu Leu Trp Gln Gly Lys Trp
            100                 105                 110
Pro Thr Ala Ile Asp Trp Thr Ala Ala Val Leu Gly Thr His Val Ser
        115                 120                 125
Ala Thr Leu Ser Ser Leu Thr Ser Thr Val Gly Asp Val Leu Leu Ser
    130                 135                 140
Ser Leu Ser Ala Asp Thr Glu Asn Ala Glu Gly Glu Cys Gln Ser Ala
145                 150                 155                 160
Ile His Arg Ser Leu Ala Phe Glu Asn Phe Ile Asn His Phe Phe Gly
                165                 170                 175
Gln Ser Val Ser Phe Tyr Tyr Gly Glu Asp Ala Ile Ser Leu Arg Gly
            180                 185                 190
Gln Ala Tyr Asp Asp Met Leu Trp Val Val Leu Glu Trp Leu Glu Asn
        195                 200                 205
Ile Lys Phe Gln Val Leu His Ser Glu Leu His Tyr Asp Arg Ser Asn
    210                 215                 220
Ala Ser Thr Glu His Arg Trp His Gly Val Gln Phe Gln Ile Pro Ala
225                 230                 235                 240
Ala His Arg Ala Arg Leu Phe Tyr Glu Leu Ala Ser Ser Gly Trp Asp
                245                 250                 255
Arg Ser Leu Cys Gly Gly Gly Met Ile Trp Ser Pro Tyr Leu Gly Pro
            260                 265                 270
Tyr Lys Asn Ala Ile Thr Asn Glu Leu Tyr Ile Ser Ala Ser Ile Gly
        275                 280                 285
Met Tyr Leu Tyr His Pro Gly Asp Val Ile Asn Ser Pro Phe Ala Ser
    290                 295                 300
Pro Ser Arg Thr Ser Glu Val Ala Ser Asp Gly Tyr Pro His Asn Pro
305                 310                 315                 320
Ala His Leu Gln Ala Ala Ile Glu Gly Tyr Glu Trp Leu Lys Ser Ser
                325                 330                 335
Asn Met Ile Gly Ile Gly Gly Leu Tyr Ala Asp Gly Phe His Ile Ser
            340                 345                 350
Gly Trp Arg Ser Val Thr Gln Pro Gly Thr Arg Arg Cys Asp Val Leu
        355                 360                 365
Asn Pro Met Val Tyr Thr Tyr Asn Gln Gly Val Ile Leu Ser Gly Leu
    370                 375                 380
Arg Gly Leu Trp Leu Ala Thr Ala Ser Gln Asp Tyr Leu Gln Asp Gly
385                 390                 395                 400
His Asp Leu Val Arg Lys Val Ile Arg Ala Thr Gly Trp Pro Asn Lys
                405                 410                 415
Asp Ala Arg Glu Trp Ala Gly Leu Gly Arg Gly Leu His His Gly Ala
            420                 425                 430
Gly Arg Ser Glu Gln Ala Leu
        435
```

<210> 33882

<211> 77
<212> PRT
<213> A.fumigatus

<400> 33882
Leu Thr Glu Leu Pro Pro Leu Thr Val Arg Leu Leu Leu Ile Asp Pro
1 5 10 15
Ser Ser Ile Val Ser Ile Thr Glu Val Gln Leu Arg Gln Tyr Asp Ile
20 25 30
Thr Tyr Ile Ile Ile Pro Ile Ser Leu Cys Ser Ile Tyr Thr Ile Trp
35 40 45
Gly His Cys Ala Gly Ala Ser Thr Ser Gly Arg Pro Phe Pro Glu Ala
50 55 60
Thr Ile Ser Thr Gly Val Asn Gly Ala Trp Asp Ile Ile
65 70 75

<210> 33883
<211> 66
<212> PRT
<213> A.fumigatus

<400> 33883
Asn Gln Ser Thr Asn Gln Arg Leu Cys Leu Ala Arg Val Arg His Val
1 5 10 15
Met Ile Met Ser Phe Arg Gly Ser Cys Phe Tyr Ser Ser Asp Trp Thr
20 25 30
Ser Val Leu Arg Leu Tyr Leu Tyr Leu Leu Val Pro Leu Tyr Cys Ile
35 40 45
Leu Lys Thr Asp Gly Asn Val Met Pro Pro Thr Tyr Leu Gly Thr Tyr
50 55 60
Asp Ser
65

<210> 33884
<211> 142
<212> PRT
<213> A.fumigatus

<400> 33884
Ala Gly Leu Cys Leu Ile Ala Cys Arg Ser Phe Leu Thr Tyr Leu Ile
1 5 10 15
Pro Leu Ala Asp Ser Ile Leu Trp Pro Ile Leu His Tyr Gln Ser Gly
20 25 30
Val Val Tyr Asp Asp Gly Pro Trp Gln Ala Tyr Arg Arg Val Asn Glu
35 40 45
Leu Phe Ala Asp Ala Val Ala Glu Ala Ala Thr Arg Gly Ser Leu Ile
50 55 60
Trp Val His Asp Tyr His Leu Met Leu Leu Pro Lys Leu Leu Arg Gln
65 70 75 80
Arg Leu Asn Lys Glu Lys Pro Cys Ala Ile Gly Phe Ser Leu His Thr
85 90 95
Pro Phe Pro Ala Gly Asp Phe Trp Arg Ala Leu Pro Val Arg Asn Asp
100 105 110
Leu Leu Glu Gly Met Leu Ala Ser Asp Leu Ile Gly Phe His Thr Asp
115 120 125
Glu Tyr Lys Ser Asn Phe Ile Gln Thr Cys Ala Gln Val Leu

130 135 140

<210> 33885
<211> 265
<212> PRT
<213> A.fumigatus

<400> 33885
Met Asp Arg Gly Ala Arg Thr Glu Ile Pro Gly Arg Ile Gln Tyr Lys
1 5 10 15
Asp Arg Leu Val Glu Thr Asp Lys Phe Ile Val Gly Ile Asp Pro Gln
20 25 30
Lys Phe Lys Asp Thr Leu Gln Lys Gln Glu Val Gln Asp Arg Ile Lys
35 40 45
Gln Leu Glu Glu Lys Tyr Lys Gly Ile Thr Val Ile Ile Gly Val Asp
50 55 60
Arg Leu Asp Tyr Ile Lys Gly Leu Thr Gln Lys Leu Lys Gly Tyr Asp
65 70 75 80
His Phe Leu Asp Arg His Pro Glu Leu Arg Asn Lys Val Ile Leu Ile
85 90 95
Gln Val Ala Val Pro Ser Arg Glu Asp Val Lys Glu Tyr Gln Glu Leu
100 105 110
Glu Thr Glu Leu Ser Thr Ile Ala Gly Lys Ile Asn Gly Lys His Cys
115 120 125
Met Cys Met Ser Tyr Ser Ile Cys Gly Arg Val Ile Thr Gln Ile Leu
130 135 140
Asn Tyr Glu Leu Leu Thr Ala Thr Pro Asp Gly Val Pro Leu Leu Tyr
145 150 155 160
Met His Arg Ser Val Pro Phe Thr Glu Leu Thr Ala Leu Tyr Ser Ile
165 170 175
Ala Asp Ala Cys Leu Leu Thr Ser Thr Arg Asp Gly Met Asn Leu Val
180 185 190
Ser Phe Glu Tyr Ile Ala Cys Gln Glu Gln Arg His Gly Val Leu Val
195 200 205
Leu Ser Glu Phe Ala Gly Ala Ala Ser Phe Met Lys Glu Gly Ser Ile
210 215 220
Ser Phe His Pro Ala Asn Thr Thr Glu Leu Ala Asp Ala Val Tyr Lys
225 230 235 240
Ala Val Met Met Gly Glu Asp Glu Lys Lys Lys Lys Tyr Glu Tyr Leu
245 250 255
Arg Asn Phe Ile Glu Thr Asn Thr Arg
260 265

<210> 33886
<211> 64
<212> PRT
<213> A.fumigatus

<400> 33886
Lys Met Ala Pro Asp Ser Ser Gln Val Lys Arg Asn Leu Ile Ile Val
1 5 10 15
Ser Asn Arg Leu Pro Val Ser Val Lys Arg Thr Asp Gly Ser Tyr Lys
20 25 30
Ser Ser Leu Ser Ser Gly Gly Leu Val Thr Ser Leu Ser Gly Leu Thr
35 40 45
Lys Ser Thr Glu Phe Arg Trp Phe Gly Trp Pro Gly Leu Asp Val Leu

50 55 60

<210> 33887
<211> 336
<212> PRT
<213> A.fumigatus

<400> 33887
His Arg Glu Ala Pro Thr Gly Asp Leu Arg Pro Phe Gln Ala Ala Arg
1 5 10 15
Glu Gly Gly Ile Ser Pro Gly Glu Val Gln Arg Arg Gly Gln Ala Arg
20 25 30
His Ala Gly Pro Arg Arg Asp Cys Ser Asp Gln Thr Val Thr Gly Pro
35 40 45
Glu His Asp Leu His His Pro Gln Pro Arg Glu Asp Pro Ala Gln Arg
50 55 60
Arg His Asp Gly Ile Leu Pro Gly Gln Asn Gly Arg Gly Asp Val Arg
65 70 75 80
Leu Leu Asp Arg Val Asp Pro Pro Val His Leu Pro Arg Ala Leu Pro
85 90 95
Gly Asn Arg Gly Glu Glu Pro Ala His Ser Glu Val Ile Asp Val Gln
100 105 110
Ala Tyr Gly Arg His Arg Gly Gly Ala His Ile Phe Leu Ala Gly Glu
115 120 125
Arg Gly Arg Gln Pro Gln Leu Gly Leu Pro Val Leu Leu Gly Pro Gly
130 135 140
His Gly Val His Pro Leu Arg Leu Pro Gln Asp Gly Leu Gln Arg Gly
145 150 155 160
Gly Gly Gly Val Arg Glu Leu His Leu Arg Pro Asp Leu Pro Ala Arg
165 170 175
Ala Ala Gly Gly Arg Ala Gly Leu Glu Thr Ser Leu Pro Ala Ala His
180 185 190
Val His His Pro Arg Arg Val Arg Asp Pro Arg Gly Gly Ala Glu Pro
195 200 205
Ser Gly Arg Val Gln Val Gln Gln Ala Arg Ala His Arg Gln Arg Gly
210 215 220
Arg Leu Pro His Thr Ala Gly His Leu Arg Arg Thr Ala Gly Gln His
225 230 235 240
Leu Pro Val Arg Gln Ala Arg Gln Pro Asn His Leu Arg Pro Val Ala
245 250 255
Arg Asp Pro Ala His Gly Gln Leu Arg Gly Arg Gly Ala Pro Arg Lys
260 265 270
Gly His Val Asp Leu Gly Val Pro Arg Pro Asp Pro Glu Leu Pro Leu
275 280 285
Leu Gln Asp His Ala Leu Gly Gly Ala Gly Pro Arg Arg Ala Pro Leu
290 295 300
Arg Glu Ala Leu Gln Pro Pro Leu Pro Gly Pro Pro Gln Met Asp Pro
305 310 315 320
Arg Pro Arg Arg Ala Leu Arg Arg Asp His Gly Ala Arg Leu Gln Leu
325 330 335

<210> 33888
<211> 85
<212> PRT
<213> A.fumigatus

<400> 33888
Ser Ala Thr Lys Lys Arg Gly Pro Asn Gln Ala Ala Lys Tyr Asn Val
1 5 10 15
Pro Ile Pro Asn Leu Trp Lys Leu Ala Leu Ala His Phe Asp Asn Ile
20 25 30
Leu Ser Tyr Ser Asn His Leu Gly Met Phe Ser Glu Glu Val Ala Ile
35 40 45
Ser Gly Glu Gln Met Gly Asn Thr Pro Gln Ala Phe Ser His Leu Ala
50 55 60
Cys Val Ser Ala Ala Leu Asn Leu Glu Arg Leu Gly Arg Asp Gln Asp
65 70 75 80
Glu Pro Asn Ser Ser
85

<210> 33889
<211> 521
<212> PRT
<213> A.fumigatus

<400> 33889
Asn Pro Asp Gly Pro Thr Arg Lys Gly Val Val Thr Leu Val Gly Lys
1 5 10 15
Phe Pro Arg Val Pro Pro Lys Ser Pro Ala Ser Ser Gly Arg Ile Leu
20 25 30
Ser Gly Asp Trp Ser Leu Gln Arg Ala Arg Gly His Pro Val Gln Val
35 40 45
Arg Gly Ser Ala Ile Arg Arg Gly Gln Lys Ala Asp Leu Gln Arg Gly
50 55 60
Arg Tyr Ala Leu Ala Ser Glu Val Phe Pro Ala Phe Asn Tyr Ala Gly
65 70 75 80
Ile Pro His Ala Thr Arg Cys Lys Leu Ser Asn Asp Leu Ser Lys His
85 90 95
Gln Leu Gln Thr Val His Phe Glu Ser Asp Thr Glu Lys Leu Gln Leu
100 105 110
Glu Ile Phe Ala His Ser Lys Gln Leu Glu Lys Val Gly Phe Pro Gln
115 120 125
Val Lys Phe Ser Val Glu Asp Arg Pro Gly Met Gln Gly Arg Gly Val
130 135 140
Ile Ala Arg Ile Arg Leu Ser Gln Gly Gln Ser Met Thr Phe Ile Ile
145 150 155 160
His Ser Pro Glu Lys Ile Leu Pro Ser Asp Ala Met Met Glu Ser Tyr
165 170 175
Leu Asp Lys Met Glu Glu Glu Thr Phe Asp Tyr Trp Thr Gly Trp Thr
180 185 190
Arg Gln Cys Thr Phe Arg Gly His Tyr Arg Glu Ile Val Glu Arg Ser
195 200 205
Leu Leu Ile Leu Lys Leu Leu Thr Tyr Lys Pro Thr Gly Ala Ile Val
210 215 220
Ala Ala Pro Thr Phe Ser Leu Pro Glu Asn Val Gly Gly Ser Arg Asn
225 230 235 240
Trp Asp Tyr Arg Tyr Ser Trp Val Arg Asp Thr Ala Phe Thr Leu Tyr
245 250 255
Val Phe Leu Lys Met Gly Tyr Ser Glu Glu Ala Glu Ala Tyr Val Asn
260 265 270
Phe Ile Phe Asp Arg Ile Phe Pro His Ala Gln Gln Glu Ala Gly Pro
275 280 285

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Gly Ser Lys Arg Pro Phe Leu Pro Leu Met Phe Thr Ile Arg Gly Glu
    290                 295                 300
Tyr Glu Ile Pro Glu Val Glu Leu Ser His Leu Glu Gly Tyr Lys Cys
305                 310                 315                 320
Ser Lys Pro Val Arg Ile Gly Asn Ala Ala Val Phe His Thr Gln Leu
                325                 330                 335
Asp Ile Tyr Gly Glu Leu Leu Asp Ser Ile Tyr Leu Tyr Asp Lys His
            340                 345                 350
Gly Asn Pro Ile Thr Tyr Asp Gln Trp Leu Ala Ile Arg Arg Met Val
        355                 360                 365
Asn Tyr Val Ala Glu Val Arg His Glu Lys Asp Met Ser Ile Trp Glu
    370                 375                 380
Ser Arg Gly Gln Ile Gln Asn Phe Leu Tyr Ser Lys Ile Met Leu Trp
385                 390                 395                 400
Val Ala Leu Asp Arg Gly Val Arg Leu Cys Glu Lys Arg Ser Ser Leu
                405                 410                 415
Pro Cys Pro Asp Arg Leu Arg Trp Ile His Val Arg Asp Glu Leu Tyr
            420                 425                 430
Asp Glu Ile Met Glu Arg Gly Tyr Asn Phe Asp Arg Gly His Phe Thr
        435                 440                 445
Gln Ser Tyr Glu Ser Arg Asp Val Leu Asp Ala Ala Val Met Ile Ala
    450                 455                 460
Pro Leu Val Phe Phe Cys Ala Pro Asn Asp Pro Arg Phe Ile Ser Thr
465                 470                 475                 480
Leu Gln Lys Ile Leu Gln Asn Pro Asn Glu Gln Gly Leu Ser Ser Ala
                485                 490                 495
Lys Met Val Phe Arg Tyr Asp His Glu Lys Ala Arg Asp Gly Asn Pro
            500                 505                 510
Ser Asn Ser Ser Ala Leu Ser His Pro
        515                 520
```

<210> 33890
<211> 149
<212> PRT
<213> A.fumigatus

<400> 33890

```
Ala Ile Trp Lys Gly Thr Ser Ala Ala Ser Pro Cys Ala Ser Ala Thr
1               5                   10                  15
Arg Pro Ser Ser Thr His Ser Trp Thr Ser Thr Ala Asn Cys Trp Thr
            20                  25                  30
Ala Ser Thr Cys Thr Thr Ser Thr Ala Thr Gln Ser Pro Thr Thr Ser
        35                  40                  45
Gly Ser Arg Ser Gly Ala Trp Ser Thr Thr Trp Pro Arg Cys Ala Thr
    50                  55                  60
Lys Arg Thr Cys Arg Ser Gly Ser Pro Ala Ala Arg Ser Arg Thr Ser
65                  70                  75                  80
Ser Thr Pro Arg Ser Cys Ser Gly Trp Arg Trp Thr Ala Ala Cys Ala
                85                  90                  95
Ser Ala Arg Ser Ala Pro Ala Ser Pro Ala Arg Thr Ala Ser Asp Gly
            100                 105                 110
Ser Thr Ser Ala Thr Ser Ser Thr Thr Arg Ser Trp Ser Ala Ala Thr
        115                 120                 125
Thr Leu Thr Ala Ala Thr Ser Pro Arg Ala Thr Arg Ala Ala Thr Ser
    130                 135                 140
Ser Thr Pro Pro Ser
```

145

<210> 33891
<211> 117
<212> PRT
<213> A.fumigatus

<400> 33891
Gly Pro Phe Asp Ser Glu Lys Pro Phe Asn Lys Ala Ile Ile Asp Ala
1 5 10 15
Tyr Gln Ser Lys Ala Pro Lys Arg Gln Ile Lys Asn Ser Leu Ala Gly
20 25 30
Met Leu Ser His Glu Lys His Arg Ile Val Phe Thr His Gly Asp Leu
35 40 45
Arg Leu Gln Asn Ile Met Val Thr Asp Gly Tyr Val Ser Gly Ile Leu
50 55 60
Asp Trp Glu Phe Ser Gly Trp Tyr Pro Glu Tyr Trp Glu Phe Ser Lys
65 70 75 80
Ala Leu Tyr Val Trp Lys Trp Gln Asn Asp Trp Ile Glu Asn Leu Val
85 90 95
Gln Val Leu Glu Pro Tyr Tyr Pro Glu Tyr Ala Val His Ser Phe Leu
100 105 110
Thr Glu Thr Leu Trp
115

<210> 33892
<211> 134
<212> PRT
<213> A.fumigatus

<400> 33892
Ala Ser Ala Thr Ile Pro Cys Arg Glu Ala Gln Ala Leu Arg Gln Gly
1 5 10 15
Phe Gly Ser Leu Val Leu Gln Gln Leu Asp Glu Arg Met Ala Asp Phe
20 25 30
Gly Pro Arg Ala Pro His Gly Pro Asp Met Thr Gly Thr His Asp Pro
35 40 45
Leu Glu Asp Met Asp Val His Glu Lys Gly Ala Phe Asp Ala Leu Ile
50 55 60
Arg Pro Asp Asp Ser Tyr Thr Pro Asp Gly Val Tyr Trp Ala Asp Leu
65 70 75 80
Pro Leu Val Lys Lys Ile Lys Phe Val Gly Ser Tyr Asp Ala Lys Glu
85 90 95
Ala Lys Arg Glu Leu Lys Gly Ile Trp Asp Met Thr Lys Lys Asp Pro
100 105 110
Leu Ser Pro Val Ala Tyr Tyr Phe Arg Asn Met Val Leu Pro Gly Ala
115 120 125
Gly Leu Gly Leu Glu Gly
130

<210> 33893
<211> 73
<212> PRT
<213> A.fumigatus

<400> 33893

```
Ile Cys Gly Glu Arg Ser Asp Ala Asn Phe Pro Val Ser Ser Pro Ile
1               5                  10                  15
Ser Tyr Val Leu Phe Ser Ile Gly Asn Val Lys Pro Leu Phe Gln Ala
            20                  25                  30
Ala Phe Lys Ser Cys Trp Lys Asp His Lys Ile Cys Asn Pro Gln Trp
        35                  40                  45
Ile Asn Ala Val Glu Tyr Leu Glu Ile Val Gly Ile Ile Val Gly Gln
    50                  55                  60
Ile Leu Val Gly Val Leu Gly Asp Trp
65                  70
```

<210> 33894
<211> 223
<212> PRT
<213> A.fumigatus

<400> 33894

```
Leu Ala Thr Ile Gly Gly Glu Tyr Pro Met Thr Ala Thr Ser Gly Met
1               5                  10                  15
Glu Asn Ala Val Gly Ser Gly Lys Val Ser Thr Lys Glu Asp Arg Leu
            20                  25                  30
His Arg Gly Arg Lys Val Thr Ser Ala Phe Leu Met Gln Gly Trp Gly
        35                  40                  45
Gln Phe Phe Asn Gln Val Ile Leu Ile Ile Leu Leu Leu Cys Phe His
    50                  55                  60
His Gly Ser Gly Asn Pro Pro Tyr Ser Ser Val Ala Ala Gln Trp Thr
65                  70                  75                  80
Tyr Arg Ile Ser Phe Ala Ile Pro Ala Val Gly Thr Leu Trp Leu Val
                85                  90                  95
Tyr Tyr Arg Thr Tyr His Met Lys Ala Ala Ser Lys Gln Leu Ala Ala
            100                 105                 110
Ala Lys Lys Lys Ala Ser Val Thr Gly Tyr Asp Val Thr Ser Leu Lys
        115                 120                 125
Leu Ala Phe Thr His Phe Gly Phe Arg Ile Val Ala Thr Ala Gly Gly
    130                 135                 140
Trp Phe Ala Asn Asp Val Phe Phe Tyr Gly Asn Lys Leu Phe Gln Ser
145                 150                 155                 160
Glu Phe Ile Lys Val Ile Ser Pro Glu Thr Thr Ser Ile Met Pro Thr
                165                 170                 175
Trp Leu Trp Asn Leu Val Asn Val Gly Val Ser Leu Ala Gly Tyr Tyr
            180                 185                 190
Leu Ala Ser Phe Leu Ile Asp Asn Lys Leu Tyr Gly Arg Lys Trp Met
        195                 200                 205
Ser Ser Pro Arg Gly Arg Lys Glu Pro Arg Asn Ala Leu Gly Arg
    210                 215                 220
```

<210> 33895
<211> 105
<212> PRT
<213> A.fumigatus

<400> 33895

```
Ser Ala Leu Tyr Pro Ser Thr Cys Lys Asp Leu Leu Gln Pro Trp Gln
1               5                  10                  15
Ser Pro Tyr Cys Ile Ala Phe Ser Ile Asp Leu Tyr Gly Ser Lys Asn
            20                  25                  30
```

```
Asn Asp Ile Thr Tyr Leu Glu Leu Gly Cys Ser Glu Asn Ser Leu Asp
        35                  40                  45
Ala Asn Ala Pro Phe Ser Gln Pro Lys Ala Ser Tyr Val Pro Ala Ile
    50                  55                  60
Arg Cys Gly Ser Ile Ser Ser Arg Arg Trp Pro Asn Ser Arg Ser Glu
65                  70                  75                  80
Ala Leu Phe Gly Asn Gly Ile Trp Cys Leu Ala Tyr Pro Asp Ile Pro
                85                  90                  95
Asn His Trp Cys His Pro Gly Arg Ser
            100                 105
```

<210> 33896
<211> 112
<212> PRT
<213> A.fumigatus

<400> 33896

```
Leu Gln Gln Asp Val Phe Asp Gly Tyr Met His Arg Ala Lys Tyr Tyr
1               5                   10                  15
Gly Tyr Asp Arg Lys Asp Thr Val Phe Val Ser Gln Tyr Ser Leu Leu
            20                  25                  30
Asn Gly Leu Thr Tyr Thr Ile Arg Lys Leu Gly Gly Gly Glu Glu Ser
        35                  40                  45
Pro Cys Lys Val Phe Leu Glu Ala Asp Asp Leu Arg Thr Leu Val Asp
    50                  55                  60
Ala Lys Cys Lys Met Arg Tyr Ala Ile Gly Ala Ile Pro Gly Gly Gly
65                  70                  75                  80
Val Glu Leu Leu Lys Leu Arg Phe Pro Gly Tyr Gly Glu Tyr Thr Glu
                85                  90                  95
Asp Arg Met Asp Arg Gly Asp Leu Asp Leu Arg Ile Val Tyr Lys Gly
            100                 105                 110
```

<210> 33897
<211> 100
<212> PRT
<213> A.fumigatus

<400> 33897

```
Arg Lys His Lys Met Lys Leu Pro Phe Val Leu Phe Thr Ala Leu Tyr
1               5                   10                  15
Ala Ser Cys Ala Leu Ala Ala Ala Leu Pro Pro Asp His Val Asp Ala
            20                  25                  30
Asp Lys Ala Ile Leu Leu Leu Ala Asp Gly Thr Thr Lys Thr Ile Glu
        35                  40                  45
Lys Thr Asp Leu Ala Ser His Leu Asn Gly Thr Leu Leu Glu Ala Pro
    50                  55                  60
Thr Asp Asn Phe Pro Arg Ser Ile Lys Ser Val Asn Phe Asn Ser Leu
65                  70                  75                  80
Glu Ala Arg Gly Gly Arg Leu His Pro Gly Arg Lys Ser Arg Ala Ile
                85                  90                  95
Ser Ile Asn Pro
            100
```

<210> 33898
<211> 84
<212> PRT

<213> A.fumigatus

<400> 33898
Leu Leu Glu Thr Asp Thr Gln Lys Gln Arg Thr Thr Lys Val Thr Thr
1 5 10 15
Tyr Phe Gly Asp Gln Asn Pro Leu Ile Ile Ala Tyr Arg Val Ser Glu
20 25 30
Phe Asn Ile Phe Asn Pro Phe Gln Gly Ala Ser Leu Ser Leu Ser Gln
35 40 45
Asn Leu Arg Ile Glu Ile Leu Ile Leu Pro Tyr Pro Pro Arg Lys Lys
50 55 60
Pro Glu Asn Lys Ser Val Gly Gln Lys Thr Leu Thr Ser Gly Leu Ile
65 70 75 80
Ala Pro Val Leu

<210> 33899
<211> 1034
<212> PRT
<213> A.fumigatus

<400> 33899
Lys Ile Glu Val Asp Ala Ser Ala Leu Gln Ser Ser Lys Glu Leu Gly
1 5 10 15
Lys Arg Lys Arg Glu Asp Glu Asn Ile Val Pro Thr Thr Thr Thr Lys
20 25 30
Asp Val Ser Thr Ser His Asn Gln Asn Ser Asp Ser Glu Leu Ser Gly
35 40 45
Asp Glu Thr Asp Asp Ser Phe Val Asp Ser Lys Gly Thr Thr Lys Arg
50 55 60
Lys Leu Ala Glu Thr Ala Pro Ala Pro Pro Ile Pro Ala Pro Val Ile
65 70 75 80
Gly Gly Gly Leu Lys Arg Pro Leu Glu Leu Gly Pro Asp Gly Phe Pro
85 90 95
Val Leu Lys Lys Arg Lys Arg Ala Pro Lys Ala Lys Pro Ala Ala Val
100 105 110
Ser Val Pro Glu Val Pro Trp Glu Gly Phe Asn Ser Asp Asp Lys Asn
115 120 125
Asp Ser Ala Gly Ser Ser Asp Glu Glu Pro Glu Asp Ser Glu Ile Asp
130 135 140
Ala Glu Thr Lys Asn Val Gln Asp Gly Glu Lys Asp Ala Ser Ser Asp
145 150 155 160
Asn Asp Glu Ser Asp Glu Glu Asp Ser Gly Ser Asp Asn Glu Glu Glu
165 170 175
Asp Glu Glu Asp Glu Asp Asp Glu Glu Gly Val Val Asp Asp Glu Glu
180 185 190
Ala Glu Ser Leu Ala Gln Leu Arg Ile Lys Pro Arg Gln Ser Ala Phe
195 200 205
Lys Glu Trp Ala Arg Gln Gln Ile Asn Glu Val Val Gly Phe Lys Pro
210 215 220
Ser Gly Pro Ile Thr Ala Glu Glu Gln Pro Phe Val Arg Glu Ser Lys
225 230 235 240
Arg Pro Val Arg Asn Thr Val Ala Glu Glu Glu Pro Leu Pro Leu Glu
245 250 255
Leu Gln Val Thr Lys Gly Asp Pro Asn Arg Lys Ala Phe Ser Val Gln
260 265 270

```
Val Asp Arg Ser Glu Glu Val Gln Asn Ser Arg Leu Gly Leu Pro Val
        275                 280                 285
Val Gly Glu Glu Gln Lys Ile Met Glu Ala Ile His Asn Asn Ser Ser
    290                 295                 300
Ile Val Ile Trp Gly Ala Thr Gly Ser Gly Lys Thr Thr Gln Leu Pro
305                 310                 315                 320
Gln Phe Leu Phe Glu Ala Gly Tyr Gly His Pro Asp Ser Pro Asn Pro
                325                 330                 335
Gly Met Ile Ala Val Thr Gln Pro Arg Arg Val Ala Ala Val Ser Met
            340                 345                 350
Ala Lys Arg Val Ala Asp Glu Leu Gly Gln Tyr Phe Asp Arg Val Ala
        355                 360                 365
Tyr Gln Ile Arg Phe Glu Ser Asn Val Ser Ser Lys Thr Ala Ile Lys
    370                 375                 380
Phe Met Thr Asp Gly Ile Leu Ile Arg Glu Ile Ala Glu Asp Phe Ala
385                 390                 395                 400
Leu Lys Lys Tyr Ser Val Ile Val Ile Asp Glu Ala His Glu Arg Ser
                405                 410                 415
Val Asn Thr Asp Ile Leu Ile Gly Met Val Ser Arg Ile Ile Asp Leu
            420                 425                 430
Arg Lys Ala Met Ser Glu Glu Asp Pro Ser Ile Lys Pro Leu Lys Leu
        435                 440                 445
Val Val Met Ser Ala Thr Leu Arg Ile Ser Asp Phe Thr Gln Asn Pro
    450                 455                 460
Ser Leu Phe Arg Gln Gly Pro Pro Pro Phe Val Gln Ala Glu Gly Arg
465                 470                 475                 480
Gln Tyr Pro Val Thr Val His Phe Ala Arg Arg Thr His Arg Asp Tyr
                485                 490                 495
Val Glu Glu Ala Tyr Arg Lys Val Cys Arg Gly His Arg Lys Leu Pro
            500                 505                 510
Pro Gly Gly Met Leu Val Phe Leu Thr Gly Gln Asn Glu Ile Arg His
        515                 520                 525
Leu Ala Lys Arg Leu Lys Gln Thr Phe Lys Pro Thr Gln Arg Gly Glu
    530                 535                 540
Ala Thr Gln Ala Lys Val Gln Leu Ser Ala Asn Asp Ala Pro Leu Glu
545                 550                 555                 560
Ala Glu Asp Leu Asp Leu Gly Gly Ala Asp Leu Ser His Leu Gly Asn
                565                 570                 575
Glu Asp Asp Glu Ser Asp Leu Glu Ile Thr Gly Leu Asp Glu Asn Pro
            580                 585                 590
Glu Glu Asp Glu Glu Phe Asn Leu Gly Glu Glu Ala Met Asp Ser Ser
        595                 600                 605
Thr Arg Val His Val Leu Pro Leu Tyr Ser Gln Leu Pro Thr Lys Glu
    610                 615                 620
Gln Leu Lys Val Phe Glu Pro Pro Pro Glu Gly Ser Arg Leu Ile Val
625                 630                 635                 640
Leu Ala Thr Asn Val Ala Glu Thr Ser Leu Thr Ile Pro Gly Ile Lys
                645                 650                 655
Tyr Val Phe Asp Cys Gly Arg Ala Lys Glu Lys Gln Tyr Asp Leu Glu
            660                 665                 670
Thr Gly Val Gln Lys Phe Gln Ile Gly Trp Ile Ser Lys Ala Ser Ala
        675                 680                 685
Asn Gln Arg Ala Gly Arg Ala Gly Arg Thr Gly Pro Gly His Cys Tyr
    690                 695                 700
Arg Leu Tyr Ser Ser Ala Ile Tyr Glu Gly Glu Phe Ala Glu Tyr Thr
705                 710                 715                 720
```

```
Asp Pro Glu Ile Leu Arg Thr Pro Ile Glu Gly Val Val Leu Gln Met
                725                 730                 735
Lys Ser Met Gly Leu His Asn Val Ile Asn Phe Pro Phe Pro Thr Pro
            740                 745                 750
Pro Ser Arg Gln Gly Leu Ala Lys Ala Glu Lys Leu Leu Lys Asn Leu
        755                 760                 765
Gly Ala Leu Ser Ala Asn Gly Lys Ile Thr Gln Ile Gly His Arg Leu
    770                 775                 780
Ser Thr Tyr Pro Leu Ser Pro Arg Phe Ser Lys Met Leu His Ile Gly
785                 790                 795                 800
His Gln His Gly Cys Met Pro Tyr Val Ile Ala Leu Val Ser Ala Leu
                805                 810                 815
Ala Val Gly Asp Leu Phe Ile Pro Glu Asn Gln Ile Asp Pro Ala Thr
            820                 825                 830
Ser Lys Glu Glu Asp Lys Ser Asp Gly Val Tyr Lys Asn Ser Asp Arg
        835                 840                 845
Leu Glu Asp Thr Ala Arg Glu Gln Arg His Lys Asp Tyr Thr Arg Ala
    850                 855                 860
Gln Arg Leu Phe Ser Lys His Asp Asp Thr Ser Asp Ala Met Lys Tyr
865                 870                 875                 880
Leu Ser Ala Ile Cys Ala Tyr Ala Tyr Ala Ser Asn Gly Asp Ser Phe
                885                 890                 895
Cys Asp Gln Met Phe Leu Arg Ala Lys Ala Phe Lys Glu Ala Thr Gln
            900                 905                 910
Leu Arg Gln Gln Leu Thr Asp Ile Val Arg Ala Asn Asn Pro Gly Leu
        915                 920                 925
Ile Gly Ala Tyr Glu Pro Arg Leu Pro Glu Pro Thr Asp Lys Gln Ile
    930                 935                 940
Lys Ala Leu Lys Gln Ile Val Thr Ala Gly Phe Ile Asp Asn Val Ala
945                 950                 955                 960
Ile Arg Ala Asp Leu Ala Pro Val Pro Pro Glu Met Asp Arg Thr Pro
                965                 970                 975
Lys Arg Ala Ile Asp Val Pro Tyr Leu Thr Leu Phe Arg Ser Arg Glu
            980                 985                 990
Gly Arg Ala Thr Glu Leu Arg Glu Lys Ala Val Tyr Val His Pro Ser
        995                 1000                1005
Ser Val Leu Ala Arg Leu Ser Pro Lys Glu Met Pro Gln Tyr Leu Val
    1010                1015                1020
Tyr Ser His Leu Gln Gln Ser Ala Pro Ser
1025                1030

<210> 33900
<211> 207
<212> PRT
<213> A.fumigatus

<400> 33900
Leu Ala Val Ala Pro Ala Asp Leu Ser Val Gly Phe Phe Asn Ile Val
1               5                   10                  15
Ser Met Cys Pro Ser Cys Glu Val Tyr Gly His Arg Val Leu Thr Ala
            20                  25                  30
Phe Cys Leu Tyr Glu Arg Arg Arg Ala Leu Thr Glu Glu Thr Trp Ile
        35                  40                  45
Leu Ser Glu Ile Arg Asp Pro Gln Ser Gly Arg His Asp Tyr Lys Leu
    50                  55                  60
Glu Gly Phe Asp Gly Gly Ile Leu Phe Ala His Gly Phe Pro Gln Val
```

65 70 75 80
Asn Asp Thr Ala Asn His Ser Asn Gln Asp Ile Ser Val Asp Ala Pro
85 90 95
Leu Val Gly Leu Val Asp Asp Asp Asn Arg Ile Phe Leu Gln Ser Glu
100 105 110
Val Phe Gly Asn Leu Ala Asp Lys Asp Thr Val Gly His Glu Leu Asp
115 120 125
Arg Gly Phe Ala Gly Asp Val Ala Phe Glu Ser Asn Leu Val Ser Asp
130 135 140
Pro Val Glu Ile Leu Ser Gln Leu Ile Gly His Thr Leu Gly His Thr
145 150 155 160
Asp Ser Ser Asn Ser Ala Gly Leu Cys His Cys Asn His Thr Arg Val
165 170 175
Gly Thr Ile Gly Val Ser Ile Thr Gly Leu Glu Gln Glu Leu Arg Lys
180 185 190
Leu Arg Gly Leu Ser Ala Thr Ser Ser Thr Pro Asp Asp Asp Gly
195 200 205

<210> 33901
<211> 97
<212> PRT
<213> A.fumigatus

<400> 33901
Arg Leu Ser Phe Leu Ile Ile His His Pro Leu Leu Ile Val Phe Val
1 5 10 15
Phe Phe Ile Leu Leu Leu Ile Ile Thr Ala Thr Ile Leu Phe Ile Ala
20 25 30
Phe Ile Ile Val Gly Arg Cys Val Phe Phe Ser Ile Leu His Ile Phe
35 40 45
Cys Phe Gly Ile Asp Phe Arg Val Phe Arg Leu Phe Ile Ala Ala Thr
50 55 60
Ser Thr Ile Ile Phe Ile Ile Gly Ile Glu Ser Phe Pro Trp Asn Phe
65 70 75 80
Arg Tyr Gly Tyr Gly Arg Arg Phe Gly Leu Gly Arg Ser Phe Pro Leu
85 90 95
Leu

<210> 33902
<211> 239
<212> PRT
<213> A.fumigatus

<400> 33902
Thr Ser Ser Glu Arg Ser Thr Cys Thr Leu Asn Ala Leu Arg Phe Gly
1 5 10 15
Ser Pro Leu Val Thr Cys Asn Ser Arg Gly Ser Gly Ser Ser Ser Ala
20 25 30
Thr Val Phe Leu Thr Gly Arg Leu Asp Ser Arg Thr Asn Gly Cys Ser
35 40 45
Ser Ala Val Met Gly Pro Glu Gly Leu Lys Pro Thr Thr Ser Leu Ile
50 55 60
Cys Cys Leu Ala His Ser Leu Asn Ala Asp Trp Arg Gly Leu Ile Arg
65 70 75 80
Ser Cys Ala Asn Asp Ser Ala Ser Ser Ser Ser Thr Thr Pro Ser Ser

```
                85                  90                  95
Ser Ser Ser Ser Ser Ser Ser Ser Ser Leu Ser Leu Pro Leu Ser
            100                 105                 110
Ser Ser Ser Leu Ser Ser Leu Ser Glu Asp Ala Ser Phe Ser Pro Ser
        115                 120                 125
Cys Thr Phe Phe Val Ser Ala Ser Ile Ser Glu Ser Ser Gly Ser Ser
    130                 135                 140
Ser Leu Leu Pro Ala Leu Ser Phe Leu Ser Ser Glu Leu Asn Pro Ser
145                 150                 155                 160
His Gly Thr Ser Gly Thr Asp Thr Ala Ala Gly Leu Ala Leu Gly Ala
                165                 170                 175
Leu Phe Arg Phe Phe Arg Thr Gly Lys Pro Ser Gly Pro Ser Ser Arg
            180                 185                 190
Gly Arg Leu Arg Pro Pro Pro Met Thr Gly Ala Gly Ile Gly Gly Ala
        195                 200                 205
Gly Ala Val Ser Ala Ser Phe Arg Leu Val Val Pro Phe Glu Ser Thr
    210                 215                 220
Lys Glu Ser Ser Val Ser Ser Pro Asp Asn Ser Glu Ser Glu Phe
225                 230                 235
```

<210> 33903
<211> 65
<212> PRT
<213> A.fumigatus

<400> 33903

```
Asn Val Ser Phe Phe Cys Trp Lys Ser Asn Pro Asn His Ser Gly Pro
1               5                   10                  15
Val Asp Arg Leu Asn Ser Tyr Gln Lys Pro Gln Thr Ser Ala Thr His
            20                  25                  30
Val Asp Thr Pro Val Ala Ser Ile Ser Ala Gln Ala Cys Arg Thr Gly
        35                  40                  45
Ser Pro Thr Ser Ile Ser Phe Arg Ser Phe Ser Phe Val Ile Ser Gln
    50                  55                  60
Pro
65
```

<210> 33904
<211> 73
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (10)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33904

```
Glu Gln Ser Gln Leu Phe Asn Lys Leu Xaa Arg Thr Ser Leu Asn Ser
1               5                   10                  15
Val Asn Phe Arg Gly Leu Ala Gln Arg Met Ser Asn Arg Thr Thr Ser
            20                  25                  30
Gly Tyr Asp Ala Gly Gln Ile Lys Gln Leu Leu Val Gly Ile Gly Leu
        35                  40                  45
Thr Phe Ser Pro Leu Tyr Tyr Leu Arg Glu Ser Thr Cys Ser Arg Thr
    50                  55                  60
```

Val Leu Trp Pro Leu Arg Ser Asp Ile
65 70

<210> 33905
<211> 78
<212> PRT
<213> A.fumigatus

<400> 33905
Thr Ile Trp Pro Ala Phe Ser Met Thr Gln Asn Asp Thr Pro Arg Thr
1 5 10 15
Ser Tyr Ser Asp Pro Ser His Pro Ile Gln Tyr Leu Asp Asn Met Ala
20 25 30
Gln Lys Tyr Ala Arg Asp Gln Pro Ser Gly Phe Thr Asn Arg Ile Glu
35 40 45
Arg Val Ala Ile Val Gly Val Gly Leu Leu Pro Ser Ser Ser Glu Asn
50 55 60
Leu Thr Asn Asn Thr Thr Thr Thr Thr Arg Pro Ala Ala Pro
65 70 75

<210> 33906
<211> 117
<212> PRT
<213> A.fumigatus

<400> 33906
Val Cys Phe His Pro Pro Pro Arg Thr Ser Leu Thr Thr Pro Pro Pro
1 5 10 15
Pro Pro Gly Arg Arg His Arg Arg Gln Ile His His Pro Gly Thr Pro
20 25 30
Gln Asp Arg Pro Thr His His Asn Arg Ala His Ala Arg Arg Gln Pro
35 40 45
Lys His Pro Pro Cys Gly Arg Pro His Arg His Arg Arg Leu Pro Gly
50 55 60
Arg Val Asp Ser Gly Cys Ser Pro Ala Arg Pro Ala Val Pro His His
65 70 75 80
Tyr Ala Glu Arg Leu Ser Ala Gln Gly His Ala Glu Gln Ala Tyr Pro
85 90 95
Gly Arg Gly Glu Ser Gly Gly Pro Val Arg Asp Ala Glu Leu Leu Arg
100 105 110
Leu Arg Tyr His Glu
115

<210> 33907
<211> 319
<212> PRT
<213> A.fumigatus

<400> 33907
Gln His His His His His Gln Ala Gly Gly Thr Val Gly Lys Tyr Ile
1 5 10 15
Thr Gln Glu Leu Leu Lys Thr Gly Gln His Thr Ile Thr Ala Leu Thr
20 25 30
Arg Ala Asp Ser Gln Ser Thr Leu Pro Ala Gly Val Arg Thr Ala Thr
35 40 45
Val Asp Tyr Gln Asp Glu Ser Thr Leu Val Ala Ala Leu Gln Asp Gln

```
    50                  55                  60
Gln Phe Leu Ile Ile Thr Leu Ser Val Ser Ala Pro Lys Asp Thr Gln
65                  70                  75                  80
Ser Lys Leu Ile Gln Ala Ala Ala Lys Ala Gly Val Pro Tyr Val Met
                85                  90                  95
Pro Asn Cys Tyr Gly Cys Asp Ile Thr Asn Glu Lys Leu Arg Lys Glu
            100                 105                 110
Met Leu Val Gly Glu Pro Val Arg Gln Ala Cys Ala Glu Ile Glu Ala
        115                 120                 125
Thr Gly Val Ser Thr Trp Val Ala Leu Val Cys Gly Phe Trp Tyr Glu
    130                 135                 140
Phe Ser Leu Ser Thr Gly Pro Glu Trp Phe Gly Phe Asp Phe Gln Gln
145                 150                 155                 160
Lys Lys Leu Thr Phe Tyr Asp Glu Gly Thr Val Arg Ile Asn Val Ser
                165                 170                 175
Thr Trp Glu Gln Cys Gly Arg Ala Val Ala Ala Phe Leu Lys Phe Lys
            180                 185                 190
Glu Leu Pro Glu Asp Glu Asn Asp Thr Ser Pro Thr Val Arg Gly Trp
        195                 200                 205
Ala Asn Arg Pro Leu Phe Ile Ser Ser Phe Leu Val Ser Gln Arg Asp
    210                 215                 220
Met Phe Glu Ser Trp Lys Arg Ile Thr Gly Asp Lys Glu Glu Asp Trp
225                 230                 235                 240
Thr Ile Glu Tyr Glu Pro Thr Ala Val Arg Tyr Gln Arg Gly Ile Glu
                245                 250                 255
Arg Met His Lys Gly Asp Arg Tyr Gly Phe Ala Gln Ala Met Tyr Ala
            260                 265                 270
Arg Val Phe Tyr Pro Asn Gly Gly Gly Asp Tyr Glu Ser Ser Arg Gly
        275                 280                 285
Leu Asp Asn Asp Val Leu Gly Leu Pro Gln Glu Gly Leu Asp Glu Arg
    290                 295                 300
Thr Lys His Ala Lys Glu Met Ile Glu Ala Gly Tyr Ser Tyr Phe
305                 310                 315

<210> 33908
<211> 111
<212> PRT
<213> A.fumigatus

<400> 33908
Cys Leu Lys Ser Met Asp Ile Arg Pro Thr Asn Asp Ser Tyr Ser Tyr
1               5                   10                  15
Thr Gly Thr Ile Thr Lys Val Leu Asn Glu Asp Leu Pro Arg Val Cys
            20                  25                  30
Leu Thr Ile Ala Gly Lys Gly Thr His Pro Leu Gln Ser Pro Leu Val
        35                  40                  45
Leu Ala Asp Thr Phe Val Leu Phe Gln Thr Thr Leu Gly Thr Met Ser
    50                  55                  60
Ile Ile Ile Ala Ser Ala Ala Lys Leu Arg Pro Ala Gln Cys Ser Asp
65                  70                  75                  80
Ser Cys Ile Arg Ala Phe Ser Ala Leu Ser Ser Ala Ile Gln Val Ala
                85                  90                  95
Val Ser Asn Ala Thr Arg Ala Leu Asp Lys Pro Gly Val Ser Leu
            100                 105                 110

<210> 33909
```

<211> 161
<212> PRT
<213> A.fumigatus

<400> 33909
Ala Phe Ser Arg Arg Phe Tyr Asn Ala Tyr Ser Val Trp Val Arg Thr
1 5 10 15
Ser Leu Ile Thr Asn Val Val Arg Leu Ile Glu Ile Ala Val Glu Ala
20 25 30
Val Val Ile Gln Gly Asn Ile Asn Val Asp Asp Val Ser Ile Leu Lys
35 40 45
Arg Ala Leu Ile Gly Asp Ala Val Thr Asp Cys Leu Val Asp Gly Cys
50 55 60
Thr Tyr Gly Phe Arg Lys Met His Val Val Glu Arg Arg Arg Ile Gly
65 70 75 80
Leu Arg His Ile Arg Leu Gly Pro Phe Pro Leu Leu Phe Pro Asn Glu
85 90 95
Lys Thr Ala Thr Tyr Ile Thr Leu Gln Ala Cys Leu Val His Asn Phe
100 105 110
Ile Asp Val Val Gly Arg Asn Thr Trp Ser Asp Leu Pro Arg Gly Asn
115 120 125
Val Gln His Leu Ser Ser Gln Thr Ala Asp Leu Pro His Pro Phe Leu
130 135 140
Leu Phe Leu Ile Gln Asp Gly Asp Val Val Thr Ala Tyr Lys Leu Leu
145 150 155 160
Leu

<210> 33910
<211> 396
<212> PRT
<213> A.fumigatus

<400> 33910
Ile Arg Ser Thr Arg Ala Ala Arg Phe Leu Phe Leu Leu Cys Ala Asp
1 5 10 15
Ser Ser Asp Gln Ser Glu His Lys Ala Ile His Lys Ser Lys Ser Asn
20 25 30
Ile Leu Ser Asn Leu Phe Pro Pro Lys Val Val Ser Glu Pro Asp Pro
35 40 45
Ala Thr Gly His Phe Asn Pro Phe Pro Ser Phe Gln Phe Thr Gly Ser
50 55 60
Leu Arg Pro Val Tyr Pro Leu Ser Pro Met Arg Thr Val Pro Lys Ser
65 70 75 80
Ile Pro His Pro Asp Tyr Ala Lys Asp Gly Ile Pro Arg Ser Glu Gln
85 90 95
Lys Phe Val Gly Arg His Asn Ile Thr Ile Leu Asn Lys Glu Gln Gln
100 105 110
Glu Gly Met Arg Lys Val Cys Arg Leu Ala Arg Glu Val Leu Asp Ile
115 120 125
Ala Ala Arg Glu Val Arg Pro Gly Val Thr Thr Asp Tyr Ile Asp Glu
130 135 140
Val Val His Lys Ala Cys Leu Glu Arg Asn Val Ser Gly Cys Leu Phe
145 150 155 160
Val Arg Lys Glu Gln Arg Lys Arg Ser Gln Ser Asn Met Ser Gln Ser
165 170 175

```
Tyr Pro Ser Pro Leu Asn Tyr Met His Phe Pro Lys Ser Val Cys Thr
            180                 185                 190
Ser Val Asn Glu Thr Ile Cys His Gly Ile Pro Asp Gln Arg Pro Leu
        195                 200                 205
Glu Asp Gly Asp Ile Ile Asn Ile Asp Val Thr Leu Tyr His Asn Gly
    210                 215                 220
Phe His Gly Asp Leu Asn Glu Thr Tyr Tyr Val Gly Asp Lys Ala Arg
225                 230                 235                 240
Ala Asn Pro Asp Ala Val Arg Val Val Glu Thr Ser Arg Glu Cys Leu
                245                 250                 255
Glu Lys Ala Ile Glu Leu Val Lys Pro Gly Met Leu Phe Arg Glu Pro
            260                 265                 270
Gly Asn Val Ile Glu Lys Leu Ala Lys Ser Arg Asn Cys Ser Val Val
        275                 280                 285
Lys Ser Tyr Cys Gly His Gly Ile Asn Gln Leu Phe His Cys Ala Pro
    290                 295                 300
Asn Val Pro His Tyr Ala Lys Asn Lys Ala Val Gly Thr Ala Lys Pro
305                 310                 315                 320
Gly Met Cys Phe Thr Ile Glu Pro Met Ile Asn Ile Gly Thr His Arg
                325                 330                 335
Asp Arg Thr Trp Pro Asp Asp Trp Thr Ser Thr Thr Ala Asp Gly Ser
            340                 345                 350
Leu Ser Ala Gln Phe Glu His Thr Leu Leu Val Thr Glu Asp Gly Val
        355                 360                 365
Glu Val Leu Thr Ala Arg Leu Pro Asp Ser Pro Gly Gly Pro Ile Pro
    370                 375                 380
Met Pro Val Thr Glu Asp Ala Lys Thr Ala Glu Asn
385                 390                 395
```

<210> 33911
<211> 99
<212> PRT
<213> A.fumigatus

<400> 33911

```
Lys Gln Ile Phe Leu Ser Ala Ala Asp Gln Thr Ile Ile Val Ala Ser
1               5                   10                  15
Tyr Gly Gln Ile Gly Ser Asp Leu Lys Ala Leu Asn Leu Thr Ser Trp
            20                  25                  30
Val Ala Thr Ser Tyr Phe Ile Thr Leu Ala Ser Phe Gln Pro Leu Tyr
        35                  40                  45
Gly Lys Leu Ser Asp Ile Phe Gly Arg Arg Ala Cys Leu Leu Phe Ser
    50                  55                  60
Tyr Phe Val Phe Gly Leu Gly Cys Leu Phe Cys Gly Leu Ala Arg Asn
65                  70                  75                  80
Ile His Glu Leu Ile Ala Ala Arg Val Arg Pro Ile Glu Cys Leu Ser
                85                  90                  95
Asp Leu Glu
```

<210> 33912
<211> 153
<212> PRT
<213> A.fumigatus

<400> 33912

```
Ser Glu Phe Ser Tyr Leu Ile Lys Asp Asp Ile Cys Phe Leu Cys Ile
1               5                  10                  15
Cys Asp Arg Ser Tyr Pro Arg Lys Leu Ala Phe Thr Tyr Leu Glu Asp
            20                  25                  30
Leu Ala Thr Glu Phe Thr Thr Thr Tyr Ser Pro Ser Gln Tyr His Ser
        35                  40                  45
Pro Thr Leu Arg Pro Tyr Ala Phe Val Glu Phe Asp Thr Phe Ile Gln
    50                  55                  60
Arg Thr Lys Lys Ile Tyr Gln Asp Ser Arg Ala Ser Gln Asn Leu Asp
65                  70                  75                  80
Arg Leu Asn Asp Glu Leu Arg Asp Val Thr Lys Val Met Thr Lys Asn
                85                  90                  95
Ile Glu Asp Leu Leu Tyr Arg Gly Asp Ser Leu Glu Arg Met Gly Glu
            100                 105                 110
Leu Ser Gly Arg Leu Arg Glu Asp Ser Lys Arg Tyr Lys Lys Ala Ala
        115                 120                 125
Val Arg Ile Asn Trp Glu Leu Leu Ile Lys Gln Val Ser Cys Leu His
    130                 135                 140
Thr Arg Glu Ile Arg Glu Ile Pro Phe
145                 150
```

<210> 33913
<211> 62
<212> PRT
<213> A.fumigatus

<400> 33913

```
Lys Leu Leu Phe Asp Thr Ser Leu Asp Ser Gly Glu Ala Thr Gln Ala
1               5                  10                  15
Thr Tyr Leu Leu Cys Thr Gly Thr Ala Phe Leu Ser Ile Ser Leu Ser
            20                  25                  30
Ile Gln Ser Asp Val Leu Leu Gly Phe Cys Pro His Gln Pro Ser Ser
        35                  40                  45
Thr Trp Tyr Ile Ala Gln Ile Cys Glu Asn Leu Ser Ile Ser
    50                  55                  60
```

<210> 33914
<211> 211
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (82),(84),(96),(99),(109)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33914

```
Thr Gln Glu Phe Ala Glu Val His Pro Gly Thr Glu Val Ser Arg Gly
1               5                  10                  15
Pro Arg Val Phe Pro Lys Thr Glu Asn Phe Arg Glu Arg Tyr Asp Pro
            20                  25                  30
Leu Leu Glu Gln Phe Thr Lys Leu Leu Met Arg Asp Gly Lys Leu Ser
        35                  40                  45
Lys Ala Gln Lys Val Cys Thr Ser Leu Glu Ile Arg Gln Val Ala Gly
    50                  55                  60
Ala Asn Leu Val Asp Val Gln Asn Met Ser Phe Ile Leu Asp His Leu
```

65 70 75 80
Arg Xaa Ala Xaa Pro Pro Gln Pro His Pro Lys Arg Arg Leu Leu Xaa
85 90 95
Gly Pro Xaa Ser Pro Gln Leu Leu Leu Asn Pro Val Xaa Tyr Leu Thr
100 105 110
Leu Ile Val Asp Ser Val Ala Pro Leu Ile Lys Ile Arg Gln Gln Lys
115 120 125
Gly Ile Ala Gly Gly Gly Ala Ala Val Gln Ile Pro Val Pro Leu Met
130 135 140
Gln Arg Gln Arg Arg Arg Thr Ala Ile Arg Trp Ile Ile Asp Ala Ser
145 150 155 160
Asp Lys Arg Arg Asp Ser Ser Phe Ala Gln Arg Val Ala His Glu Leu
165 170 175
Val Ala Val Ala Glu Gly Arg Ser Gly Val Trp Asp Arg Arg Glu Ala
180 185 190
Val His Lys Leu Gly Val Ala Gly Arg Ser Asn Leu Gly Leu Val Thr
195 200 205
Gln Arg Arg
210

<210> 33915
<211> 278
<212> PRT
<213> A.fumigatus

<400> 33915
Asn Pro Arg Tyr Pro Gln Phe Arg Gln Ile Val Ser Leu Ala Ala Arg
1 5 10 15
His Pro Pro Gly Ser Val Asn Val Val Val Ile Leu Cys Thr Ile Asp
20 25 30
Gln His Tyr Pro His Asn Phe Phe Ile Trp Pro Ser His Leu Ser Asn
35 40 45
Gln Ser Asp Ala Arg Thr Pro Gln Thr Asp Ser Asn Ala Pro Ile Leu
50 55 60
Gln Pro Pro Cys Arg Phe Val Leu Arg Pro Thr Arg Gln Pro Leu Ile
65 70 75 80
Ser Pro Ala Gln Gln Leu Cys Gly Asp Pro Pro Gln Pro Arg Arg Arg
85 90 95
Ser Pro Ala Pro Ser Ser Ser Ser Pro Thr Thr Asn Asp Val Leu Ser
100 105 110
Ile Gly Arg Val Ala Thr Ser Glu Ser Val Leu Phe Phe Ser Gln Asn
115 120 125
Ser Leu Pro Val Glu Thr Val Pro Ser Asn Ala Val Gly Arg Thr Val
130 135 140
Ala Arg Ile Ala Ser Ala Thr Gly Ala Tyr Glu Gln Glu Leu Glu His
145 150 155 160
Asp Gly His Asp Gln Ser Phe Glu Leu Glu Glu Phe His Thr Arg Asn
165 170 175
Arg Tyr Pro Leu Val Thr Arg Glu Arg Thr Ser Ser Asn His Phe Val
180 185 190
Ser Leu Glu Ser Asp Ser His Glu Gln Val Gln Glu Ser Glu Lys Tyr
195 200 205
Thr Pro Pro Gly Glu Lys Ser Gly Gln Asp His Arg Ala Asn Asn Pro
210 215 220
Arg Val Arg Phe Trp Ala Glu Ala Leu Arg Arg Arg Gln Ser Pro Lys
225 230 235 240

```
Glu Ser Ala Arg Gly Gln Arg Thr Ala Lys Met Lys Phe Ser His Ser
                245                 250                 255
Ile Gln Phe Asn Ala Val Pro Asp Trp Ser Ala Tyr Tyr Ile Ala Tyr
            260                 265                 270
Ser Asn Leu Lys Lys Leu
        275
```

<210> 33916
<211> 538
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (332),(346)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33916

```
Tyr Ile Ala Pro Ala Asn Ala Asn Ala Tyr Arg Ile Tyr Ser Leu Glu
1               5                   10                  15
Gln Gln Ala Arg Lys Ala Asn Gly Gln Ala Gln Ser Asp Val Glu Ser
            20                  25                  30
Ala Pro Leu Leu Ser Glu Thr Pro Thr Pro Glu Ala Val Phe Arg Arg
        35                  40                  45
Ala Leu Asn Ala Glu Leu Glu Lys Ile Cys Ser Phe Tyr Glu Val Lys
    50                  55                  60
Glu Ser Glu Ile Leu Lys Glu Val Glu Asp Val Val Arg Asp Thr Glu
65                  70                  75                  80
Glu Tyr Ser Ser Lys Thr Asp Gly Ala Asp Val Asp Pro Met Ser Asp
                85                  90                  95
Ala Met Ile Lys Ser Arg Arg Met Ser Ser Asn Ser Arg Pro Arg Thr
            100                 105                 110
Ser Gly Ser Tyr Arg Asp Tyr Ala Glu Glu Glu Thr Glu Asp Asp Asp
        115                 120                 125
Asp Ala Ala Asp Ser Asp Asp Glu His His Pro Pro Thr Gly Gln Gly
    130                 135                 140
Gly Val Pro Ser Ser Gly Arg Ser Arg Ser Asp Leu Ser Asp Ser Arg
145                 150                 155                 160
Phe Met Ala Asp Ser Arg Ile Leu Gly Phe Asp Arg Arg Gly Ser Gly
                165                 170                 175
Gly His Asp Glu His Cys Lys Asp Pro Gly Phe Leu Glu Leu Tyr Asn
            180                 185                 190
Glu Gly Leu Ser Leu Arg Gln Arg Ala Val Asn Ala Tyr Val Ser Leu
        195                 200                 205
Cys Gly Leu Lys Ser Tyr Ile Gln Leu Asn Lys Thr Gly Phe Ser Lys
    210                 215                 220
Ala Leu Lys Lys Phe Asp Lys Ile Leu Asp Cys Asn Leu Arg Arg Glu
225                 230                 235                 240
Tyr Met Ser Ser Thr Val Ser Pro Ala Tyr Pro Phe Thr Asp Ser Thr
                245                 250                 255
Met Lys Lys Ile Asp Asp Ala Ile Gly Arg Val Glu Gln Leu Tyr Ala
            260                 265                 270
Asp Leu Ile Thr Gly Gly Asp Leu Ala Leu Ala Lys Arg Glu Leu Arg
        275                 280                 285
Leu His Leu Lys Lys His Val Val Trp Glu Arg Asn Thr Val Trp Arg
    290                 295                 300
```

```
Glu Met Ile Gly Ile Glu Arg Lys Ala Gln Ala Ala Asn Val Gly Ile
305                 310                 315                 320
Arg Arg Thr Leu Leu Gly Met Asp Glu Asp Pro Xaa Thr Ala Arg Gln
                325                 330                 335
Gln Gly Asp Tyr Pro Glu Ala Ala Ala Xaa Lys Ile Lys Thr Pro Phe
            340                 345                 350
Gly Arg Tyr Ser Val Pro Glu Trp Leu Cys Ser Leu Ser Phe Gly Thr
        355                 360                 365
Leu Ile Val Ile Leu Ala Val Phe Ile Ile Leu Leu Tyr Ala Pro Ile
    370                 375                 380
Met Asp Lys Pro Glu Gln Gln Asn Cys Leu Ala Met Leu Val Phe Val
385                 390                 395                 400
Ser Leu Leu Trp Ala Thr Glu Val Ile Pro Leu Phe Val Thr Ser Leu
                405                 410                 415
Leu Ile Pro Phe Leu Val Val Met Leu Arg Ile Met Lys Ser Ala Asp
            420                 425                 430
Lys Pro Tyr His Arg Leu Gly Pro Lys Asp Ala Thr Gly Ala Ala Phe
        435                 440                 445
Ser Ala Met Trp Thr Pro Val Ile Met Leu Leu Leu Gly Gly Phe Thr
    450                 455                 460
Ile Ala Ala Ala Leu Ser Lys Tyr Asp Ile Ala Arg Arg Met Ala Met
465                 470                 475                 480
Phe Val Leu Ser Arg Ala Gly Ser Asn Pro Lys Val Val Leu Leu Thr
                485                 490                 495
Asn Met Phe Val Ser Met Phe Leu Ser Met Trp Ile Ser Asn Val Ala
            500                 505                 510
Ser Pro Val Leu Cys Tyr Ser Ile Ile Gln Val Gly Leu Leu Phe Gln
        515                 520                 525
Glu Lys Ile Phe Phe Cys Leu Gly Thr Cys
    530                 535
```

<210> 33917
<211> 60
<212> PRT
<213> A.fumigatus

<400> 33917

```
Asn Pro Tyr Leu Ser Ile Tyr Thr Tyr Leu Leu Pro Leu Pro Leu Gly
1               5                   10                  15
Ile His Ser Met Lys Ile Thr Arg Gly Ser Phe Val Ser Met Phe Asn
            20                  25                  30
Thr Glu Ala Val Ser Arg Ser Tyr Ser Ala Gln Val Ile Ala Ser Thr
        35                  40                  45
Pro Thr Ala Phe Gly Ser Leu Gly Ile Gly Thr Thr
    50                  55                  60
```

<210> 33918
<211> 184
<212> PRT
<213> A.fumigatus

<400> 33918

```
Thr Ser Phe Gly Leu Ser Ser Arg Pro Leu Leu Pro Tyr Thr Ser Leu
1               5                   10                  15
Gly Arg Ile Phe Thr Phe Gly Ile Phe Ala Leu Asn Tyr Val Ala Met
            20                  25                  30
```

```
Val Pro Ser Ala Asn Leu Leu Gly Phe Ala Gly Arg Arg Val Asp Lys
        35                  40                  45
Glu Ala Ala Pro Arg Phe Leu Gly Ile Leu Leu Asp Thr Thr Leu Ser
    50                  55                  60
Ser Val Val Glu Ile Val Leu Phe Arg Val Leu Ile His Asn Asp Arg
65                  70                  75                  80
Gly Gly Asn Leu Ile Pro Val Ile Gln Ala Ala Ile Leu Gly Ser Ile
                85                  90                  95
Leu Ala Asn Leu Leu Leu Cys Leu Gly Leu Cys Phe Phe Phe Gly Gly
            100                 105                 110
Ile Arg Arg His Glu Gln Ser Phe His Glu Ala Ile Ser Glu Val Gly
        115                 120                 125
Ser Gly Leu Leu Leu Val Ala Gly Phe Gly Leu Leu Ile Pro Ser Ala
    130                 135                 140
Phe Tyr Ala Ala Leu Ser Ser Ser Ser Thr Lys Ala Ile Ile Thr Pro
145                 150                 155                 160
Glu Asp Leu Asp His Ser Thr Leu Val Ile Ser Arg Ser Thr Ser Val
                165                 170                 175
Ile Leu Leu Val Ala Phe Ile Met
            180
```

<210> 33919
<211> 177
<212> PRT
<213> A.fumigatus

<400> 33919

```
His Arg Pro Val Ile Gln Arg Gly Arg Leu Asp Arg Arg Arg Gln Arg
1                   5                   10                  15
Ser Ser Thr Pro Pro Arg Pro Gly Gly Arg Gln Thr Pro Leu Leu Arg
            20                  25                  30
Arg Arg Pro Ala Arg His Asp Arg Arg Gly Val Pro Pro Ser Arg Leu
        35                  40                  45
Gly Arg Gly Pro Asn Gln His Gln Arg Arg His Arg Ser Arg Arg Ser
    50                  55                  60
Gly Arg Arg Ser Gly Ala Lys Asn Gln Asp Arg Gln Ser Val Arg Asp
65                  70                  75                  80
Arg Gly Asp Ala Glu Arg Arg Gly Lys Ala Pro Pro Ala Arg Leu Arg
                85                  90                  95
Met Gly Ser Gln Trp Arg Leu Ser Asp Arg Leu Arg His Arg Ala Gln
            100                 105                 110
Arg Pro Gly Ala Pro Cys Ala Pro Asp Ala Arg Cys Arg Pro Pro Ser
        115                 120                 125
Pro Leu Cys Ala Val Cys Arg Ala Lys Pro Ala Asp Asp Pro Ala Cys
    130                 135                 140
Ala Phe Gln His Ser Ala Gln Thr Ile Gln Pro Cys Cys Val Asp Pro
145                 150                 155                 160
Glu Leu Ser Ser Cys His Lys Pro Glu Asn His Arg Pro Leu Phe Ser
                165                 170                 175
Ala
```

<210> 33920
<211> 497
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (27)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33920

```
Ser Leu Gln Leu Ser Glu Gly Gly Ile Arg Lys Gly Asp Asp Phe Tyr
1               5                  10                  15
Phe Ala Tyr Asp Leu Arg Pro Ser Ser Thr Xaa Tyr Val Glu Asn Asn
            20                  25                  30
Arg Gly Gly Leu Cys Gln Ala Val Val Gln Ala Leu Lys Asp Gly Gly
        35                  40                  45
Met Asn Pro Ile Asn Leu Gly Ala Ile His Thr Pro Ala Leu Thr Phe
    50                  55                  60
Phe Ala Leu Gln Lys Ala Lys Gly Ser Ile Met Val Thr Gly Ser His
65                  70                  75                  80
Ile Pro Phe Asp Arg Asn Gly Tyr Lys Leu Asn Thr Ser Lys Gly Glu
                85                  90                  95
Leu Leu Lys Lys Asp Glu Gln Pro Ile Asn Asn Val Val Glu Val Val
            100                 105                 110
Arg Glu Glu Leu Leu Ser Gln Pro Phe Ala Asp Ser Leu Phe Asn Glu
        115                 120                 125
Gln Gly Met Leu Arg Gly Ser Pro Ser Asn Leu Pro Pro Val Ala Pro
    130                 135                 140
Glu Gly Arg Ala Ala Tyr Ile Gln Arg Tyr Leu Asp Phe Phe Gln Gly
145                 150                 155                 160
Glu Ser Leu Lys Gly Met Lys Ile Leu Val Tyr Gln His Ser Ala Val
                165                 170                 175
Gly Arg Asp Val Val Val Glu Ile Leu Glu Lys Leu Gly Ala Glu Ala
            180                 185                 190
Thr Ser Ala Gly Arg Ser Glu Thr Phe Val Pro Ile Asp Thr Glu Ala
        195                 200                 205
Ile Asp Glu Ala Gln Leu Ser Thr Val Gln Lys Leu Tyr Asp Ser Thr
    210                 215                 220
Gly Gln Ser Phe Asn Ala Val Val Ser Thr Asp Gly Asp Ser Asp Arg
225                 230                 235                 240
Pro Leu Leu Leu Ala Pro Glu Gly Asp Lys Leu Arg Phe Phe Gly Gly
                245                 250                 255
Asp Leu Leu Gly Met Ile Val Ala Glu Phe Leu Gln Ala Asp Ser Val
            260                 265                 270
Val Val Pro Ile Ser Thr Asn Asp Ala Ile Asp Arg Gly Ala Leu Ala
        275                 280                 285
Gly Ala Leu Glu Pro Lys Thr Lys Ile Gly Ser Pro Tyr Val Ile Ala
    290                 295                 300
Gly Met Gln Ser Ala Val Glu Lys Arg Arg Gln Arg Val Cys Gly Trp
305                 310                 315                 320
Glu Ala Asn Gly Gly Phe Leu Thr Gly Ser Asp Ile Glu Arg Asn Gly
                325                 330                 335
Gln Val Leu Pro Ala Leu Pro Thr Arg Asp Ala Val Leu Pro Leu Leu
            340                 345                 350
Cys Ala Leu Phe Ala Ala Gln Ser Arg Leu Met Thr Leu Pro Ala Leu
        355                 360                 365
Phe Ser Thr Leu Pro Lys Arg Phe Ser Arg Ala Ala Leu Ile Arg Asn
    370                 375                 380
Phe Pro Arg Ala Thr Ser Leu Lys Ile Ile Asp Arg Phe Ser Val Arg
```

```
385                 390                 395                 400
Glu Gly Gly Ala Gln Thr Ala Glu Glu Gln Ser Arg Arg Ile Arg Gln
                405                 410                 415
Glu Leu Glu Gly Ile Phe Ser Ala Arg His Gly Phe Ser Ser Ile Ser
            420                 425                 430
Arg Ile Asp Tyr Thr Asp Gly Val Arg Val Ile Phe Glu Asn Gly Asp
        435                 440                 445
Val Ala His Phe Arg Pro Ser Gly Asn Ala Asp Glu Leu Arg Ile Tyr
    450                 455                 460
Ala Val Ala Asp Thr Gln Glu Arg Ala Asp Gln Ile Ala Thr Glu Gly
465                 470                 475                 480
Val Ala Glu Pro Glu Gly Leu Leu Arg Arg Leu Glu Arg Leu Val Gln
                485                 490                 495
Ala
```

<210> 33921
<211> 128
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14),(17),(41)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33921

```
Arg Pro Cys Thr Val Arg Leu Thr Val Ile Asp Thr Pro Xaa Phe Gly
1               5                   10                  15
Xaa Tyr Val Asn Asn Arg Asp Ser Trp Gln Pro Ile Ile Glu Phe Leu
            20                  25                  30
Asp Asp Gln His Glu Ser Tyr Met Xaa Gln Glu Gln Gln Pro Arg Arg
        35                  40                  45
Thr Asp Lys Ile Asp Met Arg Val His Ala Cys Leu Tyr Phe Ile Arg
    50                  55                  60
Pro Thr Gly His Thr Leu Lys Pro Leu Asp Ile Glu Val Met Lys Arg
65                  70                  75                  80
Leu Ser Ser Arg Val Asn Leu Ile Pro Val Ile Ala Lys Ala Asp Thr
                85                  90                  95
Leu Ser Pro Thr Asp Leu Ala Arg Phe Lys Gln Arg Val Arg Leu Pro
            100                 105                 110
Asp Lys Trp Pro Pro Pro Leu Val Asp Thr Asp Ser Pro Asn Leu Phe
        115                 120                 125
```

<210> 33922
<211> 188
<212> PRT
<213> A.fumigatus

<400> 33922

```
Val Lys Ala Val Val Glu Ala Gln Gly Ile Lys Ile Tyr Thr Pro Pro
1               5                   10                  15
Ile Glu Glu Asp Asp Glu His Ala Ala Ala His Ala Arg Ser Leu Met
            20                  25                  30
Ala Ala Met Pro Phe Ala Val Ile Gly Ser Glu Lys Asp Val Lys Thr
        35                  40                  45
```

```
Asn Asp Asn Arg Val Val Lys Gly Arg Gln Tyr Ala Trp Gly Val Ala
    50                  55                  60
Glu Val Glu Asn Glu Asp His Cys Asp Phe Lys Lys Leu Arg Ser Ile
65                  70                  75                  80
Leu Ile Arg Thr His Met Leu Asp Leu Ile His Thr Thr Glu Glu Gln
                85                  90                  95
His Tyr Glu Ala Tyr Arg Ala Gln Gln Met Glu Thr Arg Lys Phe Gly
            100                 105                 110
Glu Ala Arg Pro Arg Lys Leu Asp Asn Pro Lys Phe Lys Glu Glu Glu
        115                 120                 125
Glu Ala Leu Arg Lys Arg Phe Thr Glu Gln Val Lys Val Glu Glu Gln
    130                 135                 140
Arg Phe Arg Gln Trp Glu Gln Lys Leu Ile Ser Glu Arg Asp Arg Leu
145                 150                 155                 160
Asn Lys Asp Leu Glu Ala Thr His Ala Ala Tyr Val His Leu Phe Leu
                165                 170                 175
His Phe Leu Phe His Arg Glu Val Trp Arg Gln Cys
            180                 185

<210> 33923
<211> 337
<212> PRT
<213> A.fumigatus

<400> 33923
Leu Asp Ser Gly Pro Val Asn Ala Val Thr Phe Ser Ser Tyr Pro Gly
1               5                   10                  15
Thr Tyr Val Leu Thr Gly Ser Ser Asp Arg Ala Ile His Leu Ser Arg
            20                  25                  30
Ala Ile Pro Asn Ser Ser Thr Thr Gly His Glu Thr Thr Ser Pro Ile
        35                  40                  45
Gln Lys Tyr Glu Ala His Gly Tyr Ser Val Leu Asp Val Ala Val Ala
    50                  55                  60
Ala Asp Asn Ala Arg Phe Thr Ser Val Gly Gly Asp Arg Gln Val Phe
65                  70                  75                  80
Leu Trp Asp Val Glu Gln Gly Ile Thr Thr Arg Arg Trp Ala Gly His
                85                  90                  95
Asn Ala Arg Val Glu Ala Val Gln Phe Ala Gly Glu Gly Asp Ser Val
            100                 105                 110
Val Val Ser Gly Lys Ser Pro Ser Ser Val Thr Pro Val Cys Ser Val
        115                 120                 125
Val Glu Ala Ser Gly Ile Leu Thr Phe Leu Ser Gly Ser Ala Asp Thr
    130                 135                 140
Thr Ile Asn Leu Trp Asp Thr Arg Ser Lys Ser His Lys Pro Ile Gln
145                 150                 155                 160
Thr Leu Thr Glu Ala Gly Asp Thr Val Ser Ser Leu His Val His Met
                165                 170                 175
Pro Thr Tyr Ser Ile Ala Ser Gly Ser Tyr Asp Gly Arg Ala Arg Ile
            180                 185                 190
Tyr Asp Val Arg Met Gly Arg Thr Thr Val Asp Val Leu Ala His Pro
        195                 200                 205
Val Thr Ser Val Arg Cys Ser Ala Asp Gly Asn Ala Leu Leu Val Ser
    210                 215                 220
Thr Leu Asp Ser Arg Ile Arg Met Leu Asp Arg Ala Asp Gly Lys Leu
225                 230                 235                 240
Leu Lys Ala Phe Gly Gly Glu Glu Gly Leu Glu Gln Ser Thr Thr Gly
```

```
                245                 250                 255
Ala Arg Val Thr Tyr Arg Asn Ser Glu Leu Arg Ile Arg Ser Val Phe
            260                 265                 270
Ala Lys Gly Asp Ala Val Val Leu Ser Gly Ser Glu Ser Glu Lys Gly
        275                 280                 285
Asp Pro Ser Pro Gln Ala His Val Phe Ala Trp Asp Val Leu Ser Gly
    290                 295                 300
Glu Val Ile Ala Thr Val Arg Ala Gly Asn Gly Val Lys Val Val Ser
305                 310                 315                 320
Cys Val Ala Trp His Ser Ser Thr Gly Val Glu Ala Pro Arg Leu Arg
                325                 330                 335
Lys
```

<210> 33924
<211> 262
<212> PRT
<213> A.fumigatus

<400> 33924

```
Ala Lys Arg Val Ser Cys Gln Pro Arg Gly Glu Asp Lys Lys Trp Trp
1               5                   10                  15
Glu Tyr Arg Glu Leu Phe Asn Thr His Ser Ala Arg Arg Arg Leu Ile
            20                  25                  30
Cys Val Val Gly Met Ala Cys Phe Gly Gln Leu Ser Gly Asn Ser Ile
        35                  40                  45
Thr Ser Tyr Tyr Leu Pro Asn Met Val Ala Asn Ala Gly Ile Thr Asp
    50                  55                  60
Glu Lys Thr Lys Leu Met Leu Asn Gly Ile Tyr Pro Ala Ile Cys Leu
65                  70                  75                  80
Ile Ala Ala Val Thr Gly Ala Arg Leu Thr Asp Lys Ile Gly Arg Arg
                85                  90                  95
Pro Leu Met Ile Tyr Ser Leu Leu Phe Cys Ser Val Ala Phe Ala Val
            100                 105                 110
Ile Thr Gly Thr Ser Lys Met Ala Thr Asp His Pro Asp Asn Thr Asp
        115                 120                 125
Ala Ala Asn Thr Ala Ile Ala Phe Ile Tyr Leu Phe Gly Ile Val Phe
    130                 135                 140
Ser Phe Gly Trp Thr Pro Leu Gln Ser Met Tyr Ile Ala Glu Thr Leu
145                 150                 155                 160
Thr Thr Thr Thr Arg Ala Lys Gly Thr Ala Phe Gly Asn Leu Met Ser
                165                 170                 175
Ser Ile Ser Ser Thr Ile Ile Gln Tyr Ala Ser Gly Pro Ala Phe Asp
            180                 185                 190
Lys Ile His Tyr Tyr Phe Tyr Leu Val Phe Val Gly Trp Asp Leu Val
        195                 200                 205
Glu Ala Val Val Ile Trp Phe Tyr Phe Pro Glu Thr Lys Glu Arg Thr
    210                 215                 220
Leu Glu Glu Leu Ala Glu Val Phe Glu Ala Pro Asn Pro Val Lys Lys
225                 230                 235                 240
Ser Leu Gln Lys Arg Asp Ile His Ser Val Leu Asn Thr Leu Glu Val
                245                 250                 255
Gln Gly Asp Thr Lys Ala
            260
```

<210> 33925

<211> 66
<212> PRT
<213> A.fumigatus

<400> 33925
Ser Thr Gly Val Leu Lys Ala Val Lys Asn Val Asn Glu Thr Ile Gly
1 5 10 15
Pro Ala Leu Ile Lys Glu Asn Ile Asp Val Lys Asp Gln Ser Lys Val
20 25 30
Asp Glu Phe Leu Asn Lys Leu Asp Gly Thr Ala Asn Lys Ser Asn Leu
35 40 45
Gly Ala Asn Ala Thr Pro Arg Val Ser Leu Ala Val Ala Lys Gly Trp
50 55 60
Cys Cys
65

<210> 33926
<211> 65
<212> PRT
<213> A.fumigatus

<400> 33926
Arg Gly Arg Pro Glu Ile Lys Ala Leu Leu Ser Ile Ser Ser Leu Tyr
1 5 10 15
Lys Tyr Leu Asn Leu Tyr Ile Ser Met Met Glu Glu Lys Ile Val Ser
20 25 30
Tyr Ser Met Leu Ile Tyr Ile Thr Ala Ile Ser Pro Leu His Leu Arg
35 40 45
Ser His Gly Ile Asn Lys Val Ala Cys Ser Trp Pro Glu Ala Tyr Gln
50 55 60
Asp
65

<210> 33927
<211> 168
<212> PRT
<213> A.fumigatus

<400> 33927
Ser Arg Val Cys Leu Glu Ser Pro Arg Pro Ser Thr Thr Asn Leu Leu
1 5 10 15
Thr Leu Val Val Ile Ala Leu Ala Asp Ala Phe Ile Gln Ser Ser Val
20 25 30
Lys Asn Gly Ser Ser Pro Phe Lys Val Ala Trp Tyr Lys Ser Asp Thr
35 40 45
Thr Glu Ser Ile Asn Tyr Leu Lys Asp Asp Thr Ile Asp Val Gly Ile
50 55 60
Thr Tyr Thr Pro Ala Ala Glu Glu Ile Ala Ile Lys Gln Gly Val Ala
65 70 75 80
Lys Ser Pro Ala Trp Tyr Ala Trp Arg Asp His Phe Leu Leu Val Gly
85 90 95
Pro Pro Ser Asn Pro Ala Gly Leu Lys Lys Ala Asp Asp Ile Lys Thr
100 105 110
Met Phe Ser His Ile Tyr Ala Val Ala Ser Ala Gly Asp Ala Ala Asn
115 120 125
Val Ala Ile Pro Val Arg Phe Leu Thr Arg Tyr Asp Lys Ser Ala Thr

```
    130                 135                 140
Asn Ile Lys Glu Ser Gln Leu Trp Ile Glu Ile Gly Gln Val Ser His
145                 150                 155                 160
Pro Phe His Leu Asp Leu Thr Pro
                165
```

<210> 33928
<211> 120
<212> PRT
<213> A.fumigatus

<400> 33928

```
Val Pro Trp Ala Thr Lys Tyr Ser Thr Trp Tyr His Gln Tyr Ile Ala
1               5                   10                  15
Tyr Pro Ile Gln Ala Leu Thr Ala Ala Ile Leu Leu Glu Glu Tyr Thr
            20                  25                  30
Ile Thr Asp Arg Gly Thr Tyr Leu Ser Ile Asp Gln Ala Leu Ala His
        35                  40                  45
Lys Thr Thr Ile Tyr Lys Ala Ala Thr Asp Asp Pro Ala Asp Pro Leu
    50                  55                  60
Leu Asn Pro Ala His Met Leu Val Gly Lys Lys Ala Ser Asn Met Lys
65                  70                  75                  80
Met Ala Asp Lys Phe Thr Gln Trp Val Ile Ser Ala Glu Gly Gln Ala
                85                  90                  95
Val Ile Thr Gly Phe Lys Lys Asn Gly Lys Gln Leu Tyr Thr Ala Ala
            100                 105                 110
Pro Ala Asn Lys Thr Ala Pro Phe
        115                 120
```

<210> 33929
<211> 132
<212> PRT
<213> A.fumigatus

<400> 33929

```
Arg Leu Ser Phe Val Tyr Asn Phe Asn Met Ile Asp Asp Thr Asn Asp
1               5                   10                  15
Phe Pro Gly Leu Pro Pro Phe Pro Ser Asp Ile Pro Thr Ala Pro Leu
            20                  25                  30
Leu Arg Leu Ser Leu Gln Lys Leu Leu Ala Arg Glu Ala Tyr Glu Val
        35                  40                  45
Gln Arg Leu Val Gln Ala Cys Glu Asp Leu Gly Phe Phe Tyr Leu Asp
    50                  55                  60
Leu Gly Gly Cys Glu Glu Gly Arg Gly Leu Leu Asn Gly Ala Asp Lys
65                  70                  75                  80
Leu Phe Gln Thr Gly Glu Asn Leu Leu Asn Leu Ser Leu Glu Glu Lys
                85                  90                  95
Leu Gln Tyr Asp Phe Ser Ser Leu Asn Ser Tyr His Gly Tyr Lys Ala
            100                 105                 110
Gln Gly Ala Ala Val Val Asp Arg Gln Gly Asn Leu Asp Arg Asn Glu
        115                 120                 125
Phe Tyr Asn Val
    130
```

<210> 33930
<211> 215

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (182),(193),(195),(211)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33930
Val Ser Lys Asn Asp Ile Leu Gly Met Thr Pro Gln Leu Pro Ala Pro
1 5 10 15
Ala Ile Leu His Gln Ala Arg Pro Thr Leu Glu Ser Phe Ile Arg Ala
20 25 30
Ser His Ser Ile Val Thr Leu Ile Leu Ile Leu Leu Asn Asp Ser Leu
35 40 45
Gly Leu Pro Pro Ala Thr Leu Pro Asn Leu His Arg Leu Asn Ala Leu
50 55 60
Ser Gly Asp Gln Val Arg Phe Ile Lys Ser Pro Pro Gln Pro Ala Asp
65 70 75 80
Asp Arg Arg Thr Ala Leu Gly Glu His Thr Asp Phe Gly Ser Ile Thr
85 90 95
Ile Leu Phe Asn Arg Leu Gly Gly Leu Gln Val Phe Pro Pro Gly Ala
100 105 110
Asp Ala Gln Trp Val Tyr Val Arg Pro Leu Pro Gly His Ala Ile Val
115 120 125
Asn Leu Gly Asp Ala Met Val Lys Phe Thr Asn Gly Leu Phe Arg Ser
130 135 140
Asn Ile His Arg Val Val Ala Pro Pro Gly Gln Gln Ala Asp Trp Thr
145 150 155 160
Arg Tyr Ser Leu Val Tyr Phe Ser Arg Pro Glu Asp Asp Val Leu Leu
165 170 175
Lys Arg Trp Lys Gly Xaa Ile Asp Ser Glu Leu Lys Lys Arg Asp Val
180 185 190
Xaa Glu Xaa Thr Asn Asn Arg Glu Leu Asp Ile Arg Val Arg Trp Gly
195 200 205
Lys Arg Xaa Ile Gly Gly Arg
210 215

<210> 33931
<211> 81
<212> PRT
<213> A.fumigatus

<400> 33931
Gly Asn Arg Arg Asn Ala Ile Cys Phe Pro Asn Leu Leu Ile Phe Pro
1 5 10 15
Glu Lys Lys Thr Trp Ile Leu Leu Phe Gln Pro Leu Ser Gly Leu Pro
20 25 30
Arg Ile Ser Pro Ile Glu Tyr Asn Asn Cys Ser Phe Gln Ser Thr Leu
35 40 45
Lys Pro Gln Ile Ser Pro Pro Trp Cys Gly Arg Tyr Phe Asn Ser Gln
50 55 60
Lys Trp Asn Thr Leu Phe Asn Ser Ser Pro Gln His Asn Gln Val Phe
65 70 75 80
Ile

<210> 33932
<211> 229
<212> PRT
<213> A.fumigatus

<400> 33932
Arg Gly Leu Pro His Gly Gln Leu Lys Tyr Ser Ser Ile Val Ile Thr
1 5 10 15
Thr Ser His Asn Pro His Ser Thr Phe Leu Asn Ser Gly Pro Val Ile
20 25 30
Gly Lys Ser Tyr Ser Cys Thr Met Thr Thr Pro Lys Pro His Ile Ala
35 40 45
Arg Glu Leu Leu Ala Arg Ala His Ser Pro Asp Thr Ala Glu Gln Leu
50 55 60
Phe Thr Glu Arg Val Lys Gln Lys Pro Leu Tyr Leu Arg Pro Thr Ser
65 70 75 80
Pro Thr Pro Ala Asp Asn Arg Glu Arg Arg Arg Met His Arg Val Arg
85 90 95
Lys Lys Glu Tyr Phe Leu Arg Lys Gln Lys Pro Lys Pro Leu Ser Ala
100 105 110
Arg Glu Lys Arg Ile Ser Gly Leu Tyr Asp Leu Pro Lys Glu Glu Cys
115 120 125
Lys Tyr Ser Ile Phe Gln Glu Leu His Lys Leu Trp Val Gly Tyr Met
130 135 140
Gln Glu Ile Leu Asp Leu Arg Val Arg Lys Val Pro Ile Thr Pro Gln
145 150 155 160
Ser His Gly Ser Lys Leu Val Thr Ala Asp Phe His Gly Ala Glu Val
165 170 175
Glu Val Val Arg Ser Arg Cys Pro Gly Arg Val Gly Val Lys Gly Ile
180 185 190
Val Ala Arg Asp Thr Lys Phe Thr Phe Met Ile Val Thr Lys Lys Asp
195 200 205
Glu Val Lys Ser Glu Tyr Pro Phe Thr Asn Pro Phe Ile Arg Pro Glu
210 215 220
Lys Glu Ser Phe Gly
225

<210> 33933
<211> 385
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33933
Leu Ser Leu Cys Arg Leu Arg Lys Arg Lys Pro Arg Arg Pro Asp Lys
1 5 10 15
Gly Asn Glu Asn Gly Asn Val Gln Ala Asn Asp Glu Asn Val Gln Glu
20 25 30
Val Pro Ser Asn Arg Arg Arg Ala Asn Ser Val Glu Pro Arg Arg Ser
35 40 45
Ser Asp Xaa Ala Glu Lys Arg Trp Gln Glu Gln Asp Ala Thr Glu Ala

```
    50                  55                  60
Leu Arg Arg Ala Ile Gln Ser Ser Pro Ala Arg Asn Leu Glu Asn His
65                  70                  75                  80
Pro Gly Ala Ala Val Asp Glu Asn Ser Leu Thr Pro Lys Pro Val Arg
                85                  90                  95
Arg Ala Leu Phe His Ser Ala Gln Asn Glu Gly Cys Pro Leu Lys Ser
            100                 105                 110
Leu Gly Gly Ser Ala Leu Asn Ser Pro Arg Arg Ser Pro Arg Val Asn
        115                 120                 125
Cys Arg Asp Pro Gly Gln Lys Pro Gln Asp Lys Glu Asn Ala Ala Ile
    130                 135                 140
Asp Lys Asp Leu Glu Gly Leu Phe Glu Ser Pro Pro Phe Glu Tyr Asp
145                 150                 155                 160
Leu Pro Ala Ser Pro Thr Pro Arg Arg Arg Asn Gln Arg Ser Asn Leu
                165                 170                 175
Leu Gly Glu Lys Arg Asn Ser Leu Pro Cys Ile Ser Pro Leu Ser Lys
            180                 185                 190
Ala Arg Leu Glu Gly Ser Thr Asp Ile Thr Pro Thr Lys Leu Ser Ala
        195                 200                 205
Gln Lys Leu His Arg Ile Gln Gly Ser Thr Thr Val Thr Pro Arg Gln
    210                 215                 220
Asn Lys Thr Pro Lys Ser Leu Arg Ser Leu Gly Pro Asp Met Pro Ser
225                 230                 235                 240
Met Pro Asp Gly Gly Phe Asn Val Glu Ala Leu Asp Asn Ile Asp Ser
                245                 250                 255
Met Leu Val Asn Ile Phe Glu Asp Val Pro Ser Ser Ala Gln Cys Asp
            260                 265                 270
Ser Leu Phe Ser Phe Gly Gln Ser Lys Asp Ser Thr Ser Gly Asn Trp
        275                 280                 285
Ser Gly Trp Ile Glu Ser Asp Tyr Ile Ser Leu Asn Gly Ser Asp Val
    290                 295                 300
Gln Glu Ala Asn Gly Glu Gln Arg Thr Ser Arg Arg Ser Gly Ala Ser
305                 310                 315                 320
Glu Asp Glu Asp Leu Ile His Ala Ile Leu Ser Asp Pro Asp Ile Gln
                325                 330                 335
Lys Asn Ala His Phe Asp Pro Phe Gln Phe Thr Ser Ala Ser Ala Leu
            340                 345                 350
Asp Ser Gly Ile Phe Gly Ser Asp Ser Val Thr Ala Asp Val Val Thr
        355                 360                 365
Leu Gly Ser Arg Ser Lys Thr Ala Glu Glu Pro Ala Ser Lys Glu Ser
    370                 375                 380
Ala
385
```

<210> 33934
<211> 195
<212> PRT
<213> A.fumigatus

<400> 33934

```
Ser His Arg His Ile Val Tyr Ile Asp Thr Ile Pro Arg Ala Val Val
1               5                   10                  15
Ala Met Pro Pro Pro Leu Pro Ser Gln His Arg Gly Met Thr Ala Asn
            20                  25                  30
Pro Leu Lys Pro Val Lys Arg Tyr Arg Pro Gly Lys Pro Ile Ala Glu
        35                  40                  45
```

```
Glu Pro Ser Ser Ser Glu Glu Asp Asp Asp Ala Glu Glu Glu Val Gln
    50                  55                  60
Glu Gln Glu Arg Arg Arg Gln Glu Gln Gln Arg Gln Arg Gln Gln Ala
65                  70                  75                  80
Pro Lys Ala Thr Ser Phe Pro Ala Gly Ala Ala Ala Ala Gly Arg Ile
                85                  90                  95
Thr Lys Gly Val Gln Asp Val Lys Ile Glu Glu Asp Asp Asp Glu Glu
            100                 105                 110
Gly Phe Val Thr Glu Glu Glu Glu Glu Ala Pro Pro Lys Val Thr Ala
        115                 120                 125
Arg Val Ala Gly Asp Arg Ala Glu Thr Val Thr Ala Gln Ala Gly Gly
    130                 135                 140
Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Ser
145                 150                 155                 160
Glu Glu Glu Glu Ser Ser Ser Glu Glu Glu Ala Pro Arg Arg Val Leu
                165                 170                 175
Leu Arg Pro Thr Phe Ile Lys Lys Asp Leu His His Arg Leu Lys Thr
            180                 185                 190
Arg Val Thr
        195
```

<210> 33935
<211> 91
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (56)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 33935
Ser Lys Gln Lys Lys Asp Glu Met Ser Leu Gln Thr Pro Arg Ile Leu
1               5                   10                  15
Pro Ala His Leu His Ala Phe His Pro Ser Ser Gly Ser Ser Thr His
            20                  25                  30
Thr Val Arg Ile Leu Gly Thr Val Thr Ala Leu His Gly Asp Thr Ala
        35                  40                  45
Ser Ile Thr Cys Gly Asn Asn Xaa Asp Val Thr Leu Ile Leu Lys Ser
    50                  55                  60
Asp Ser His Leu Gln Met Gly Lys Leu Val Glu Val Val Gly Lys Val
65                  70                  75                  80
Thr Glu Leu Glu Gly Gly Gln Val Arg Ala Ser
                85                  90
```

<210> 33936
<211> 77
<212> PRT
<213> A.fumigatus

```
<400> 33936
Ala Pro Ala Arg Leu Ser Val Trp Phe Gly Phe Gly Ser Ser Leu Leu
1               5                   10                  15
Pro Ser Cys Cys Trp Cys Cys Ser Ser Ser Cys Pro Ile Met Pro Val
            20                  25                  30
Asp Leu Ile Pro Pro Pro Arg Ile Ser Leu Pro Phe Arg Pro Ser Pro
```

```
        35                  40                  45
Pro Asn Leu Phe Ser Pro Asp Val Pro Pro Val Thr Pro Leu Asn Gln
    50                  55                  60
Pro Pro Ile Pro Glu Thr Pro Pro Val Val Thr Ala Cys
65                  70                  75
```

<210> 33937
<211> 79
<212> PRT
<213> A.fumigatus

```
<400> 33937
Ser Leu Leu Trp Ser Ile Gly Ser Ile Leu Glu Lys Asn Pro Ala Thr
1               5                   10                  15
Ser Cys Gly Leu Cys Asn Gln Gln Glu Gly Asn Val Ser Glu Val Ile
            20                  25                  30
Leu Pro Asp Ser Leu Pro Leu Val His Gln Pro Pro Ile Met Leu Ser
        35                  40                  45
Leu Leu Thr Thr Leu Pro Cys Cys Leu Tyr Ile Ser Ser Leu Pro Ala
    50                  55                  60
Val Trp Thr Val Val Pro Phe Arg Pro Ser Asn Asn Leu Thr Ala
65                  70                  75
```

<210> 33938
<211> 154
<212> PRT
<213> A.fumigatus

```
<400> 33938
Ile Glu Ser Val Phe Lys Ile Val Thr Thr Val Tyr Phe Ser Ser Phe
1               5                   10                  15
Glu Gly Pro His Thr Pro Arg Gly Gly Glu Arg Tyr Asn Lys Ser Val
            20                  25                  30
Asn Leu Asn Asp Ser Ser Leu Ile Tyr Leu Ser Leu Ile Cys Trp Lys
        35                  40                  45
Asn Ser Ala Lys Arg His Ile Pro Ser Asn Met Ala Pro Thr Thr Thr
    50                  55                  60
Thr Lys Thr Lys Ala Val Glu Glu Ser Val Arg Cys Cys Pro Leu Ala
65                  70                  75                  80
Ile Val Thr Ala Val Glu Trp Pro Leu Thr Ser Arg Gln Pro Gln Pro
                85                  90                  95
Lys Glu Thr Ala Pro Pro Lys Lys Leu Ser Glu Met Ser Glu Val Ile
            100                 105                 110
Asp Lys Ala Thr Phe Asp Gln Ile Leu Glu Met Asp Asp Asp Glu Asp
        115                 120                 125
Met Asp Phe Ser Lys Gly Ile Val Tyr Gly Phe Phe Asp Gln Ala Glu
    130                 135                 140
Thr Thr Phe Asp Lys Met Asp Lys Ala Leu
145                 150
```

<210> 33939
<211> 100
<212> PRT
<213> A.fumigatus

<400> 33939

```
His Ser His His Arg Glu Lys Lys Asp Leu Asp Glu Leu Ser Ser Leu
1               5                  10                  15
Gly His Phe Leu Lys Gly Ser Ser Ala Thr Leu Gly Leu Lys Lys Val
            20                  25                  30
Lys Asp His Cys Glu Lys Ile Gln His Tyr Gly Ala Gly Lys Asp Glu
        35                  40                  45
Thr Gly Thr Val Asp Glu Pro Asp Glu Glu Lys Ser Leu Gln Asn Ile
    50                  55                  60
Lys Glu Thr Leu Ala Glu Val Lys Lys Asp Tyr Lys Glu Val Ala Gln
65                  70                  75                  80
Phe Leu Arg Ser Tyr Tyr Gly Glu Thr Lys Ser Pro Glu Val Thr Ser
                85                  90                  95
Pro Ser Ser Lys
            100
```

<210> 33940
<211> 400
<212> PRT
<213> A.fumigatus

<400> 33940

```
Lys Thr Gln Asn Tyr Lys Asp Asp Met Tyr Glu Val Lys Gly Arg Gly
1               5                  10                  15
Ala Thr Gly Glu Ala Asp Gly Glu Thr Gly Glu Asp Glu Ser Tyr Gly
            20                  25                  30
Leu Lys Pro Met Asn Cys Pro Gly His Cys Leu Leu Phe Lys Ser Gln
        35                  40                  45
Asn His Ser Tyr Arg Glu Leu Pro Ile Arg Tyr Ala Asp Phe Ser Pro
    50                  55                  60
Leu His Arg Asn Glu Ile Ser Gly Ala Leu Ser Gly Leu Thr Arg Val
65                  70                  75                  80
Arg Arg Phe His Gln Asp Asp Gly His Ile Phe Cys Arg Pro Gln Gln
                85                  90                  95
Ile Lys Gly Glu Ile Ala Ser Ala Leu Gly Phe Val Asp Met Val Met
            100                 105                 110
Thr Thr Phe Gly Leu Gly Pro Tyr Arg Leu Val Leu Ser Thr Arg Pro
        115                 120                 125
Glu Lys Asp Phe Ile Gly Ser Leu Glu Leu Trp Asp Ser Ala Glu Ala
    130                 135                 140
Gln Leu Arg Glu Ala Leu Asp Asn Ser Gly Arg Glu Trp Ala Met Asn
145                 150                 155                 160
Glu Gly Asp Gly Ala Phe Tyr Gly Pro Lys Ile Asp Ile Gln Leu Gln
                165                 170                 175
Asp Gln Ala Gly Lys Tyr His Gln Leu Ser Thr Ile Gln Leu Asp Met
            180                 185                 190
Asn Leu Pro Gln Arg Phe Gly Leu Glu Tyr Gln Val Ala Glu Gly Glu
        195                 200                 205
Glu Asp Tyr Asn Pro Ala Thr Pro Gly Arg Ala Thr Pro Val Leu Val
    210                 215                 220
His Arg Ala Asn Phe Gly Ser Leu Glu Arg Phe Leu Ala Leu Leu Ile
225                 230                 235                 240
Glu Gln Tyr Ala Gly Arg Trp Pro Phe Trp Leu Ser Pro Arg Gln Gly
                245                 250                 255
Ile Ile Leu Thr Val Asn Gln Asp Glu Ala Val Leu Gln Gln Ala Gln
            260                 265                 270
Glu Ala Ala Ala Lys Ile Ser Gly Tyr Arg Pro Leu Val Ala Gly Gln
```

```
        275                 280                 285
Asp Asn Ala Thr Ser Pro Lys Pro Leu Ser Ser Val Asp Ser Thr Tyr
    290                 295                 300
Leu Ile Asp Val Asp Thr Ser Ser Gln Thr Leu Gly Lys Lys Ile Gln
305                 310                 315                 320
Arg Ala Lys Gln Met Lys Tyr Asn Leu Ile Phe Ile Leu Gly Pro Lys
                325                 330                 335
Asp Val Ala Asp Ser Ser Ile Thr Val Asp Val Thr Gly Gln Met Gln
            340                 345                 350
Thr Lys Thr Asp Val Asn Gly Gln Lys Leu Lys Glu Val Leu Ala Thr
        355                 360                 365
Arg Leu Gly Glu Asn Ala Leu Gln Asn Pro Arg Ala Val Arg Leu Lys
    370                 375                 380
Val Asp Glu Val His Asp Leu Leu Val Gln Leu Glu Lys Gln Phe Val
385                 390                 395                 400
```

<210> 33941
<211> 139
<212> PRT
<213> A.fumigatus

<400> 33941

```
Leu Asp Val Leu Ala His Arg Thr Ser Met Gly Val Ile Thr Gly Asp
1               5                   10                  15
Met Phe Val Asn Gly Lys Ala Leu Asp Thr Ser Phe Gln Arg Lys Thr
            20                  25                  30
Gly Tyr Val Gln Gln Gln Asp Leu His Leu Glu Thr Ala Thr Val Arg
        35                  40                  45
Glu Ser Leu Arg Phe Ser Ala Leu Leu Arg Gln Pro Pro Thr Val Ser
    50                  55                  60
Ile Gln Glu Lys Tyr Asp Tyr Val Glu Glu Val Ile Arg Met Leu Arg
65                  70                  75                  80
Met Glu Glu Phe Ala Glu Ala Ile Val Gly Val Pro Gly Glu Gly Leu
                85                  90                  95
Asn Val Lys Gln Arg Lys Leu Leu Thr Ile Gly Val Glu Leu Ala Ala
            100                 105                 110
Lys Pro Lys Leu Leu Leu Phe Leu Asp Glu Pro Thr Arg Tyr Ala Ile
        115                 120                 125
Asp Gly Val His Asn Leu Met Asp Leu Val Lys
    130                 135
```

<210> 33942
<211> 263
<212> PRT
<213> A.fumigatus

<400> 33942

```
Ile Ser Gly Leu Asp Ser Gln Ser Ser Trp Ala Ile Cys Ser Phe Leu
1               5                   10                  15
Arg Arg Leu Ala Asp Ser Gly Gln Ala Ile Leu Cys Thr Ile His Gln
            20                  25                  30
Pro Ser Ala Ile Leu Phe Gln Glu Phe Asp Gln Leu Leu Phe Leu Ala
        35                  40                  45
Lys Gly Gly Lys Thr Val Tyr Phe Gly Pro Val Gly Asp Asn Ser Arg
    50                  55                  60
Thr Leu Leu Asp Tyr Phe Glu Ser Asn Gly Ala Arg Lys Cys Gly Glu
```

65 70 75 80
Leu Glu Asn Pro Ala Glu Tyr Met Ile Glu Val Val Asn Ala Lys Thr
85 90 95
Asn Asp Lys Gly Gln Tyr Trp Tyr Asp Val Trp Asn Gln Ser Pro Glu
100 105 110
Ser Arg Ala Val Gln Glu Glu Ile Asp Arg Ile His Glu Glu Arg Lys
115 120 125
Ala Thr His Gln Glu Asp Asp Asp Gln Ala His Thr Glu Phe Ala Met
130 135 140
Pro Phe Trp Phe Gln Leu Tyr Val Val Ser Arg Arg Val Phe Gln Gln
145 150 155 160
Tyr Trp Arg Met Pro Ala Tyr Ile Ala Ser Lys Trp Gly Leu Ala Ile
165 170 175
Met Ala Gly Leu Phe Ile Gly Phe Ser Phe Phe Asp Ala Lys Ala Ser
180 185 190
Leu Ala Gly Met Gln Thr Val Leu Tyr Ser Leu Phe Met Val Cys Ser
195 200 205
Val Phe Ala Ser Leu Val Gln Gln Val Gly Ser Arg Ile Thr Thr Ser
210 215 220
Arg Cys Val Thr Met Ile Leu Thr Ala Phe Ser Arg Ser Cys Pro Tyr
225 230 235 240
Leu Leu Pro Asn Asp His Cys Thr Arg Cys Ala Asn Asp Pro Ala Arg
245 250 255
Arg Thr His Gly Arg Pro Ser
260

<210> 33943
<211> 255
<212> PRT
<213> A.fumigatus

<400> 33943
Ile Met Pro Leu Phe Val Thr Gln Arg Ser Leu Tyr Glu Val Arg Glu
1 5 10 15
Arg Pro Ser Lys Ala Tyr Ser Trp Lys Ala Phe Leu Ile Ala Asn Ile
20 25 30
Val Val Glu Leu Pro Tyr Gln Ile Val Met Gly Ile Leu Thr Phe Ala
35 40 45
Cys Tyr Tyr Phe Pro Ile Val Gly Ala Ser Gln Ser Thr Glu Arg Gln
50 55 60
Gly Leu Val Leu Leu Tyr Cys Ile Gln Phe Tyr Val Tyr Ala Ser Thr
65 70 75 80
Phe Ala His Met Val Ile Ala Ala Ile Pro Asp Thr Gln Thr Ala Ser
85 90 95
Pro Ile Val Ile Leu Leu Phe Ser Met Met Leu Thr Phe Cys Gly Val
100 105 110
Met Gln Ser Pro Ser Ala Leu Pro Gly Phe Trp Ile Phe Met Tyr Arg
115 120 125
Leu Ser Pro Phe Thr Tyr Trp Val Gly Gly Met Gly Ala Thr Gln Leu
130 135 140
His Asp Arg Asn Val Ile Cys Ser Ala Thr Glu Leu Ser Ile Phe Asp
145 150 155 160
Pro Pro Ala Asn Gln Thr Cys Tyr Glu Tyr Met Ala Glu Tyr Met Lys
165 170 175
Leu Ala Gly Gly Gln Leu Gln Asn Pro Asn Ala Thr Ser Glu Cys Lys
180 185 190

```
Phe Cys Ser Leu Thr Val Ala Asp Gln Tyr Leu Ala Gly Ser Glu Ile
        195                 200                 205
Glu Trp Ser Gln Arg Trp Arg Asn Phe Gly Ile Ile Trp Ala Tyr Val
    210                 215                 220
Val Phe Asn Ile Phe Met Ala Thr Val Leu Tyr Tyr Leu Phe Arg Val
225                 230                 235                 240
Arg Lys Trp Asp Ile Ala Ser Ile Lys Ala Arg Phe Gly Arg Lys
                245                 250                 255

<210> 33944
<211> 149
<212> PRT
<213> A.fumigatus

<400> 33944
Gly Thr Phe Val Asn Gly Lys Val Ile Phe Asp Asn Pro Arg Gly Arg
1               5                   10                  15
Leu Pro Leu Gln Trp Met Lys Thr Ile Pro Asn Glu Gly Leu Ile His
            20                  25                  30
Phe Arg Asp Val Phe Asn Arg Ser His Leu Leu Pro Thr Thr His Gln
        35                  40                  45
Ala Leu Leu Asp Ile Met Ser Thr Asn Thr Tyr Asp Phe Glu Lys Pro
    50                  55                  60
Trp Arg Ala Arg Glu Phe Leu Ala Arg Ile Ile Gly Phe Gly Leu Ile
65                  70                  75                  80
Leu Ser Glu Gly Ala Ala His Lys Lys Gln Arg Lys Ala Leu Thr Pro
                85                  90                  95
Ala Phe Asn Ile Lys Asn Ile Arg Ser Leu Tyr Ser Leu Met Trp Glu
            100                 105                 110
Lys Thr Gly Leu Phe Leu Asp Glu Leu Glu Lys Glu Ile Arg Gln Asn
        115                 120                 125
Pro Met Glu Gly Thr Ser Pro Glu Asp Gly Val Gly Lys Val Glu Met
    130                 135                 140
Ser Met Trp Ala Arg
145

<210> 33945
<211> 127
<212> PRT
<213> A.fumigatus

<400> 33945
Asn Cys Asn Met Ser Leu Glu Ser Ala Leu Ser Ile Ala Arg Gln Tyr
1               5                   10                  15
Ala Gln Ser Ser Leu Ala Gln Leu Pro Glu Ser Ala Gln Asn Ala Leu
            20                  25                  30
Leu Asn Pro Leu Val Gln Lys Ala Leu Thr Ala Ala Leu Val Tyr Gly
        35                  40                  45
Ala Leu Arg Gln Thr Asn Arg Leu Leu Ser Gln Trp Ser Ile Asn Asn
    50                  55                  60
Trp Gln Arg Ala His Pro Trp Gln Gly Asp Arg Glu Leu Val Leu Val
65                  70                  75                  80
Ser Gly Gly Cys Ser Gly Ile Gly Lys Gln Ile Met Glu Asp Leu Ser
                85                  90                  95
Arg Lys Gly Ile Arg Val Val Ile Leu Asp Ile Asn Glu Pro Asn Phe
            100                 105                 110
```

```
Gln Leu Arg Lys Asn His Gln Ser Pro Leu Val Cys Ala Ile Asp
        115                 120                 125

<210> 33946
<211> 195
<212> PRT
<213> A.fumigatus

<400> 33946
Arg Ser Lys Ala Arg Asn Val His Phe Phe Lys Ala Asn Ile Thr Asn
1               5                  10                  15
Ser Glu Ser Ile Arg Ala Val Ala Glu Lys Ile Arg Gln Lys Leu Gly
            20                  25                  30
Asp Pro Thr Val Leu Val Asn Asn Ala Gly Val Gly Tyr Asp Gly Thr
        35                  40                  45
Ile Leu Asp Glu Pro Glu Ala Lys Ile Arg Gln Thr Phe Glu Val Asn
    50                  55                  60
Thr Ile Ser His Phe Leu Met Val Arg Glu Phe Leu Pro Ser Met Ile
65                  70                  75                  80
Arg Gln Asn His Gly His Val Ile Thr Ile Ala Ser Met Ala Ser Phe
                85                  90                  95
Val Ala Leu Gly Glu Met Val Asp Tyr Cys Cys Thr Lys Ala Ser Ala
            100                 105                 110
Leu Ala Phe His Glu Gly Leu Thr Gln Glu Leu Arg Tyr Trp Tyr Gln
        115                 120                 125
Ala Arg Lys Val Arg Thr Arg Tyr Glu Ala Thr Phe Asp Leu Thr Gly
    130                 135                 140
Phe Gly Thr Asp Gln Met Lys Cys Tyr Ser Pro Thr Leu Gly Ser Tyr
145                 150                 155                 160
Ser Asp Asp Pro Thr Val Asp Arg Arg Gly Lys Pro Ile Gln Ala Ala
                165                 170                 175
Arg Asp Asp Thr Pro Gly Gly Ile Gly Cys Ser Gly Gln Ala Asp Pro
            180                 185                 190
His Ala Glu
        195

<210> 33947
<211> 213
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (43)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33947
Leu Ala Lys Phe Arg Ser Gly Arg Ile Arg Gly Ile Tyr Pro Gln His
1               5                  10                  15
Gln Pro Pro Ser Arg Glu Lys Pro Phe Pro Lys Leu Pro Met Ala Tyr
            20                  25                  30
Ala Ser Met Asp Phe Asp Leu Asp Pro Asn Xaa Gly Gln Glu Asp Leu
        35                  40                  45
Pro Leu Ser Tyr Arg Phe Thr Phe Leu Gly Ile Phe Ala Val Pro Ala
    50                  55                  60
Leu Ile Asp Ile Thr Leu Leu Thr Thr Ile Gly Arg Gly Leu Tyr Leu
```

```
65                  70                  75                  80
Thr Thr Phe Met Ser Asn Asp Glu Lys Thr Leu Ala Thr Thr Ala Leu
                85                  90                  95
Met Val Ala Leu Leu Leu Cys Gly Gly Phe Gly Gly Trp Ile Ser Ser
            100                 105                 110
Gly Gly Ser Tyr Tyr Leu Tyr Ala Met Ala Phe Pro Ala Met Ser Met
        115                 120                 125
Phe Val Leu Thr Arg Phe Ile Ala Gly Val Ala Val Val Ser Val Gly
    130                 135                 140
Gly Leu Phe Ala Phe Ile Gly Ile Gly Ile Ala Lys Gly Phe Val Ser
145                 150                 155                 160
Gly Val Val Phe Ser Ala Tyr Leu Val Met Leu Thr Ile Tyr Leu Met
                165                 170                 175
Thr Leu Ser Ala Leu Ser Ile Tyr Gln Leu Pro Gly Phe Gln Phe Gln
            180                 185                 190
Ser Val Gly Phe Cys Met His Arg Ile Thr Val Ile Asp Ala Asp Val
        195                 200                 205
Ile Arg Ala Ala Arg
    210
```

Sequence Listing

<210> 33948
<211> 786
<212> PRT
<213> A.fumigatus

<400> 33948

```
Cys Asp Gln Gly Arg Thr Val Ile Met Ser Cys Ile Pro Ile Leu Phe
1               5                   10                  15
Val Ser Pro Val Leu Thr Ile Trp Leu Gln His Asp Ile Ile Ile Tyr
            20                  25                  30
Pro Cys Val Leu Ala Val Phe Leu Thr Val Leu Leu Leu Gly Ala Arg
        35                  40                  45
Arg Val Ile Ala Lys Trp Asn Asn Trp Tyr Leu His Ile Pro Cys Ile
    50                  55                  60
Thr Asp Gly Glu Val Val Asp Trp Tyr Gln Arg Thr Tyr Leu Ala Ser
65                  70                  75                  80
Ala Ser Thr Asp Asp Ala Asp Lys Glu Leu Ala Ser Thr Ala Leu Ala
                85                  90                  95
Arg Gln Thr Leu Leu Ala Cys Val Gln Lys Glu Arg Lys Arg Trp Phe
            100                 105                 110
Trp Thr Arg Ser Thr Ala Asp Pro Phe Val Lys Arg Leu Ala Glu Gly
        115                 120                 125
Tyr Ser Ala Thr Met Phe Leu Leu Val Trp Tyr Cys Lys Phe Ser Arg
    130                 135                 140
Thr Lys Leu Pro Leu Ala Tyr Ser Pro Thr Trp Asn Leu Gln Leu Lys
145                 150                 155                 160
Ala Ala Val Asp Thr Met Gly Asp Met Gln Lys Gly Leu Lys Leu His
                165                 170                 175
Asn Ala Phe Leu His Trp Arg His Thr Gly Lys Asp Val Trp Gly Gly
            180                 185                 190
Ile Leu Tyr Phe Ile Ile Ala Leu Met Asp Lys Trp Thr Ala Leu Phe
        195                 200                 205
Thr Gly Glu Gly Leu Val Gly Leu Ser Ser Ala Ser Ser Glu Thr Tyr
    210                 215                 220
Arg Leu Ala Val Gly Phe Gly Leu Cys Tyr Tyr Leu Ile Gly Ala Val
225                 230                 235                 240
```

```
Ile Leu Asp Gly Val Ser Gln Pro Leu Trp Thr Leu Ala His Gln Arg
                245                 250                 255
Thr Pro Gln Pro Ile Pro Ser Leu Glu Phe Leu Arg Glu Ala Thr Arg
            260                 265                 270
Asn Asp Ala Arg Ala Arg Arg Ala Leu Tyr Trp Arg Asn Leu Leu Lys
        275                 280                 285
Phe Ser Phe Leu His Ile Trp Ala Val Ala Val Thr Cys Ala Leu Val
    290                 295                 300
Trp Ser Phe Glu Gly Ser Arg Ser Ala Thr Ile Met Tyr Leu Ala Tyr
305                 310                 315                 320
Val Gly Ala Tyr Thr Gly Leu Leu Trp Tyr Gln Tyr Asn Arg Ile Tyr
                325                 330                 335
Thr Gly Ser Arg Ser Asp Arg Ala Leu Thr Ala Gly Ala Ile Gly Gly
            340                 345                 350
Phe Val Ala Cys Ile Leu Leu Arg Val Leu Pro Arg Glu Phe Ala Tyr
        355                 360                 365
Ser Gly Val Ile Gly Leu Ala Val Gly Thr Trp Thr Thr Ala Ile Val
    370                 375                 380
Ser Phe Phe Arg Ala Asp Val Ala Trp Thr Arg Gly Gln Lys Leu Thr
385                 390                 395                 400
Ser Leu Asp Lys Asp Thr His Ala Val Thr Tyr Thr Cys Ser Thr Leu
                405                 410                 415
Glu Pro Asp Pro Asp Phe Ser Gln Ser Thr Leu Ser Asn Thr Phe Glu
            420                 425                 430
Ala Ile Arg Ala Leu Pro Ser Glu Leu Arg Tyr Lys Leu Asp Pro Ser
        435                 440                 445
Gln His Pro Gly Ala Glu Val Met Gln Ile Leu Leu Arg Ser Lys Ser
    450                 455                 460
Glu Ala Thr Thr Pro Pro Ser Leu Gln Gln Ala Phe Pro Gln Ser Glu
465                 470                 475                 480
Thr Ile Leu His Arg Thr Ala Glu Leu Trp Gln Ser Gly Glu Thr Val
                485                 490                 495
Val Glu Leu Val Ser Ala Arg His Leu Met Leu Pro Pro Gln Asp Pro
            500                 505                 510
Thr Met Arg Ala Ile Thr Gln Arg Ala Gly Asp Arg Leu His Ile Phe
        515                 520                 525
Ile Leu Ile Ser Leu Asp Leu Val Gly Asp Glu Trp Val Val Asn Ile
    530                 535                 540
Arg Arg Asn Cys Gln Ala Ile Ala Glu Thr Leu Val Tyr Val Thr Ala
545                 550                 555                 560
Glu Ser Arg Leu Gly Leu Ser Arg Asp His Ala Met Leu Ala Gln Leu
                565                 570                 575
Leu Ala Ala Gln His His Asp Ser Gly Thr Leu Ala Val Pro Glu Gly
            580                 585                 590
Ile Lys Arg Gln Leu Lys Ser Ser Pro Pro Glu Arg Lys Arg Val Ile
        595                 600                 605
Ala His Ala Gln Lys Thr Met Leu Arg His Leu Leu Leu Gly Met Asp
    610                 615                 620
Pro Asp Arg Glu Trp Asp Leu Met Pro Arg His Val His Ala Phe Leu
625                 630                 635                 640
Ile Glu Arg Ala Cys Gly Gln Pro Thr Arg Leu Ser Ala Pro Asp Val
                645                 650                 655
Glu Trp Ile Arg Cys His Pro Gly Thr Ala Asp Ala Val Glu Leu His
            660                 665                 670
Cys Leu Leu Ala Arg Ser Ser Leu Ser Thr Ser Leu Ala Val Leu Val
        675                 680                 685
```

```
Gly Gln Tyr Ala Gly Ala Ile Ala Ala His Asp Glu Asp Phe Gly Pro
    690                 695                 700
Arg Ser Asp Phe Arg Asp Ser Ser Tyr Asp Gln Leu Ile Thr Thr Val
705                 710                 715                 720
Ser Ser Glu Ile Glu Leu Lys Asn Lys Gly Phe Ala Glu Phe Met Arg
                725                 730                 735
Val Ala Val Ile Arg Phe Leu Gln Lys Ile Arg Thr Cys Ile Lys Phe
            740                 745                 750
Thr Val Leu Ser Leu Val Ala Asp Pro Glu Tyr Gln Arg Glu Leu Asn
        755                 760                 765
Tyr Ile Leu Arg Gly Gln Ser Leu Val Ile Ser Trp Pro Ile Thr Trp
    770                 775                 780
Ile Leu
785
```

<210> 33949
<211> 274
<212> PRT
<213> A.fumigatus

```
<400> 33949
Val Leu Glu Ala His Asp Val Asp Thr Phe His Val Pro Lys Ala Phe
1               5                  10                  15
Tyr Glu Lys His Pro Ser Lys Thr His Leu Lys Asp Leu Asp Glu Tyr
            20                  25                  30
Lys Lys Leu Tyr Asp Glu Ser Ile Arg Ser Pro Asp Thr Phe Trp Ala
        35                  40                  45
Arg Met Ala Arg Glu Leu Leu Thr Phe Asp Lys Asp Phe Gln Thr Thr
    50                  55                  60
His Ile Gly Ser Leu Glu Asn Gly Asp Asn Ala Trp Phe Val Glu Gly
65                  70                  75                  80
Arg Leu Asn Ala Ser Phe Asn Cys Val Asp Arg His Ala Ile Lys Asn
                85                  90                  95
Pro Asn Lys Val Ala Ile Ile Tyr Glu Ala Asp Glu Pro Asn Glu Gly
            100                 105                 110
Arg Ile Ile Thr Tyr Gly Glu Leu Leu Arg Glu Val Ser Arg Val Ala
        115                 120                 125
Trp Val Leu Lys Gln Arg Gly Val Lys Lys Gly Asp Thr Val Ala Ile
    130                 135                 140
Tyr Leu Pro Met Ile Pro Glu Ala Val Val Ala Phe Leu Ala Cys Ala
145                 150                 155                 160
Arg Ile Gly Ala Ile His Ser Val Val Phe Ala Gly Phe Ser Ser Asp
                165                 170                 175
Ser Leu Arg Asp Arg Val Leu Asp Ala Gly Ser Lys Val Val Ile Thr
            180                 185                 190
Thr Asp Glu Gly Lys Arg Gly Gly Lys Val Ile Gly Thr Lys Arg Ile
        195                 200                 205
Val Asp Glu Ala Leu Lys Gln Cys Pro Asp Val Thr Ser Val Leu Val
    210                 215                 220
Tyr Lys Arg Thr Gly Ala Glu Val Pro Trp Thr Asn Gly Arg Asp Thr
225                 230                 235                 240
Trp Trp His Glu Glu Val Glu Lys Tyr Pro Cys Tyr Leu Ala Pro Glu
                245                 250                 255
Ser Met Ser Ser Glu Gly Pro Pro Leu Pro Pro Leu His Leu Trp Phe
            260                 265                 270
Asp Trp
```

<210> 33950
<211> 172
<212> PRT
<213> A.fumigatus

<400> 33950
Ala Pro Lys Asp Pro Leu Phe Leu Leu Tyr Thr Ser Gly Ser Thr Gly
1 5 10 15
Lys Pro Lys Gly Val Met His Thr Thr Ala Gly Tyr Leu Leu Gly Ala
20 25 30
Ala Met Thr Gly Lys Tyr Val Phe Asp Ile His Asp Asp Asp Arg Phe
35 40 45
Phe Cys Gly Gly Asp Val Gly Trp Ile Thr Gly His Thr Tyr Val Val
50 55 60
Tyr Ala Pro Leu Leu Leu Gly Cys Ser Thr Val Val Phe Glu Ser Thr
65 70 75 80
Pro Ala Tyr Pro Asn Phe Ser Arg Tyr Trp Asp Val Ile Glu Lys His
85 90 95
Lys Val Thr Gln Phe Tyr Val Ala Pro Thr Ala Leu Arg Leu Leu Lys
100 105 110
Arg Ala Gly Asp Glu His Ile His His Lys Met Glu His Leu Arg Ile
115 120 125
Leu Gly Ser Val Gly Glu Pro Ile Ala Ala Glu Val Trp Lys Trp Tyr
130 135 140
Phe Glu Lys Val Gly Lys Glu Glu Ala His Ile Cys Asp Val Arg Thr
145 150 155 160
Gly Arg Pro Pro Ile Gln Pro Pro Val Leu Gln Arg
165 170

<210> 33951
<211> 105
<212> PRT
<213> A.fumigatus

<400> 33951
Cys Leu Lys Gln Thr Tyr Trp Gln Thr Glu Thr Gly Ser His Val Ile
1 5 10 15
Thr Pro Leu Gly Gly Ile Thr Ser Thr Lys Pro Gly Ser Ala Ser Leu
20 25 30
Pro Phe Phe Gly Ile Glu Pro Ala Ile Ile Asp Pro Val Ser Gly Glu
35 40 45
Glu Ile Ser Gly Asn Asp Val Glu Gly Val Leu Ala Phe Lys Gln Pro
50 55 60
Trp Pro Ser Met Ala Arg Thr Val Trp Gly Ala His Lys Arg Tyr Met
65 70 75 80
Asp Thr Tyr Leu Asn Val Tyr Lys Gly Tyr Tyr Val Arg Ser Phe Ile
85 90 95
Arg Thr Ile Pro Ala Arg Ala Leu Gly
100 105

<210> 33952
<211> 329
<212> PRT
<213> A.fumigatus

<400> 33952
Thr Arg Ala Val Gln Ser Ala Gln Arg Pro Cys Arg Asn Gly Thr Asn
1 5 10 15
Glu Ala Ser Tyr Val Val Ala Leu Val Asp Val Gln Val Cys Val His
20 25 30
Ile Ala Leu Val Gly Thr Pro His Gly Pro Gly His Ala Arg Pro Arg
35 40 45
Leu Leu Glu Ser Lys Asn Thr Leu Asp Ile Val Ala Arg Asp Leu Leu
50 55 60
Ala Gly Asp Gly Val Asp Asp Ser Gly Phe Asn Ala Glu Glu Gly Gln
65 70 75 80
Gly Cys Thr Ala Trp Leu Gly Gly Ser Asn Ser Thr Glu Gly Ser Asp
85 90 95
Asp Val Arg Ala Gly Leu Ser Leu Pro Val Gly Leu Phe Gln Ala Leu
100 105 110
Ala Leu Glu His Gly Gly Leu Asn Arg Gly Ser Ala Ser Pro Tyr Val
115 120 125
Ala Asn Val Ser Phe Leu Leu Ser Asp Leu Leu Lys Val Pro Leu Pro
130 135 140
Asp Leu Ser Gly Asn Trp Phe Thr Asp Gly Ala Gln Asp Thr Gln Val
145 150 155 160
Leu His Leu Val Val Asp Val Leu Ile Thr Gly Thr Leu Gln Gln Thr
165 170 175
Gln Ser Cys Gly Gly Asp Ile Glu Leu Gly Asp Leu Val Leu Leu Asn
180 185 190
Asp Ile Pro Val Ala Gly Glu Val Gly Val Gly Gly Ser Ala Phe Glu
195 200 205
Asn Asp Gly Arg Ala Thr Lys Lys Lys Arg Arg Ile Asp Asp Val Gly
210 215 220
Val Ser Gly Asp Pro Ala Asn Val Thr Thr Ala Glu Glu Ala Ile Val
225 230 235 240
Val Met Asn Val Lys Asp Val Leu Ala Gly His Arg Gly Thr Lys Glu
245 250 255
Val Ala Gly Ser Ser Val His Asn Thr Leu Gly Leu Thr Ser Arg Thr
260 265 270
Arg Gly Val Glu Glu Glu Glu Gly Val Leu Arg Ser Ser Ser Thr Gln
275 280 285
Glu Arg Asp Ser Arg Gly Thr Ser Arg Pro Pro His Ala Thr Lys Cys
290 295 300
His Ala His Trp Ser Lys Gly Leu Arg His Gln Cys Ala Cys Arg Pro
305 310 315 320
Ala His Trp Ser His Arg Gly Thr Ala
325

<210> 33953
<211> 232
<212> PRT
<213> A.fumigatus

<400> 33953
Arg Arg Lys Arg Gly Ser Phe Gly Ala His Arg Leu Arg Ser Glu Ile
1 5 10 15
Ala Gly Val Leu Leu Asp Leu Leu Met Pro Pro Ser Val Thr Pro Ile
20 25 30
Gly Pro Arg Asp Phe Gly Thr Ser Ala Leu Val Asp Gln His Thr Gly

```
        35                  40                  45
His Ile Gly Ala Leu Leu Glu Gly Leu Ile Asp Asn Ala Leu Gly Ala
    50                  55                  60
Asn His Leu Ala Thr Thr Leu Thr Leu Val Arg Gly Asp Asn Asp Leu
65                  70                  75                  80
Gly Ser Ser Ile Lys Asp Thr Val Thr Gln Gly Val Arg Gly Glu Thr
                85                  90                  95
Ser Glu Asp Asn Gly Val Asn Gly Thr Asp Thr Gly Thr Gly Glu Lys
            100                 105                 110
Ser His Asn Gly Phe Arg Asn His Gly Lys Val Asp Arg Asp Ser Val
        115                 120                 125
Thr Leu Leu Asp Thr Pro Leu Leu Gln Asp Pro Gly Asn Ala Gly Asp
    130                 135                 140
Phe Ala Glu Glu Leu Ala Val Gly Asn Asp Ala Ala Leu Ile Arg Leu
145                 150                 155                 160
Ile Gly Leu Val Asp Asp Arg Asp Leu Ile Arg Val Leu Asp Gly Met
                165                 170                 175
Thr Ile His Ala Val Glu Arg Gly Ile Gln Ala Thr Phe Asp Glu Pro
            180                 185                 190
Gly Ile Val Ser Ile Leu Glu Arg Pro Asp Val Arg Gly Leu Glu Val
        195                 200                 205
Phe Val Glu Ser Glu Gln Leu Thr Gly His Ala Gly Pro Glu Arg Val
    210                 215                 220
Arg Ala Thr Asp Arg Leu Val Val
225                 230
```

<210> 33954
<211> 360
<212> PRT
<213> A.fumigatus

<400> 33954

```
Arg Arg Ser Asp Thr Met Pro Ile Ile Ser Pro Phe Glu Ser Ser Ile
1               5                   10                  15
Ala Lys Pro Gly Gln Gly Lys Val Val Leu Ser Leu Leu Pro Pro Ser
            20                  25                  30
Ile Pro Thr Leu Thr Thr Leu Thr Tyr Lys Tyr Pro Leu Lys Leu Leu
        35                  40                  45
Thr Arg Ala Pro Gly Phe Val Pro Gln Ser Ser Gly Leu Thr Gly Ser
    50                  55                  60
Ser Arg Pro Val His Leu Tyr Leu Leu Thr Tyr Gly Gly Gly Leu Leu
65                  70                  75                  80
Pro Gly Asp His Ile Asp Val Ser Ile Thr Leu Asp Pro Arg Thr Arg
                85                  90                  95
Leu Val Val Thr Thr Pro Gln Gly Ser Thr Lys Ile Phe Lys Thr Glu
            100                 105                 110
Pro Thr Ala Ser Val Lys Gly Gln Arg Gly Thr Pro Ala Arg Ala Leu
        115                 120                 125
Thr Asp Lys Ser Arg Gln Leu Val Asn Val Gln Val Ala Ser Glu Ala
    130                 135                 140
Ala Leu Cys Tyr Leu Pro Asp Pro Ala Val Pro Phe Lys Asp Ser Arg
145                 150                 155                 160
Tyr Glu Gln Val Gln Ser Phe Thr Val Asp Gly Ala Ser Lys Asp His
                165                 170                 175
Lys Arg Ser Ser Leu Cys Val Leu Asp Trp Val Thr Gln Gly Arg Thr
            180                 185                 190
```

```
Ser Arg Gly Glu Asn Trp Asp Phe His Leu Trp Lys Gly Lys Asn Glu
        195                 200                 205
Val Trp Thr His Asp Ala Thr Gly Lys Lys Lys Leu Leu Leu Arg Asp
    210                 215                 220
Ser Ile Ile Leu Asp Asp Glu Ile Asp Ala Val Cys Leu Glu Asn Asp
225                 230                 235                 240
Ser Glu Thr Phe Ser Arg Asn Asn Leu Ile Arg Glu Arg Thr Arg Pro
                245                 250                 255
His Gly Ile Ile Gly Thr Leu Ile Leu Tyr Gly Pro Val Phe Glu Asp
            260                 265                 270
Leu Ala Ser Phe Phe Met Asn Arg Phe Thr Ser Gln Pro Arg Ile Gly
        275                 280                 285
Ala Arg Asn Trp Ser Ser Ser Ala Pro Ala Ala Ala Glu Thr Pro Pro
    290                 295                 300
Asn Ala Asp Ser Glu Val Thr Phe Thr Ala Ala Arg Val Arg Gly Gly
305                 310                 315                 320
Phe Val Leu Val Lys Phe Gly Ala Asn Asp Phe Glu Thr Ala Lys Asn
                325                 330                 335
Trp Leu Gly Gly Ile Leu Arg Asp Glu Gly Thr Ile Leu Arg Glu Phe
            340                 345                 350
Gly Glu Glu Ser Leu Met Cys Leu
        355                 360

<210> 33955
<211> 408
<212> PRT
<213> A.fumigatus

<400> 33955
Thr Val Gln Glu Ser Gln Gly Val Leu Leu Leu Ala Phe Asp Arg Cys
1               5                   10                  15
Gly Gly Phe His His Ala Val Ser Thr Arg Pro Thr Leu Pro Ser Pro
            20                  25                  30
Pro His Ser Val Pro Met Thr Thr Asp Cys Cys Ser Asn Pro Tyr Arg
        35                  40                  45
Gly Leu Val Gln Phe Val Ser Ile Val Cys Gly Ile Val Val Ser Phe
    50                  55                  60
Phe Pro Asp Glu Leu Asp Lys Ala Ala Gly His Trp Arg His Val Pro
65                  70                  75                  80
Asp Asn Asp Leu Tyr Thr Asp Ile Thr Arg Trp Pro Thr Asp Ile Ser
                85                  90                  95
Arg Asp Ile Ile Pro Val Gly Cys His Ser His Asn Asp Tyr Trp Arg
            100                 105                 110
Arg Ile Pro Leu Tyr Ser Ala Leu Gln Ala Gly Cys Ile Gly Val Glu
        115                 120                 125
Ala Asp Val Trp Leu Ile Asp Asn Glu Leu Tyr Val Gly His Thr Ser
    130                 135                 140
Thr Ser Leu Thr Thr Lys Arg Thr Leu Lys Asn Met Tyr Ile Asp Pro
145                 150                 155                 160
Leu Ile Lys Ile Ile Glu Arg Gln Asn Pro Ile Thr His Phe His Ala
                165                 170                 175
Ala Val Asp His Pro Leu His Gly Val Phe Asp Thr Asp Pro Ser Gln
            180                 185                 190
Thr Leu Ile Leu Leu Ile Asp Phe Lys Thr Asp Gly Glu Lys Thr Trp
        195                 200                 205
Gln Arg Val Met Glu Asp Leu Ser Pro Leu Arg Glu Arg Gly Tyr Leu
```

```
    210                 215                 220
Thr Tyr Phe Asn Gly Thr Gly Leu Thr Asn Gly Pro Ile Thr Val Val
225                 230                 235                 240
Gly Thr Gly Asn Thr Pro Phe Asn Met Ile Thr Ser Asn Ser Thr Tyr
                245                 250                 255
Arg Asp Ile Phe Phe Asp Ala Pro Leu Asn Leu Leu Ala Glu His Glu
            260                 265                 270
Ala Ile Ala Pro Pro Ala Glu Ala Asp Val Leu His Asp Ser Ala Ala
        275                 280                 285
Thr Ala Gln Pro Pro Thr Gly Asn Asp Gly Gln Gly Leu Ser Gly Ile
    290                 295                 300
Ser Ala Gly Asp Ile Gly Pro Asp Thr Phe Asn Trp Thr Asn Ser Phe
305                 310                 315                 320
Tyr Ala Ser Val Ser Phe Lys Lys Ser Ile Gly Tyr Pro Trp Arg Phe
                325                 330                 335
His Leu Thr Asn Glu Gln Met Asp Leu Ile Arg Ala Gln Ile Gln Gly
            340                 345                 350
Ala His Arg Arg Gly Leu Lys Val Arg Tyr Trp Gly Leu Pro Ser Trp
        355                 360                 365
Pro Arg Ser Leu Arg Asn His Ile Trp Ser Val Leu Ala Arg Glu Gly
    370                 375                 380
Val Asp Ile Leu Asn Val Asp Asp Leu Gln Ser Ala Thr Lys Gln Glu
385                 390                 395                 400
Trp Lys Val Arg Ile Phe Asp Trp
                405
```

<210> 33956
<211> 72
<212> PRT
<213> A.fumigatus

<400> 33956

```
Thr Ser Trp Arg Ser Thr Arg Pro Leu Leu Leu Leu Gln Arg Leu Thr
1               5                   10                  15
Ser Cys Met Thr Arg Arg Pro Pro Pro Ser His Leu Pro Glu Thr Thr
            20                  25                  30
Ala Arg Ala Cys Gln Val Ser Pro Pro Ala Thr Leu Ala Pro Thr Pro
        35                  40                  45
Ser Thr Gly Pro Thr Ala Phe Thr Pro Arg Ser Pro Ser Arg Ser Pro
    50                  55                  60
Ser Ala Ile Pro Gly Asp Ser Thr
65                  70
```

<210> 33957
<211> 101
<212> PRT
<213> A.fumigatus

<400> 33957

```
Arg Gly Ser Phe Pro Val Cys Phe Phe Ile Ala Met Thr Pro Ile Thr
1               5                   10                  15
Ser Thr Phe Ile Leu Pro Arg Arg Thr His Ala Leu Gly Ala Cys Arg
            20                  25                  30
Thr Cys Arg Arg Arg His Val Lys Cys Asp Gln Lys Arg Pro Ser Cys
        35                  40                  45
Arg Thr Cys Arg Ser Leu Gly Val Thr Cys Glu Arg Pro Pro Ser Lys
```

```
    50                  55                  60
Val Arg Trp Met His Asn Ser Asn Ile Glu Glu Ser Ala Asp Asp Gln
65                  70                  75                  80
Arg Glu Thr Arg Arg His Leu Tyr Thr Gly Glu His Pro Ser His Ser
                85                  90                  95
Arg Arg Ile Arg Ala
            100
```

<210> 33958
<211> 409
<212> PRT
<213> A.fumigatus

<400> 33958

```
Arg Ser Ser Ala Asn Ala Asp Thr Glu Gln Ser Arg Leu Ser Met Thr
1               5                   10                  15
Ser Ser Leu Arg Ser Arg Leu Val Ser Gly Ser Ile Asn Ala Ser Leu
            20                  25                  30
Ala Glu Ile Asp Leu Arg Thr Arg Asp Ile Asp Asn Pro Pro Thr Gly
        35                  40                  45
Asp Ile Val Val Gly Pro Phe Ala Val Leu Gly Leu Pro Thr Pro Glu
    50                  55                  60
Ser Pro Arg Gly Asp Lys Val Val His Leu Gln Ala Gln Gln Asp Gly
65                  70                  75                  80
Pro Asp Ser Val Ser Val Glu Ser Glu Gly Gln Pro Thr Gln Pro Val
                85                  90                  95
Ser Pro Pro Asn Met Glu Asp Ser Ser Glu Pro Ile Gly Gln Leu Thr
            100                 105                 110
Thr Phe Ser Gln Ala Ser Phe Leu Ala Asp Pro Val Cys His Phe Asp
        115                 120                 125
Asp Phe Leu His Trp Ser Asp Leu Leu Gly Cys Ser Pro Asp Ala Leu
    130                 135                 140
Gly Trp Asn Ser Ala Pro Ile Thr Asp Asp Met Asp Leu Gly Thr Asn
145                 150                 155                 160
Ile Gly Ser Phe Gly Ala Glu Phe Glu Thr Asp Pro Met Ser Phe Asp
                165                 170                 175
Gly Pro Glu Asn Val Gly Ser Phe Pro Leu Ala Pro Asp Ser Asp Asp
            180                 185                 190
Ser Met Gln Thr Thr Gly Pro Thr Glu Met Ala Ser Thr Leu Leu Tyr
        195                 200                 205
Ala Ala Ser Leu Ala Glu Ala Pro Phe Leu Phe Lys His Phe His Asp
    210                 215                 220
Asn Val Ile Pro Gln Thr Met Pro Met Pro Leu Gly Lys Lys Ser Pro
225                 230                 235                 240
Trp Lys Ile Leu Asn Val Pro Ala Ala Met Met Thr Tyr Ser Asp Leu
                245                 250                 255
Thr Ile Leu Gly Ser Gln Asn Ile Asn His Ala Arg Gln Ala Asn Leu
            260                 265                 270
Tyr Gly Leu Leu Ala Cys Ser Ala Ile His Leu Ser Met Tyr Pro Ser
        275                 280                 285
Ala Pro Ser Thr Glu Ala Ala Gln His Trp Gln Gly Thr Ala Asp His
    290                 295                 300
Leu Phe Glu Gln Ala Arg Glu His Met Gln Leu Ser Ile Lys Tyr Glu
305                 310                 315                 320
Thr Gln Glu Pro Lys Lys Ala Lys Tyr Lys Asp Gln Leu Met Ala Ile
                325                 330                 335
```

```
Cys Cys Leu Thr Glu Tyr Ala Val Ser Ser Trp His Pro Met Leu Cys
            340                 345                 350
Ser Leu Pro Glu Asn Glu Ala Asn Val His Arg Phe Cys Leu Gly Asn
        355                 360                 365
Ser Thr Met Leu Val Gly Ser Leu Ser Thr Leu Ser Ile Phe Cys Ala
    370                 375                 380
Cys Gly Gly Cys Arg Asn Tyr Gly Ser Arg Gln Arg Arg Ala Phe Tyr
385                 390                 395                 400
Thr Met Phe Ile His Gly Cys Asp Leu
                405
```

<210> 33959
<211> 463
<212> PRT
<213> A.fumigatus

<400> 33959

```
Cys Leu Trp Ser Arg Ser Val Ile Met Ala Leu Cys Leu Ser Asn Cys
1               5                  10                  15
Ser Ala Ser Phe Arg Arg Lys Leu Thr Ile Ala Pro Asp Gly Gly Arg
            20                  25                  30
Ala Ala Val Met Asp Met Val Ser Phe Arg Ala Ala Gly Arg Arg Arg
        35                  40                  45
Thr Gly Pro Arg Glu Phe Ser Thr Lys Ser Trp Lys Gln Tyr Asn Asp
    50                  55                  60
Gln Asn Lys His Glu Arg Ser Ser Pro Arg Ser Ser Phe Gly Ser Arg
65                  70                  75                  80
Leu Arg Phe Ala Leu Arg Thr Thr Lys Val Glu Trp Tyr Pro Ile Pro
                85                  90                  95
Val Gly Leu Gly Ile Gly Leu Leu Gly Leu Leu His Phe Tyr Lys Ser
            100                 105                 110
Gln Arg Ala Glu Arg Glu Arg Ala Glu Arg Glu Ala Leu Gly Glu Ser
        115                 120                 125
Phe Asp Phe Glu Lys Pro Pro Pro Arg Pro Arg Val Arg Pro Ser Gly
    130                 135                 140
Pro Trp Gln Val Gln Ile Leu Ser Thr Leu Pro Leu Lys Ala Met Ser
145                 150                 155                 160
Arg Trp Trp Gly Ala Phe Asn Glu Leu Glu Leu Pro Tyr Tyr Leu Arg
                165                 170                 175
Val Pro Gly Phe Lys Leu Tyr Ser Trp Ile Phe Gly Val Asn Leu Asp
            180                 185                 190
Glu Val Ala Glu Pro Asp Leu His Thr Tyr Pro Asn Leu Ala Ala Phe
        195                 200                 205
Phe Tyr Arg Lys Leu Lys Pro Gly Val Arg Pro Ile Asp Pro Asp Pro
    210                 215                 220
His Ala Ile Val Ser Pro Ser Asp Gly Arg Ile Leu Gln Phe Gly Leu
225                 230                 235                 240
Ile Asp Arg Gly Glu Val Glu Gln Val Lys Gly Ile Thr Tyr Ser Leu
                245                 250                 255
Asp Ala Leu Leu Gly Ala Ala Thr Pro Ser Ser Ala Asp His Ser Lys
            260                 265                 270
Lys Phe Met Asn His Met Ala Glu Pro Ser Gln Lys Asp Ala Ala Asn
        275                 280                 285
Met Leu Ala Asp Glu Glu Phe Ala Lys Val Asn Gly Ile Ser Tyr Thr
    290                 295                 300
Leu Pro Thr Leu Leu Ala Gly Asp Lys Gly Gly Ala Arg Arg Arg Ala
```

305 310 315 320
Ala Ser Leu Asp Ala Ser Thr Lys Ser Glu Ala Ala Ala Glu Glu Ala
325 330 335
Val Lys Ala Glu Ile Ala Arg Gly Asp Gly Ser Pro Trp Tyr Ala Pro
340 345 350
Lys Pro Thr Ser Asn Asn Ala Leu Tyr Tyr Val Val Ile Tyr Leu Ala
355 360 365
Pro Gly Asp Tyr His Arg Phe His Ser Pro Val Ser Trp Val Val Glu
370 375 380
Ser Arg Arg His Phe Ala Gly Glu Leu Tyr Ser Val Ser Pro Tyr Leu
385 390 395 400
Gln Arg His Leu Pro Gly Leu Phe Thr Leu Asn Glu Arg Val Val Leu
405 410 415
Leu Gly Arg Trp Arg Trp Gly Phe Phe Ser Tyr Ile Pro Val Gly Ala
420 425 430
Thr Asn Val Gly Ser Ile Lys Ile Asn Phe Asp Ser Glu Leu Arg Thr
435 440 445
Asn Ser Leu Thr Thr Asp Thr Ala Ala Asp Arg Ala Ala Ala Leu
450 455 460

<210> 33960
<211> 130
<212> PRT
<213> A.fumigatus

<400> 33960
Ala Arg Val Ser Tyr Thr Ser Phe Lys His Phe Lys Ala Glu Thr Ser
1 5 10 15
Gly Phe Gln Ile Met Ala Ser Asn Ser Ser Asp Gln Pro Ser Ala Pro
20 25 30
Phe Glu Thr Val Pro Arg Ser Ile Thr Leu His Val Leu Cys Pro Ser
35 40 45
Leu Pro Asn Arg Phe Thr Phe Asp Asp Leu Pro Leu Ser Thr Thr Val
50 55 60
Ala Gly Leu Lys Ala Arg Leu Thr Glu Ser Ile Pro Ser Arg Pro Ala
65 70 75 80
Pro Ser Asn Gln Arg Leu Ile Trp Arg Gly Arg Ala Leu Leu Asp Asp
85 90 95
Ala Met Thr Leu Glu Ser Val Leu Gly Pro Ala Asp Val Cys Pro Thr
100 105 110
Pro Asn Ser Leu Tyr Leu Ala Glu Pro Leu Ala Phe Gly Ile Ala Thr
115 120 125
Asp Asp
130

<210> 33961
<211> 411
<212> PRT
<213> A.fumigatus

<400> 33961
Ala Asp Leu Arg Leu Asp Leu Thr Met Ala Asp Thr Arg Tyr Thr Ser
1 5 10 15
Pro Asp Pro Thr Thr His Asp Thr Val Gly Ala Ser Thr Ile Ala Thr
20 25 30
Pro Leu Phe Leu Pro Ser Ser Pro Pro Pro Ala Glu Glu Arg Met Val

```
        35                  40                  45
Asp Ser Arg Pro Arg Ala Asp Ser Pro Val Ser Asp Arg Val Ala Ala
    50                  55                  60
Glu Ser Glu Gly Ala Arg Ser Pro Ala Leu Ser Arg Ser Ser Ser Pro
65                  70                  75                  80
Asp His Gln Val Asn Glu Leu Asp Ala Arg Leu Ala Glu Tyr Thr Val
                85                  90                  95
Asp Phe Arg Ala Leu Ser Gly Thr Gln Leu Ala His Asp Gly Asp Thr
            100                 105                 110
Leu Pro Asp Leu Lys Phe Pro His Glu Glu Asp Lys Leu Ser Glu Val
        115                 120                 125
Gly Gly Pro Glu Asp Phe Thr Ala Asn Met Glu Arg Tyr Leu Met Gly
    130                 135                 140
Met Asp Asp Asp Leu Glu Asp Lys Gly Trp Glu Glu Gly Gln Ser Ala
145                 150                 155                 160
Leu Val Asn Asp Asn Pro Gln Pro Ala Ile Thr Pro Gly Asp Lys His
                165                 170                 175
Glu Gly Gln Gly Glu Glu Lys Glu Ala Asp His Gln Pro Gln Gln Gln
            180                 185                 190
Gly His Gly Leu Gln Gln Pro Gly Pro Asp Asp Glu Ala Glu Val Ser
        195                 200                 205
Glu Tyr Ser Glu Phe Gly Pro Pro Val Asp Met Ser Thr Pro Ser His
    210                 215                 220
Phe Leu Arg Arg Thr Gly Ala Phe Ala Lys Glu Met Thr Gln Leu Glu
225                 230                 235                 240
Asp Ile Glu Glu Asp Pro Asp Asp Glu Ala Pro Pro Val Ser Thr Pro
                245                 250                 255
Ser Val Gln Arg Gln Thr Ala Thr Pro Gln His Asp Thr Thr Asp Ser
            260                 265                 270
Asn Glu Asp Leu Arg Arg Gln Ile Ala Glu Leu Lys Ala Ala Ile Arg
        275                 280                 285
Asp Arg Asp Gln Gln Leu Glu Arg Asn His Arg Arg Val Leu Glu Ala
    290                 295                 300
Ala Ser Ala Gly Glu Gln Ile Lys His Leu Gln Ala Glu Leu Gln Lys
305                 310                 315                 320
Lys Ser Ser Gln Leu Asp Asp Leu Gln Ala Lys Ile Asp Asp Glu Ala
                325                 330                 335
Asn Leu Arg Gln Gln Ile Gln Met Pro Gln Ser Glu Asn Asp Glu Lys
            340                 345                 350
Glu Ser Tyr Met Gln Arg Ser Ser Phe Ser Gln Ser Gly Leu Ser Ala
        355                 360                 365
Leu Gln Lys Gln Leu Gly Asp Met Gln Lys Glu Leu Gln Ser Arg Asp
    370                 375                 380
Thr Arg Pro Asp Leu Asp Ala Glu Arg Leu Glu Thr Ile Ala Tyr Leu
385                 390                 395                 400
Arg Leu Asn Ala Ala Asp Gly Arg Ser Thr Leu
                405                 410
```

<210> 33962
<211> 145
<212> PRT
<213> A.fumigatus

<400> 33962

```
His Ala Leu Asp Thr Lys Gln Thr Arg Val Val Lys Val Thr Val Pro
1               5                   10                  15
```

```
Thr Glu Ser Phe Phe Asn Phe Phe Ser Pro Pro Gln Pro Pro Thr Asp
            20                  25                  30
Asp Asp Asp Thr Ile Ala Thr Asp Ile Glu Glu Arg Leu Glu Leu Asp
        35                  40                  45
Tyr Gln Leu Gly Glu Asp Ile Lys Glu Lys Leu Ile Pro Arg Ala Ile
    50                  55                  60
Asp Trp Phe Thr Gly Glu Ala Leu Gln Phe Glu Glu Leu Gly Asp Asp
65                  70                  75                  80
Met Asp Ala Asp Glu Phe Asp Asp Glu Asp Asp Glu Asp Glu Glu Glu
                85                  90                  95
Asp Glu Asp Asp Asp Asp Asp Arg Arg Ser Asp Arg Asp Val Asp Asp
            100                 105                 110
Glu Ser Glu Glu Glu Val Arg Phe Phe Ser Leu Tyr Ala Ser Lys Tyr
        115                 120                 125
Ile Phe Ala Ser Thr Pro Phe Phe Thr Thr Met Thr Ala Leu Pro Gln
    130                 135                 140
Ser
145

<210> 33963
<211> 272
<212> PRT
<213> A.fumigatus

<400> 33963
Ser Asp Ser Ile Asn Leu Thr Tyr Met Ser Glu Ser Leu Asp His Ala
1               5                   10                  15
Thr Ala Ala Ser Leu Phe Ala Arg Asn Pro Gly Leu Val Ser Met Ile
            20                  25                  30
Gln Gly Lys Leu Gly Ser Leu Val Gly Arg Ser Ser Gly Tyr Ile Glu
        35                  40                  45
Ser Leu Pro Ala Pro Val Arg Arg Arg Val Ala Gly Leu Lys Gly Ile
    50                  55                  60
Gln Lys Glu His Ala Lys Leu Glu Ala Gln Phe Gln Glu Glu Val Leu
65                  70                  75                  80
Glu Leu Glu Lys Lys Tyr Phe Ala Lys Phe Thr Pro Leu Tyr Gln Arg
                85                  90                  95
Arg Ala Thr Ile Val Asn Gly Ala Ala Glu Pro Thr Asp Asp Glu Val
            100                 105                 110
Gln Ala Gly Lys Glu Glu Glu Glu Glu Glu Glu Val Asp Val Lys Ala
        115                 120                 125
Glu Asp Glu Arg Lys Gln Glu Glu Lys Asp Ile Thr Thr Pro Gly Ile
    130                 135                 140
Pro Glu Phe Trp Leu Ser Ala Met Lys Asn Gln Ile Ser Leu Ala Glu
145                 150                 155                 160
Met Ile Thr Asp Arg Asp Glu Glu Ala Leu Lys His Leu Thr Asp Val
                165                 170                 175
Arg Met Glu Tyr Leu Asp Arg Pro Gly Phe Arg Leu Ile Phe Glu Phe
            180                 185                 190
Ala Glu Asn Glu Phe Phe Thr Asn Lys Thr Ile Ser Lys Thr Tyr Tyr
        195                 200                 205
Tyr Lys Glu Glu Ser Gly Tyr Gly Gly Asp Phe Ile Tyr Asp His Ala
    210                 215                 220
Glu Gly Cys Lys Ile Asp Trp Lys Ala Asp Lys Asp Leu Thr Val Arg
225                 230                 235                 240
Val Glu Ser Lys Lys Gln Arg Asn Lys Ser Thr Ser Thr Trp Ile Cys
```

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                245                 250                 255
Ser Val Gly Lys Leu Thr Cys Ser Arg His Gln Thr Asn Pro Ser Arg
            260                 265                 270

<210> 33964
<211> 96
<212> PRT
<213> A.fumigatus

<400> 33964
Ser Lys Gln Gly Thr Cys Val Ser Arg Gly Trp Leu Ile Ser Met His
1               5                   10                  15
Asp Asp Val Asn Ile Pro Val Ile Arg Val Phe Tyr Trp Phe Gly His
            20                  25                  30
Tyr Tyr Ser Leu Ser Leu Leu Val Gln Ala Val Ile Met Ile Gly Val
        35                  40                  45
Gln Ile Val Leu Leu Lys Val Ala Leu Asp Asn Arg Pro Ser Pro Gly
    50                  55                  60
Val Lys Asn Ser Val Glu His Val Pro Phe Ser Asn Leu Asp Glu Lys
65                  70                  75                  80
Gly Phe Ala Arg Pro Tyr Glu Phe Trp Gln Trp Lys Ser Ala Lys Pro
                85                  90                  95

<210> 33965
<211> 146
<212> PRT
<213> A.fumigatus

<400> 33965
Arg Thr Leu Gly Leu His Arg Tyr Trp Met Phe Leu Ala Tyr Phe Val
1               5                   10                  15
Gly Ala Leu Ser Phe Val Gln Ile Leu Leu Pro Pro Ile Ala Arg Ser
            20                  25                  30
Asp Phe Tyr Val Ser Leu Leu Gly Tyr Ala Gly Leu Ala Val Glu Ala
        35                  40                  45
Ile Leu Pro Leu Pro Gln Ile Val Ala Asn His Arg Thr Arg Ser Cys
    50                  55                  60
Lys Gly Phe Arg Val Ser Val Leu Ala Ala Trp Ile Leu Gly Asp Val
65                  70                  75                  80
Met Lys Met Ser Tyr Phe Phe Cys Ser Lys Glu Val Ile Pro Trp Ala
                85                  90                  95
Phe Arg Leu Cys Gly Met Phe Gln Cys Ala Cys Asp Leu Tyr Leu Gly
            100                 105                 110
Val Gln Phe Trp Met Tyr Ala Arg His Thr Leu Arg Ala Ala Gly Gly
        115                 120                 125
Pro Arg His Asn Thr Ala Ser Trp Pro Ala Gly Glu Lys Asp Ile Arg
    130                 135                 140
Met Thr
145

<210> 33966
<211> 112
<212> PRT
<213> A.fumigatus

<220>
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<221> UNSURE
<222> (71),(94)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33966
Met Thr Asp Val Ser His Ser Gly Ser His Ile Met Ser Phe Val Leu
1 5 10 15
Ala Gln Lys Gln Gly Trp Lys Pro Asp Ser Leu Thr Pro Ala Val Leu
20 25 30
Gly Pro Phe Gln Ala Met Arg Asn Gly Val Thr Gly Tyr Asn Ala Ser
35 40 45
His Pro Asp Gln Ala Thr Pro Ala Ala Glu Phe Phe Met Trp Glu His
50 55 60
Phe Thr Thr Lys Pro Tyr Xaa His Ala Asp Ala Asp Lys Pro His Pro
65 70 75 80
Pro Leu Glu Glu Asn Arg Glu Ile Phe Thr Pro Trp Pro Xaa Leu Leu
85 90 95
Ile Val Ala Phe His Ser Val Phe Pro Asp Pro Asp Met Thr Arg Asn
100 105 110

<210> 33967
<211> 250
<212> PRT
<213> A.fumigatus

<400> 33967
Val Arg Phe Arg Pro Ala Arg Ala Gly Glu Asp Lys Gly Lys Val Leu
1 5 10 15
Val Ser Gln Arg Thr Glu Ser Ser Leu Met Pro Ser Ile Pro Ser Asp
20 25 30
Lys Ser Tyr Phe Pro Glu Ile Val Glu Phe Leu Pro Ser Lys Ser His
35 40 45
Arg Arg Ala Val Arg Phe Ala Asp Gly Arg Val Glu Met Asp Ile Asp
50 55 60
Ala Ile Val Phe Cys Thr Gly Tyr Leu Tyr Ser Phe Pro Phe Leu Ser
65 70 75 80
Ser Leu Asp Pro Pro Val Ile Gly Asp Gly Arg Arg Thr Leu Asn Thr
85 90 95
Tyr Gln His Leu Phe Tyr Ile Tyr Asn Pro Thr Leu Val Phe Pro Val
100 105 110
Leu Pro Gln Arg Val Ile Pro Phe Pro Leu Ser Glu Asn Gln Ala Ala
115 120 125
Val Tyr Ala Arg Val Trp Ser Gly Arg Leu Thr Leu Pro Ser Ile Ala
130 135 140
Glu Met Lys Gln Trp Glu Glu Ser Thr Val Ala Thr Lys Gly Asp Ser
145 150 155 160
Thr Lys Phe His Leu Met His Phe Pro Leu Asp Ala Asp Tyr Met Asn
165 170 175
Phe Leu His Asp Trp Ala Asp Met Ala Glu Thr Arg Gln Gly Leu Ala
180 185 190
Asn Asn Gly Tyr Gly Lys Gln Cys Asn Tyr Trp Gly Met Lys Gln Arg
195 200 205
Trp Met Arg Gln Lys Phe Pro Glu Ile Arg Arg Ala Phe Val Glu Lys
210 215 220
Gly Glu Glu Arg Tyr Asn Ile Lys Ser Ile Ala Glu Leu Gly Phe Asp
225 230 235 240

```
Phe Asp Glu Asp Trp Lys Gln Arg Gln Asp
                245                 250

<210> 33968
<211> 88
<212> PRT
<213> A.fumigatus

<400> 33968
Thr Arg Met Met Trp Arg Lys Arg Lys Ala Ala Ser Pro Ala Ile Ser
1               5                  10                  15
Asp Pro Ala Asp Asn Phe Arg Lys Arg Arg Trp Lys Val Val Tyr Val
            20                  25                  30
Ile Ser Ser Ser Asp Asp Glu Asn Asp Glu Asn Asp Asp Ser Thr Ser
        35                  40                  45
Ser Leu Asp Glu Asp Glu Trp Tyr Ile Asn Cys Ile Leu Asp Glu Thr
    50                  55                  60
Glu Ser Gln Tyr Leu Ile Asp Trp Glu Gly Pro Trp Ser Pro Thr Trp
65                  70                  75                  80
Val Ser Trp Ala Lys Ser Leu Ser
                85

<210> 33969
<211> 201
<212> PRT
<213> A.fumigatus

<400> 33969
Arg Ser Ser Asn Gln Asp Ala Ser Thr Ser Leu Pro Ala Ile His Ala
1               5                  10                  15
Ala Glu His Ala Val Leu Ser Leu Leu Pro Thr Phe Val Ile Ser Ser
            20                  25                  30
Pro Gly Asp Val Lys Thr Glu Cys Lys Val Ala Lys Lys Glu Leu Gly
        35                  40                  45
Arg Asn Leu Lys Ile Ala Asn Glu Met Arg Asp Gln Gln Ile Lys Glu
    50                  55                  60
Asn Ile Arg Lys Leu Gln Pro Pro Ala Arg Gln Arg Pro Ala Arg Leu
65                  70                  75                  80
Thr Phe Tyr Asp Ala Lys Gly Gly Ser Cys Gly Ser Gly Ile Ala Ser
                85                  90                  95
Lys Ala Phe Glu Phe Val Asp Val Leu Leu Arg Arg Ala Val Ala Arg
            100                 105                 110
Ile Glu Ala Cys Glu Cys Val Thr Pro Gln Gly Cys Met Glu Cys Val
        115                 120                 125
Cys Asp Glu Arg Cys Arg Glu Leu Asn Ser Val Met Ser Lys Ala Gly
    130                 135                 140
Ala Gly Val Val Leu Arg Cys Leu Leu Gly Trp Asp Val Asp Ile Asp
145                 150                 155                 160
Ala Leu Pro Trp Gly Glu Asp Val Glu Gly Glu Asp Gly Leu Arg Glu
                165                 170                 175
Leu Ala Gly Gly Leu Glu Thr Val Ile Pro Ala Thr Glu Val Pro Leu
            180                 185                 190
Arg Arg Gln Cys Arg Ser Asp Asn Val
        195                 200

<210> 33970
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<211> 962
<212> PRT
<213> A.fumigatus

<400> 33970

```
Lys Ser Arg Ser Thr Lys Thr Ser Arg Ile Gln Arg Val Ile Lys Ser
1               5                  10                  15
Pro Ser Pro Lys Arg Lys Pro Ser Ala His Trp Pro Glu Ala Phe Lys
            20                  25                  30
Ser Leu Ser Gln Ile His Arg Ala Leu Asn Leu Val Tyr Thr Phe Cys
        35                  40                  45
Cys Thr Arg Lys His Phe Ala Thr Thr Phe Glu Asn Ile Gln Lys Ala
    50                  55                  60
Val Gln Ala Gln Leu Gly Ser Gly Ser Ala Leu Thr Val Glu Asp Ile
65                  70                  75                  80
Ala Arg Val Arg Val Leu Phe Pro Arg Ala Val Lys Phe Glu Tyr Val
                85                  90                  95
Asp Ala Ala Lys Leu Glu Val Met Thr Val Gly Glu Lys Glu Thr Ala
            100                 105                 110
Arg Asn Gln Ser Tyr Gly Leu Ser His Pro Glu Cys Asp Gly Ser Asp
        115                 120                 125
Val Gly Ala Asp Val Gln Ser Lys Glu Val Leu Leu Phe Glu Phe Leu
    130                 135                 140
Asp Gly Asp Leu Lys Arg Glu Val Arg His Pro Lys Asn Gly Glu Pro
145                 150                 155                 160
Thr Lys Pro Val Arg Lys Leu Lys Asp Glu Asp Leu Lys Met Pro Val
                165                 170                 175
Tyr Ser Gln Lys Gln Met Leu Ala Leu Ile Glu Lys Arg Asn Lys Lys
            180                 185                 190
Phe Ser Asp Ala Ile Asp Ala Phe Leu Val Gln Cys Glu Asp Gly Gly
        195                 200                 205
Ser Asp Pro Val Glu Arg Leu Glu Arg Glu Lys Asp Ala Trp Ile Pro
    210                 215                 220
Asn Pro Pro Val Phe Glu Asp Asp Ser Leu Lys Thr Ala Lys Leu Leu
225                 230                 235                 240
Ser Met Pro Pro Pro Glu Ile Pro Lys Glu Arg Lys Ser Thr Ala Glu
                245                 250                 255
Ile Ile Asp Glu Ile Arg Ala Met Asp Trp Tyr Phe Ala Gln Ile Val
            260                 265                 270
Pro Glu Gly His Arg Val Phe Glu Ala Gln Ser Ala Val Tyr Gly Asp
        275                 280                 285
Leu Thr Phe Gln Leu Ser Gln Asp Leu Val Asn Ala Leu Tyr Asn Thr
    290                 295                 300
Lys Gly Ile Thr Gln Phe Tyr Leu His Gln Ala Glu Ala Ile Asn Ser
305                 310                 315                 320
Leu Tyr Ala Gly Glu Asp Val Ile Val Ser Thr Ser Thr Ser Ser Gly
                325                 330                 335
Lys Ser Leu Ile Tyr Gln Val Pro Met Leu His Glu Leu Gly Arg Asp
            340                 345                 350
Pro Asn Ser Arg Gly Met Tyr Ile Phe Pro Thr Lys Ala Leu Ala Gln
        355                 360                 365
Asp Gln Lys Arg Ser Ile Lys Glu Leu Leu Gln Phe Met Asp Gly Leu
    370                 375                 380
Gln Asp Val Met Val Glu Thr Phe Asp Gly Asp Thr Pro Met Gly Ser
385                 390                 395                 400
Arg Asn Leu Ile Arg Asp Glu Ala Arg Ile Ile Phe Thr Asn Pro Asp
```

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                405                 410                 415
Met Leu His Ile Thr Ile Leu Pro Gln Glu Ser Ser Trp Arg Thr Phe
            420                 425                 430
Leu Lys Asn Leu Lys Phe Val Val Val Asp Glu Leu His Val Tyr Asn
        435                 440                 445
Gly Leu Phe Gly Ser His Val Ala Phe Ile Met Arg Arg Leu Arg Arg
    450                 455                 460
Ile Cys Ala Ala Val Gly Asn Arg His Val Arg Phe Ile Ser Cys Ser
465                 470                 475                 480
Ala Thr Val Ala Asn Pro Glu Glu His Met Lys Ala Val Phe Gly Ile
                485                 490                 495
Asp Ser Val Arg Leu Ile Asp Phe Asp Gly Ser Pro Ser Gly Arg Lys
            500                 505                 510
Glu Phe Leu Cys Trp Asn Thr Pro Tyr Lys Asp Pro Asn Asp Pro Thr
        515                 520                 525
Ser Gly Arg Gly Asp Ser Val Ala Glu Thr Ala Arg Leu Phe Cys Gln
    530                 535                 540
Leu Ile Leu Arg Gly Ala Arg Val Ile Ala Phe Cys Arg Ile Arg Lys
545                 550                 555                 560
Met Cys Glu Val Leu Leu Gln Ala Val Arg Asn Glu Phe Gln Ala Ile
                565                 570                 575
Gly Arg Pro Glu Val Gly Lys Leu Val Met Gly Tyr Arg Gly Gly Tyr
            580                 585                 590
Ser Pro Gln Asp Arg Arg Lys Ile Glu Arg Glu Met Phe Glu Gly His
        595                 600                 605
Leu Leu Gly Ile Val Ala Thr Asn Ala Leu Glu Leu Gly Val Asp Ile
    610                 615                 620
Gly Ser Leu Asp Ala Val Ile Thr Leu Gly Phe Pro Tyr Ser Ile Ser
625                 630                 635                 640
Asn Leu Arg Gln Gln Ser Gly Arg Ala Gly Arg Arg Asn Lys Asp Ser
                645                 650                 655
Leu Ser Val Leu Val Gly Asp Arg Phe Pro Ala Asp Gln Tyr Tyr Met
            660                 665                 670
Gln Asn Pro Asp Glu Leu Phe Thr Lys Pro His Cys Glu Leu Gln Ile
        675                 680                 685
Asp Leu Ser Asn Glu Leu Ile Leu Glu Gly His Val Gln Cys Ala Ala
    690                 695                 700
Phe Glu Met Pro Ile Arg Pro Asp Glu Asp His Val Tyr Phe Gly Lys
705                 710                 715                 720
Gln Leu His Glu Ile Ala Ala Met Arg Leu Val Arg Asp Ser Phe Gly
                725                 730                 735
Phe Tyr His Cys His Glu Arg Phe Arg Pro His Pro Ser Arg Cys Val
            740                 745                 750
Pro Ile Arg Asp Thr Glu Asp Gln His Phe Ala Val Ile Asp Ala Thr
        755                 760                 765
Asn Ala Arg Asn Val Val Leu Glu Glu Val Glu Ala Ser Arg Ala Phe
    770                 775                 780
Phe Thr Ile Tyr Glu Gly Gly Ile Phe Leu His Gln Gly Gln Thr Tyr
785                 790                 795                 800
Leu Val Lys Glu Leu Asn Thr Asp Gln Arg Phe Ala Arg Val Val Lys
                805                 810                 815
Val His Val Asp Trp Ser Thr Met Gln Arg Asp Tyr Thr Asp Ile Asp
            820                 825                 830
Pro Ile Glu Thr Glu Val Met Arg Gln Ile Asn Gln Ser Ser Ala Ser
        835                 840                 845
Arg Ala Phe Tyr Gly Ser Val Gln Ile His Ala Val Val Tyr Gly Phe
```

```
    850                 855                 860
Phe Lys Ile Asp Lys Arg Gly Arg Val Leu Asp Ala Val Ala Val Asp
865                 870                 875                 880
Asn Pro Pro Ile Asn Ile Phe Thr Lys Gly Met Trp Leu Asp Val Pro
                885                 890                 895
Lys Arg Ala Leu Glu Ile Leu Glu Ser Arg Arg Leu Asn Ile Ala Ala
            900                 905                 910
Arg Tyr Ser Cys Ser Arg Thr Cys Cys Ala Leu Pro Ala Ala His Leu
        915                 920                 925
Arg His Leu Val Ala Arg Arg Arg Gln Asn Arg Val Gln Ser Arg Lys
    930                 935                 940
Glu Gly Thr Arg Gln Lys Pro Glu Asp Arg Glu Arg Asp Ala Arg Ser
945                 950                 955                 960
Thr Asn
```

<210> 33971
<211> 180
<212> PRT
<213> A.fumigatus

<400> 33971

```
Cys Ser Ala Arg Gly Arg Ala Gly Pro Leu Ala Lys Leu Arg Lys Pro
1               5                   10                  15
Ser Ala Lys Gly Ser Met Trp Leu Lys Asp Cys Thr Ser Val Ser Ser
            20                  25                  30
Trp Glu Ala Ser Met Arg Pro Gly Thr Asn Gly Thr Leu Ile Gly Trp
        35                  40                  45
Pro Ala Ser Cys Ala Ala Phe Ser Thr Ala Ala Gln Pro Ala Arg Thr
    50                  55                  60
Met Arg Ser Ala Ser Glu Thr Phe Leu Leu Ser Pro Arg Ala Leu Lys
65                  70                  75                  80
Arg Asp Trp Thr Ala Ser Asn Ala Glu Arg Ala Ser Arg Ser Gln Gly
                85                  90                  95
Trp Leu Leu Thr Ser Gln Ser Arg Cys Gly Ala Arg Arg Met Arg Ala
            100                 105                 110
Pro Leu Ala Pro Pro Arg Leu Ser Leu Pro Arg Lys Val Glu Ala Ala
        115                 120                 125
Ala Gln Ala Val Glu Met Lys Leu Leu Gly Gly Thr Pro Glu Ala Arg
    130                 135                 140
Ile Ser Ser Leu Ser Ala Ala Met Ser Asp Ala Ser Thr Ser Gly Trp
145                 150                 155                 160
Leu Thr Ala Gly Met Gly Ser Cys Gln Ile Arg Thr Ser Leu Gly Thr
                165                 170                 175
Ser Gly Pro Arg
            180
```

<210> 33972
<211> 467
<212> PRT
<213> A.fumigatus

<400> 33972

```
Glu Gln Thr Arg Arg Ser Arg Arg Pro Ser Arg Gly Cys Ser Cys Pro
1               5                   10                  15
Ala Gly Glu Gln Arg Ser Arg Ser Ser Glu Leu Gln Thr Gly Gly Glu
```

```
            20                  25                  30
Asp Ala Val Arg Gly Ala Val Val Val Gly Val Glu His Pro Gln Thr
        35                  40                  45
Ala Asn Gln Asp Gly His Leu Gly Arg Arg Gln Val Gln Gln Leu Arg
    50                  55                  60
Leu Val Asp Glu Val Val Leu Arg Thr Arg Ala Gly Arg Ala Leu Gly
65                  70                  75                  80
Glu Ile Ala Glu Ala Ile Gly Glu Gly Leu His Val Val Glu Gly Leu
                85                  90                  95
His Val Arg Phe Leu Leu Gly Gly Val His Ala Thr Gly Asp Glu Arg
            100                 105                 110
His Leu Asp Arg Val Ala Gly Val Leu Arg Gly Leu Leu Asp Gly Arg
        115                 120                 125
Ala Ala Gly Gln Asp Asp Glu Ile Ser Glu Arg Asp Leu Leu Ala Val
    130                 135                 140
Ala Ala Gly Val Glu Ala Arg Leu Asp Ser Leu Gln Arg Gly Glu Gly
145                 150                 155                 160
Leu Ala Gln Pro Gly Leu Val Val Asp Leu Pro Val Ala Leu Arg Gly
                165                 170                 175
Gln Thr Asp Ala Cys Ala Val Gly Thr Pro Ala Leu Val Ala Ala Thr
            180                 185                 190
Glu Gly Gly Gly Gly Gly Pro Gly Gly Gly Asp Glu Ala Ser Trp Arg
        195                 200                 205
His Thr Gly Gly Glu Asp Leu Val Leu Glu Arg Gly Asn Val Gly Arg
    210                 215                 220
Val Asp Glu Trp Met Val Asp Gly Gly Asp Gly Val Leu Pro Asp Gln
225                 230                 235                 240
Asn Leu Ala Gly Asp Leu Arg Ala Glu Val Ala Gly Ala Gly Ala His
                245                 250                 255
Val Pro Val Gly Glu Leu Glu Pro Gly Ala Gly Glu Gly Val Gly Glu
            260                 265                 270
Leu Val Arg Met Leu Glu Glu Ala Ala Gly Asp Leu Leu Val Gly Gly
        275                 280                 285
Ile Glu Ala Glu Arg Gln Val Gly Gly Glu His Gly Gly Leu Val Leu
    290                 295                 300
Leu Gly Gly Ile Val Gly Val Gly Asn Asp Leu Val Ser Val Leu Gly
305                 310                 315                 320
Asn Pro Leu Val Gly Ala Gly Gly Thr Leu Gly Glu Leu Pro Leu Glu
                325                 330                 335
Leu Glu Gln Val Leu Gln Glu Ile Val Val Pro Leu Gly Arg Gly Leu
            340                 345                 350
Gly Pro Gly His Leu Gln Ala Ala Arg Asp Gly Val Gly Thr Leu Ala
        355                 360                 365
Gly Ala Val Leu Val Arg Pro Ala Glu Thr Leu Gly Phe Gln Ala Gly
    370                 375                 380
Gly Phe Gly Leu Phe Ala Asp Val Val Arg Arg Gly Ser Thr Val Gly
385                 390                 395                 400
Leu Ala Lys Gly Val Ala Thr Ser Asp Glu Gly Asp Arg Leu Leu Val
                405                 410                 415
Val His Ser His Ala Ala Lys Gly Val Pro Asp Ile Val Ser Gly Arg
            420                 425                 430
Asp Gly Ile Gly Val Thr Ile Gly Thr Leu Arg Val Asp Ile Tyr Gln
        435                 440                 445
Thr His Val Gly Gly Gly Gln Lys Ser Leu Gln Leu Thr Arg Val Gly
    450                 455                 460
Gly Leu Val
```

465

<210> 33973
<211> 86
<212> PRT
<213> A.fumigatus

<400> 33973
Ser Arg Lys Pro Leu Gly Val Pro Arg Val Val Ala Gln Pro Gly Ile
1 5 10 15
Leu Ser Ser Pro Val Gly Gly Phe Val Arg Phe Pro Gly Val Trp Thr
20 25 30
Ala Ser Ser Glu Ala Lys Gly Leu Glu Thr His Gly Leu Gln Gly Asp
35 40 45
Val Thr Gly Glu Asp Gln Glu Ile Gly Pro Arg Asp Leu Val Ala Val
50 55 60
Leu Leu Leu Asp Gly Pro Glu Gln Thr Thr Ser Phe Val Gln Thr Asp
65 70 75 80
Ile Val Gly Pro Ala Val
85

<210> 33974
<211> 66
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1),(13),(14)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33974
Xaa Asp Phe Leu Phe Pro Val Ser Ala Leu Val Val Xaa Xaa Glu Leu
1 5 10 15
Glu Asp Tyr Asn Arg Phe Ala Ser Tyr Pro Asn Pro Gly His Ile Gly
20 25 30
His Leu Tyr Thr Ala Tyr Ala Pro Ile Lys Lys Ser Cys Trp Tyr Leu
35 40 45
Ile Gly Gln Arg Arg Glu Ala Arg Arg Arg Ala Lys Arg Gly Ser Leu
50 55 60
Met Glu
65

<210> 33975
<211> 179
<212> PRT
<213> A.fumigatus

<400> 33975
Arg Asp His Ser Arg Arg Leu Arg Cys Leu Gln Glu Ala Gln Ala His
1 5 10 15
His Ala His His Arg Leu Val Ala Pro Leu Arg Ser Arg Leu Arg Glu
20 25 30
Asp Arg Pro Pro Leu Pro Arg Ala Ser Gly Pro Val Arg Arg Arg Leu
35 40 45
Arg Pro Arg Leu Val Gln Ala His Pro Pro Gly His Gly Pro Pro Arg

```
    50                  55                  60
Pro Leu Pro Arg Pro Gly Gly Pro Gln Arg Gly Ser Asp Leu Ala Gly
65                  70                  75                  80
Pro His Pro Arg Arg Gln Pro Ser Thr Arg Arg Arg Val Arg His Cys
                85                  90                  95
Arg Ala Gln Gly Arg Asp Pro Arg Leu Arg Cys Ala Ser Lys Lys Leu
            100                 105                 110
His Leu His Arg Leu Gly Arg Arg Leu His Leu Pro Trp Gln Arg Gln
        115                 120                 125
Ala Arg Gly Cys Gln Arg Arg Thr His Pro Ser Gly Pro Ala Ala Arg
    130                 135                 140
Leu Gly Gly Gln Gln Pro Thr Leu Ala Ala Arg Gly Pro Leu Arg Val
145                 150                 155                 160
Gly Gly Cys Pro Ile Ala Leu Gln Arg Pro Arg Arg Gln Gln Glu Gly
                165                 170                 175
Leu Ala Arg
```

<210> 33976
<211> 666
<212> PRT
<213> A.fumigatus

```
<400> 33976
Asp Lys His Ile Met Thr Gln Asp Lys Cys Pro Phe Lys Glu Gln Ser
1               5                   10                  15
Ser Gln Pro Asn Phe Ala Gly Gly Gly Thr Ser Asn Lys Asp Trp Trp
            20                  25                  30
Pro Asp Arg Leu Lys Leu Asn Ile Leu Arg Gln His Thr Ala Val Ser
        35                  40                  45
Asn Pro Leu Asp Ala Asp Phe Asp Tyr Ala Ala Ala Phe Asn Ser Leu
    50                  55                  60
Asp Tyr Glu Gly Leu Lys Lys Asp Leu Arg Ala Leu Met Thr Asp Ser
65                  70                  75                  80
Gln Asp Trp Trp Pro Ala Asp Phe Gly His Tyr Gly Gly Leu Phe Ile
                85                  90                  95
Arg Met Ala Trp His Ser Ala Gly Thr Tyr Arg Val Phe Asp Gly Arg
            100                 105                 110
Gly Gly Ala Gly Gln Gly Gln Gln Arg Phe Ala Pro Leu Asn Ser Trp
        115                 120                 125
Pro Asp Asn Val Ser Leu Asp Lys Ala Arg Arg Leu Leu Trp Pro Ile
    130                 135                 140
Lys Gln Lys Tyr Gly Asn Lys Ile Ser Trp Ala Asp Leu Leu Ile Leu
145                 150                 155                 160
Thr Gly Asn Val Ala Leu Glu Ser Met Gly Phe Lys Thr Phe Gly Phe
                165                 170                 175
Ala Gly Ser Arg Pro Asn Thr Trp Glu Ala Asp Glu Ala Thr Tyr Trp
            180                 185                 190
Gly Arg Glu Asn Thr Trp Leu Gly Asn Asp Ala Arg Tyr Ala Lys Gly
        195                 200                 205
Phe Ser Gly Ser Asp Lys Arg Gly Ser Leu Ile Ala Asp Glu Glu Ser
    210                 215                 220
His Lys Thr Thr His Ser Arg Glu Leu Glu Thr Leu Leu Ala Ala Ala
225                 230                 235                 240
His Met Gly Leu Ile Tyr Val Asn Pro Glu Gly Pro Asp Gly Asn Pro
                245                 250                 255
```

```
Asp Pro Val Ala Ala Ala His Asp Ile Arg Asp Thr Phe Gly Arg Met
            260                 265                 270
Ala Met Asn Asp Glu Glu Thr Val Ala Leu Ile Ala Gly Gly His Thr
        275                 280                 285
Phe Gly Lys Thr His Gly Ala Ala Pro Ala Asp Asn Val Gly Lys Glu
    290                 295                 300
Pro Glu Ala Ala Gly Leu Glu Ala Gln Gly Leu Gly Trp Ala Asn Lys
305                 310                 315                 320
His Gly Ser Gly Lys Gly Pro His Thr Ile Thr Ser Gly Leu Glu Val
                325                 330                 335
Thr Trp Thr Lys Thr Pro Thr Gln Trp Asn Asn Asn Phe Leu Glu Tyr
            340                 345                 350
Leu Phe Lys Phe Glu Trp Glu Leu Thr Lys Ser Pro Ala Gly Ala His
        355                 360                 365
Gln Trp Val Ala Lys Asn Ala Asp Glu Ile Ile Pro Asp Ala Tyr Asp
    370                 375                 380
Ala Ser Lys Lys His Lys Pro Thr Met Leu Thr Thr Asp Leu Ser Leu
385                 390                 395                 400
Arg Phe Asp Pro Ala Tyr Glu Lys Ile Ala Arg Arg Phe Leu Glu His
                405                 410                 415
Pro Asp Gln Phe Ala Asp Ala Phe Ala Arg Ala Trp Phe Lys Leu Thr
            420                 425                 430
His Arg Asp Met Gly Pro Arg Ala Arg Tyr Leu Gly Pro Glu Val Pro
        435                 440                 445
Ser Glu Val Leu Ile Trp Gln Asp Pro Ile Pro Ala Val Asn His Pro
    450                 455                 460
Leu Val Asp Ala Ser Asp Ile Ala Ala Leu Lys Asp Glu Ile Leu Ala
465                 470                 475                 480
Ser Gly Val Pro Pro Arg Ser Phe Ile Ser Thr Ala Trp Ala Ala Ala
                485                 490                 495
Ser Thr Phe Arg Gly Ser Asp Lys Arg Gly Gly Ala Asn Gly Ala Arg
            500                 505                 510
Ile Arg Leu Ala Pro Gln Arg Asp Trp Glu Val Asn Asn Gln Pro Trp
        515                 520                 525
Leu Arg Glu Ala Leu Ser Ala Leu Glu Ala Val Gln Ser Arg Phe Asn
    530                 535                 540
Ala Arg Gly Asp Ser Lys Lys Val Ser Leu Ala Asp Leu Ile Val Leu
545                 550                 555                 560
Ala Gly Cys Ala Ala Val Glu Lys Ala Ala Gln Asp Ala Gly His Pro
                565                 570                 575
Ile Lys Val Pro Phe Val Pro Gly Arg Met Asp Ala Ser Gln Glu Glu
            580                 585                 590
Thr Asp Val Gln Ser Phe Asn His Met Glu Pro Phe Ala Asp Gly Phe
        595                 600                 605
Arg Asn Phe Ala Lys Gly Pro Ala Arg Pro Arg Ala Glu His Tyr Leu
    610                 615                 620
Val Asp Lys Ala Gln Leu Leu Asn Leu Ser Ala Pro Glu Met Thr Val
625                 630                 635                 640
Leu Val Gly Gly Leu Arg Val Leu Asn Thr Asn Tyr Asp Gly Ser Thr
                645                 650                 655
His Gly Val Phe Thr Ser Arg Leu Glu Leu
            660                 665
```

<210> 33977
<211> 178
<212> PRT

<213> A.fumigatus

<400> 33977

```
Ser Gly Arg Thr Pro Ser Pro Pro Ser Thr Ile His Ser Ser Thr Arg
1               5                  10                  15
Pro Thr Leu Pro Arg Ser Arg Thr Arg Ser Ser Pro Pro Val Cys Leu
            20                  25                  30
Gln Glu Ala Ser Ser Pro Pro Pro Gly Pro Pro Pro Pro Pro Ser Val
        35                  40                  45
Ala Ala Thr Ser Ala Gly Val Pro Thr Ala His Ala Ser Val Trp Pro
    50                  55                  60
Arg Ser Ala Thr Gly Arg Ser Thr Thr Asn Pro Gly Cys Ala Arg Pro
65                  70                  75                  80
Ser Pro Arg Trp Arg Leu Ser Asn Arg Ala Ser Thr Pro Ala Ala Thr
                85                  90                  95
Ala Arg Arg Ser Arg Ser Leu Ile Ser Ser Ser Trp Pro Ala Ala Arg
            100                 105                 110
Pro Ser Arg Arg Pro Arg Arg Thr Pro Ala Thr Arg Ser Arg Cys Arg
        115                 120                 125
Ser Ser Pro Val Ala Trp Thr Pro Pro Arg Arg Lys Arg Thr Cys Ser
    130                 135                 140
Pro Ser Thr Thr Trp Ser Pro Ser Pro Met Ala Ser Ala Ile Ser Pro
145                 150                 155                 160
Arg Ala Leu Pro Ala Arg Val Arg Ser Thr Thr Ser Ser Thr Arg Arg
                165                 170                 175
Ser Cys
```

<210> 33978
<211> 158
<212> PRT
<213> A.fumigatus

<400> 33978

```
Ser Ile Glu Gln Cys Arg Ser Pro Pro Tyr Pro Cys Arg Trp Pro Ala
1               5                  10                  15
Arg Pro Ala Gln Ser Ser Ser Ser Leu Ser Asn Ala His Ser Ser Leu
            20                  25                  30
Pro Gly His Leu Pro Pro Gln His Pro Phe Ser Ser Phe Gly Phe Tyr
        35                  40                  45
Asp Ser Pro Thr Pro Ala Phe Cys Ser Pro His Phe Val Phe Pro Asp
    50                  55                  60
Thr Thr Leu Asp Leu Ala Ser Phe Ala Pro Asp Pro Ser Val Ser Asp
65                  70                  75                  80
Thr Asp Pro Ser Ala Phe Val Pro Leu Pro Pro Asp Leu Ala Ser Phe
                85                  90                  95
Gly Asp Leu Asp Tyr Ala Ser Leu Pro Thr Gly Thr Ser Ser Ser Pro
            100                 105                 110
Tyr Ala Pro Asp Ser Phe Asp Val Thr Ala Ile Ser Thr Pro Ala Val
        115                 120                 125
Asp Val Lys Asp Ser Leu Pro Cys Leu Asp Ile Asp Ser Ser Gly Thr
    130                 135                 140
Asp Ser Gly Leu Ser Ala Ser Ala Phe Thr Gln Ala Leu Tyr
145                 150                 155
```

<210> 33979

<211> 143
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (108)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33979
Arg Ser His Met Ser Arg Ala Trp Ser Ser Pro Pro Ala Pro Ala Ala
1 5 10 15
Pro Gly Ser Thr Gly Gln Thr His Pro Trp Asp Thr Thr Gln Asn Asp
20 25 30
Glu Glu Asp Val Asp Asp Val Ala Thr Lys Leu Val Met Glu Asp Ala
35 40 45
Ser His Asp Trp Asp Leu Leu Arg Asp Leu Leu Asn Ala Met Arg Leu
50 55 60
Val Asp Asp Ala His Val Gln Ala Leu Leu Gly Met Val Arg Ala Asp
65 70 75 80
Cys Ala Ile Glu Glu Val Lys Leu Phe Val Gln Lys Thr Leu Asn Asp
85 90 95
Val Gln Asp Ala Gly Arg Gly Gly Glu Thr Val Xaa Arg Leu His Asp
100 105 110
Met Arg Met Arg Val Arg Ile Glu Ser Gly Asp Pro Pro Phe Arg Pro
115 120 125
Gln Val Met Asp Ile His Tyr Leu Cys His Val Ala Pro Tyr Arg
130 135 140

<210> 33980
<211> 128
<212> PRT
<213> A.fumigatus

<400> 33980
Phe Leu Arg His Arg Phe Arg Ser Val Cys Phe Ser Leu His Thr Ser
1 5 10 15
Ile Val Leu Ile Ser Ala Asp Thr Gln Ile Asn Pro Gly Gln Ile His
20 25 30
Thr Leu Thr Pro Pro Leu Leu Met Pro Ala Ser Arg Pro Gln Arg Val
35 40 45
Ser Ile Ser Ala Ala Ser Thr Ala Lys Asp Asn Pro Pro Lys Glu Thr
50 55 60
Pro Asn Arg Val Leu Lys Arg Gln Leu Asn Thr Leu Ala Ala Arg Arg
65 70 75 80
Tyr Arg Gln Arg Arg Val Asp Arg Met Asn Glu Leu Glu Ala Glu Leu
85 90 95
Glu Lys Val Lys Arg Glu Arg Asp Glu Leu Lys Met Arg Val Ser Lys
100 105 110
Leu Glu Gly Glu Thr Glu Ala Leu Arg Gly Leu Leu Lys Lys Asp Lys
115 120 125

<210> 33981
<211> 103
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (25)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33981
Ile Ser Met Thr Trp Gly Arg Asn Gly Gly Ser Pro Leu Ser Met Arg
1 5 10 15
Thr Arg Ile Arg Met Ser Cys Asn Xaa Leu Thr Val Ser Pro Pro Arg
20 25 30
Pro Ala Ser Cys Thr Ser Phe Asn Val Phe Trp Thr Asn Ser Phe Thr
35 40 45
Ser Ser Ile Ala Gln Ser Ala Arg Thr Ile Pro Ser Ser Ala Cys Thr
50 55 60
Cys Ala Ser Ser Thr Lys Arg Ile Ala Phe Ser Arg Ser Leu Ser Arg
65 70 75 80
Ser Gln Ser Trp Leu Ala Ser Ser Met Thr Asn Phe Val Ala Thr Ser
85 90 95
Ser Thr Ser Ser Ser Ser Phe
100

<210> 33982
<211> 66
<212> PRT
<213> A.fumigatus

<400> 33982
Thr Lys Leu Thr Ser His Gln Leu Asn Tyr Leu Ser Phe Phe Asn Asn
1 5 10 15
Pro Leu Asn Ala Ser Val Ser Pro Ser Ser Phe Asp Thr Arg Ile Phe
20 25 30
Asn Ser Ser Arg Ser Arg Phe Thr Phe Ser Ser Ser Ala Ser Ser Ser
35 40 45
Phe Ile Arg Ser Thr Arg Arg Trp Arg Tyr Arg Arg Ala Ala Arg Val
50 55 60
Leu Ser
65

<210> 33983
<211> 142
<212> PRT
<213> A.fumigatus

<400> 33983
Glu Ala Leu Asn Phe Ile Leu Pro Val Tyr Asp Ile Thr Leu Glu Lys
1 5 10 15
Leu Arg Tyr Glu Leu Val Glu Thr His Ile Asp Gly Gln Ala Cys Phe
20 25 30
Val Pro Val Ala Lys Val Leu Val Gly Glu Pro Asn Leu His Gly Ala
35 40 45
Trp Gly Val Ala Val Asp Ser Ser Arg Arg Cys Leu Asp Leu Trp Gly
50 55 60
Trp Arg Asn Ser Thr Leu Arg Leu Arg Thr Gly Val Arg Lys Arg Leu
65 70 75 80
Leu Leu Ala Thr Arg Glu Arg Asp Phe Gln Ser Pro Trp Asn Leu Pro

```
                85                  90                  95
Leu Asp Asp Leu Leu Phe Asp Arg Cys Gln Ile Glu Asp Asp Tyr Ala
            100                 105                 110
Thr Ser Cys Val Val Val Ala Asp Arg Ala Asp Tyr Asp Thr Phe Ser
        115                 120                 125
Leu His Ser Thr Thr Ser Arg Ser Gly Val Glu Val Val Thr
    130                 135                 140
```

<210> 33984
<211> 114
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (81)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33984

```
Gly Gly Phe Ser Pro Gly Ala Ser Lys Glu Glu Ile Asp Ser Gly Ser
1               5                   10                  15
Glu Gly Phe Val Ala Ser Val Pro Gly Asp Ala Ser Leu Asp Ala Pro
            20                  25                  30
Pro Phe Trp Arg Ser Ser Cys Ser Ser Lys Leu Leu Thr Lys Gly Glu
        35                  40                  45
His Cys Trp Arg Trp His Ser Pro Ile Ala Ser Pro Arg Leu Ser Ile
    50                  55                  60
Ala Thr Lys Ser Ser Arg Gly Ala Glu Ala Ser Arg Gly Ala Gly Pro
65                  70                  75                  80
Xaa Glu Gly Ala Ala Ala Ala Met Ser Val Ser Thr Thr Ser Ala Gly
                85                  90                  95
Ser Ser Gly Ser Ser Ser Gly Val Ser Val Thr Gly Glu Thr Ser Pro
            100                 105                 110
Val Asp
```

<210> 33985
<211> 141
<212> PRT
<213> A.fumigatus

<400> 33985

```
Ser Ile Cys Glu Val Arg Val Pro Ser Glu Asp Ser Leu Val Ser Glu
1               5                   10                  15
Ala Thr Asp Ser Arg Ser Glu Thr Lys Glu Asp Trp Gly Lys Ser Ala
            20                  25                  30
Tyr Phe Cys Arg Ser Ser Ser Ala Val Lys Pro Ser Ser Ser Ser Thr
        35                  40                  45
Ser Ser Ser Ser Ser Val Ser Glu Ser Val Glu Asp Met Leu Leu Ser
    50                  55                  60
Ser Ser Ser Ala Ser Leu Val Val Ala Ser Val Pro Leu Ser Ser Ala
65                  70                  75                  80
Ser Val Glu Ser Arg Lys Ser Leu Pro Val Ser Pro Arg Ile Ser Arg
                85                  90                  95
Arg Leu Phe Ser Asn Ser Met Val Asp Cys Leu Ile Ala Arg Ser Arg
            100                 105                 110
```

```
Ala Arg Trp Ser Ser Thr Phe Arg Ser Ser Ser Gln Arg Ala Arg Arg
        115                 120                 125
Ile Arg Ser Thr Ser Ala Arg Ala Lys Ser Asn Ile Phe
    130                 135                 140
```

<210> 33986
<211> 818
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2),(533)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33986

```
Arg Xaa Arg Ala Pro Gly Glu Asp Ser Thr Ser Ala Pro Asn Asp Pro
1               5                  10                  15
Thr Ser His Asn Ala Arg Ser Lys Arg Ser His Ser Asn Val Thr Ser
            20                  25                  30
Thr Pro Thr Ile Gly Ile Asp Glu Leu Trp Asn Asp Ile Gly Gly Glu
        35                  40                  45
Thr Asp Leu Gly Asp Glu Gln Gly Gln Arg Val Pro Arg Leu Arg Ile
    50                  55                  60
Lys Val Lys Lys Pro Val Ile Gly Phe Gln His Pro Ser His Val Ile
65                  70                  75                  80
Pro Pro Arg Lys Tyr Asn Ser Phe Arg Glu Trp Leu Glu Ser Gly Glu
                85                  90                  95
Gly Arg Ile Glu Asp Gly Ala Val Leu Thr Pro Glu Ala Ala Leu Val
            100                 105                 110
Glu Ala Arg Lys Arg Cys Arg Val Leu Glu Ala Thr Glu Pro Gly Gly
        115                 120                 125
Leu Leu Ser Pro Glu Val Cys Ser Ala Tyr Leu Pro Glu Gln Gln Glu
    130                 135                 140
Glu Pro Pro Gln Gln Tyr Ser His Gln Asp His Leu Val Ala His Ala
145                 150                 155                 160
Leu Tyr Phe Lys Lys Leu Leu Asp Gln Glu His Arg Arg His Arg Asn
                165                 170                 175
Thr Ala Arg Leu Leu Ala Gln Trp Cys Ala Asp Ala Trp Arg Lys Arg
            180                 185                 190
Asn Lys Arg Pro Glu Asp Ile Leu Arg Glu Gln Gln Glu Glu Val Arg
        195                 200                 205
Val Lys Arg Lys Gln Leu Ala Arg Asp Leu Gln Lys Met Phe Asp Leu
    210                 215                 220
Ala Arg Ala Glu Val Asp Arg Met Arg Leu Ala Arg Trp Glu Glu Glu
225                 230                 235                 240
Arg Lys Val Glu Asp Gln Arg Ala Leu Asp Arg Ala Ile Lys Gln Ser
                245                 250                 255
Thr Met Leu Phe Glu Lys Arg Arg Leu Glu Ile Leu Gly Glu Thr Gly
            260                 265                 270
Ser Asp Phe Leu Asp Ser Thr Asp Ala Glu Glu Ser Gly Thr Asp Ala
        275                 280                 285
Thr Thr Ser Asp Ala Glu Glu Asp Glu Ser Asn Met Ser Ser Thr Asp
    290                 295                 300
Ser Glu Thr Glu Asp Glu Asp Glu Val Asp Asp Asp Glu Gly Leu Thr
305                 310                 315                 320
```

```
Ala Glu Glu Leu Arg Gln Lys Tyr Ala Asp Leu Pro Gln Ser Ser Leu
                325                 330                 335
Val Ser Asp Arg Glu Ser Val Ala Ser Asp Thr Ser Glu Ser Ser Asp
            340                 345                 350
Gly Thr Arg Thr Ser His Ile Leu Gln Asn Ile Glu Asp Ile Asn Asp
        355                 360                 365
Ser Gln Gly Glu Thr Pro Leu Glu Gln Ile Glu Leu Asp Glu Val Asp
    370                 375                 380
Pro Met Leu Leu Asp Asp Ser Glu Asp Glu Ser Thr Asp Met Asp Asp
385                 390                 395                 400
Asp Met Gly Asp Ser Asp Glu Asp Gly Asp Ala Asp Gly Thr Asp Ser
                405                 410                 415
Asp Asp Glu Ser Asp Asp Gly Pro Gly Leu Leu Gly Phe Phe Ser Ser
            420                 425                 430
Lys Asp Arg Val Leu Asn Asp Ala His Arg Phe Asp Asp Glu Gly Asp
        435                 440                 445
Asp Pro Leu Ala Val Ser Asn His Glu Gly Gly Ser Gly Phe His Asp
    450                 455                 460
Asp Gly Gln Ser Val Ser Val Asp Glu Asp Gly Asp Glu Glu Leu Glu
465                 470                 475                 480
Asp Ala Asp Glu Val Ser Leu Val Pro Asn Gly Pro Ser Asn Ser Val
                485                 490                 495
Ser Ile Ser Gln Ser Thr Gly Glu Val Ser Pro Val Thr Glu Thr Pro
            500                 505                 510
Asp Glu Glu Pro Asp Asp Pro Ala Glu Val Val Asp Thr Asp Met Ala
        515                 520                 525
Ala Ala Ala Pro Xaa Glu Gly Pro Ala Pro Leu Glu Ala Ser Ala Pro
    530                 535                 540
Leu Glu Asp Leu Val Ala Ile Asp Lys Arg Gly Asp Ala Met Gly Glu
545                 550                 555                 560
Cys His Arg Gln Gln Cys Ser Pro Leu Val Asn Asn Leu Asp Glu Gln
                565                 570                 575
Glu Leu Arg Gln Asn Gly Gly Ala Ser Ser Glu Ala Ser Pro Gly Thr
            580                 585                 590
Leu Ala Thr Lys Pro Ser Glu Pro Glu Ser Ile Ser Ser Phe Glu Ala
        595                 600                 605
Pro Gly Glu Lys Pro Pro Gln Pro Ser Glu Ser Pro Ala Pro Gly Leu
    610                 615                 620
Lys Thr Pro Ile Pro His Leu Leu Arg Gly Thr Leu Arg Glu Tyr Gln
625                 630                 635                 640
His Tyr Gly Leu Asp Trp Leu Ala Gly Leu Tyr Asn Asn His Ile Asn
                645                 650                 655
Gly Ile Leu Ala Asp Glu Met Gly Leu Gly Lys Thr Ile Gln Thr Ile
            660                 665                 670
Ala Leu Leu Ala His Leu Ala Val Glu His Glu Val Trp Gly Pro His
        675                 680                 685
Leu Val Val Val Pro Thr Ser Val Ile Leu Asn Trp Glu Met Glu Phe
    690                 695                 700
Lys Lys Trp Cys Pro Gly Phe Lys Ile Met Thr Tyr Tyr Gly Ser Ile
705                 710                 715                 720
Glu Glu Arg Arg Gln Lys Arg Lys Gly Trp Thr Asp Asp Thr Ser Trp
                725                 730                 735
Asn Val Leu Ile Thr Ser Tyr Gln Leu Val Leu Gln Asp Gln Gln Val
            740                 745                 750
Leu Lys Arg Arg Asn Trp His Tyr Met Val Leu Asp Glu Ala His Asn
        755                 760                 765
```

```
Ile Lys Asn Phe Arg Ser Arg Lys Trp Gln Lys Leu Leu Thr Phe Lys
    770                 775                 780
Asn Arg Ala Arg Val Leu Pro Tyr Lys Leu His Arg Leu Gln Lys Gln
785                 790                 795                 800
Ser His Arg Asn Tyr Gly Pro Leu Leu Leu Leu Leu Gly Cys Pro Pro
                805                 810                 815
Asp Trp
```

<210> 33987
<211> 294
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (277)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33987

```
Val Ser Ala Pro Met Arg Ser Ser Thr Leu Ala Asp Ala Lys Pro Met
1               5                   10                  15
Ala Val Gly Pro Tyr Ser Pro Asn Ala Cys Ala Leu Cys Arg Ser Gln
            20                  25                  30
Lys Arg Arg Cys Asp Lys Thr Leu Pro Ser Cys Ser Arg Cys Ile Lys
        35                  40                  45
Ser Glu Phe Ser Ala Ser Ser Leu Cys Leu Ser Val Thr Asp Thr Gln
    50                  55                  60
Lys Arg Ser Lys Leu Ser Cys Asp Tyr Ala Trp Asn Ala Thr Arg Thr
65                  70                  75                  80
Glu Gly Leu Pro Arg Val Ser Leu Ser Asp Phe Leu Leu Phe His Val
                85                  90                  95
Pro Val Thr Gln Asp Gln Leu Trp Leu Pro Gly Ser Phe Gln Ala Leu
            100                 105                 110
Gln Pro His Trp Asp Asn Ile Ser Phe Arg Arg Val Asp Ile Asp Asn
        115                 120                 125
Tyr Phe Val Gly Leu Ala Met Ala Thr Leu Thr Glu Gln Cys Val Ser
    130                 135                 140
Val Glu Arg Met Leu Glu Glu Tyr Phe Cys Asn Ile His Pro Trp Phe
145                 150                 155                 160
Ser Val Ile Ile Glu Pro Gly Phe Arg Lys Arg Leu Ser Asn Leu His
                165                 170                 175
Arg Glu Pro Cys Ala Glu Thr Ala Met Leu Leu Leu Ala Val Ser Leu
            180                 185                 190
Val Thr Gly Ser His Asp Arg Ser Ser Asn Asp Ser His Arg Thr Arg
        195                 200                 205
Ile Tyr Gln Ile Gly Lys Tyr Leu Phe Ser Phe Leu Gln Leu Gln Arg
    210                 215                 220
Glu Pro Ser Leu Glu Met Val Pro Ser Gly Leu Leu Leu Val Leu Tyr
225                 230                 235                 240
Glu Leu Arg Ala Ser Arg Leu Asn Glu Ala Ser Val Ser Val Gly Asn
                245                 250                 255
Cys Ala Arg Leu Gly Tyr Thr Leu Arg Leu Asn Ile Asp His Pro Asn
            260                 265                 270
Arg Gly Glu Thr Xaa Arg Gly Trp Asn Pro Arg Asn Asp Ala Glu Tyr
        275                 280                 285
```

Gly Ala Asp Tyr Thr Cys
290

<210> 33988
<211> 215
<212> PRT
<213> A.fumigatus

<400> 33988
Asp Ser Ile Arg Thr Leu Ser Asn Met Trp Met Thr Ala Ile Val Val
1 5 10 15
Glu Gly Lys Thr Phe Ala Leu Asn Gly Tyr Asn Val Ser Tyr Arg Phe
20 25 30
His Val Asp Glu Ser Thr Gly Asp Leu Arg Ser Asp His Phe Gly Gly
35 40 45
Ser Val Ser Gly Pro Ile Pro Asp Asp Ser Ala Pro Ile Met Asn Gly
50 55 60
Trp Thr Gly Met Pro Asp Arg Val Arg Arg Glu Phe Pro Asp Gln Gly
65 70 75 80
Arg Gly Asp Phe Arg Ile Pro Ala Ile Arg Ile Arg Gln Ser Gln Gly
85 90 95
His Thr Val Ser Ala Phe Arg Tyr Asp Ser His Thr Val Leu Lys Gly
100 105 110
Lys Pro Ala Leu Ala Gly Leu Pro Ala Thr Phe Gly Thr Glu Glu Asp
115 120 125
Val Ser Thr Leu Val Val His Leu Tyr Asp Gln His Ser Glu Val Ala
130 135 140
Ala Asp Leu Met Tyr Ser Ile Phe Pro Lys His Asp Ala Ile Val Arg
145 150 155 160
Ser Val Arg Ile Thr Asn Lys Gly Glu Gly Thr Ile Ser Ile Glu Ala
165 170 175
Leu Ser Ser Met Ser Val Asp Leu Pro Cys Glu Asp Phe Asp Met Ile
180 185 190
Gly Leu Arg Gly Asp Trp Ala Arg Glu Ala His Arg Gln Arg Arg Lys
195 200 205
Val Asp Tyr Gly Ile Gln Gly
210 215

<210> 33989
<211> 300
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (299),(300)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33989
Ala Ile Asn Thr Val Asp Arg Thr Arg Leu Phe Thr Glu Leu Asp Arg
1 5 10 15
Phe Gly Ser Thr Thr Gly Phe Ser Ser His Leu His Asn Pro Phe Val
20 25 30
Ala Leu Ala His Arg Ser Thr Thr Glu Ser His Gly Glu Ala Trp Gly
35 40 45
Phe Ser Leu Val Tyr Thr Gly Ser Phe Ala Ala Asn Ile Glu Lys Gly

```
    50                  55                  60
Ser Gln Gly Leu Thr Arg Val Ser Met Gly Phe His Pro Asn Gln Leu
65                  70                  75                  80
Ser Trp Pro Leu Ala Pro Gly Glu Thr Phe Thr Ser Pro Glu Cys Val
                85                  90                  95
Ser Val Tyr Ser Lys Asp Gly Leu Gly Gly Met Ser Arg Ser Leu His
            100                 105                 110
Arg Leu Tyr Arg Asn His Leu Met Lys Ser Lys Phe Ala Ala Asp Asn
        115                 120                 125
Arg Pro Val Leu Leu Asn Ser Trp Glu Gly Leu Tyr Phe Asp Ile Asn
    130                 135                 140
Glu Glu Asn Met His Arg Met Ala Gln Glu Ser Ala Ala Leu Gly Val
145                 150                 155                 160
Lys Leu Phe Val Met Asp Asp Gly Trp Phe Gly Asp Lys Tyr Pro Arg
                165                 170                 175
Val Ser Asp Ser Ala Gly Leu Gly Asp Trp Val Pro Asn Pro Thr Arg
            180                 185                 190
Phe Pro Asn Gly Leu Ala Pro Leu Val Lys Ala Ile Thr Ser Leu Lys
        195                 200                 205
Val Ala Lys Ser Pro Glu Asn Leu Arg Phe Gly Ile Trp Val Glu Pro
    210                 215                 220
Glu Met Val Asn Pro Gln Ser Ser Leu Tyr His Glu His Pro Asp Trp
225                 230                 235                 240
Val Leu His Ala Gly Ser Tyr Pro Arg Thr Glu Gln Arg Asn Gln Leu
                245                 250                 255
Val Leu Asn Leu Ala Leu Pro Glu Val Gln Glu Phe Ile Ile Asp Ala
            260                 265                 270
Ile Thr Asn Ile Leu Asn Ser Ala Asp Ile Ser Tyr Val Lys Trp Ser
        275                 280                 285
Ser Pro Arg Gly Trp Lys Glu Pro Leu Gln Xaa Xaa
    290                 295                 300

<210> 33990
<211> 64
<212> PRT
<213> A.fumigatus

<400> 33990
Leu Arg Tyr Arg Arg Cys Arg Glu Arg Asp Met Pro Pro Arg Pro Ser
1               5                   10                  15
Phe Glu Tyr Thr Asp Thr His Ser Gly Asp Val Lys Val Ser Pro Gly
            20                  25                  30
Ala Lys Gly Gln Asp Ser Trp Phe Gly Trp Lys Pro Met Asp Thr Arg
        35                  40                  45
Val Asn Pro Cys Glu Pro Phe Ser Ile Leu Ala Ala Lys Glu Pro Val
    50                  55                  60

<210> 33991
<211> 204
<212> PRT
<213> A.fumigatus

<400> 33991
Phe Trp Glu Glu Val Met Pro Glu Asn Pro Asn Thr Pro Val Pro Glu
1               5                   10                  15
Leu Leu Asp Gln Thr Phe Thr Ser Val Asp Gln Gln Leu Glu Lys Leu
```

```
            20                  25                  30
Pro Leu Lys Asn Ser Gly Cys Thr Ala Val Ile Ala Leu Leu Arg Trp
        35                  40                  45
Glu Asp Arg Val Pro Ser Ser His Ser Val Thr Gly Ser Ala Ala Leu
    50                  55                  60
Ala Pro Ala Ala Val Ala Ala Ala Ala Glu Pro Asn Ser Glu Ala Asp
65                  70                  75                  80
Asn Thr Pro Thr Gln Ser Ala Pro Val Ser Val Leu Pro Thr Leu Gln
                85                  90                  95
Glu Lys Ala Ser Arg Gln Arg Val Leu Tyr Thr Ala Asn Val Gly Asp
            100                 105                 110
Ala Arg Ile Ile Leu Cys Arg Asn Gly Lys Ala Leu Arg Leu Ser Tyr
        115                 120                 125
Asp His Lys Gly Ser Asp Glu Asn Glu Gly Lys Arg Ile Ala Asn Ala
    130                 135                 140
Gly Gly Leu Ile Leu His Asn Arg Val Asn Gly Val Leu Ala Val Thr
145                 150                 155                 160
Arg Ala Leu Gly Asp Ala Tyr Leu Lys Asp Leu Val Thr Gly His Pro
                165                 170                 175
Tyr Thr Thr Glu Thr Val Ile Leu Pro Asp His Asp Glu Phe Ile Ile
            180                 185                 190
Leu Ala Cys Asp Gly Val Ser Ile Leu Ser Leu Tyr
        195                 200
```

<210> 33992
<211> 305
<212> PRT
<213> A.fumigatus

<400> 33992

```
Ser Ser Phe Leu Pro Lys Gly Leu Pro Ile Lys Leu Ala Gly Asn Lys
1               5                   10                  15
Arg Arg Ser Phe Ser Ser Gln Gly Gly Leu Leu Asn Arg Met Phe Ser
            20                  25                  30
Gly Ser Ser Ser Pro Pro Lys Asp Lys Leu Glu Thr Ile Pro His Ser
        35                  40                  45
Glu Ala Ile Thr Thr Pro Ser Leu Thr Val Lys Thr Asp Glu Ala Thr
    50                  55                  60
Val Ser Gln Lys Lys Phe Ser Pro Pro Ser Gly Phe Phe Gly Arg Arg
65                  70                  75                  80
Ala Ser Asp Glu Pro Ser Pro Gly Gly Glu Lys Lys Arg Arg Ser Ser
                85                  90                  95
Thr Val Thr Lys Ala Ala Thr Leu Phe Ser Asn Ala Lys Asn Ser Leu
            100                 105                 110
Ser Trp Ser Asn Ser Arg Glu Thr Ala Ala Thr Leu Thr Val Ala His
        115                 120                 125
Ser Pro Pro Thr Ser Leu His Lys Leu Gly Arg Met Asp Pro Ala Leu
    130                 135                 140
Ile Val Pro Gln Gly Ser Leu Asn Asn Ser Ala Gly Glu Ser Leu Pro
145                 150                 155                 160
Thr Pro Arg Ser Ser Phe Arg Val Gly Val Thr Glu Asp Arg Asn Arg
                165                 170                 175
Arg Cys Arg Arg Thr Met Glu Asp Thr His Ala Tyr Leu Tyr Asn Phe
            180                 185                 190
Leu Gly Thr Pro Ala Pro Ser Gly Arg Ala Asp Val Asn Gly Arg Arg
        195                 200                 205
```

```
Gln Ser Gly Asp Val Ser Pro Ser Ala Ala Glu Glu Thr Ser Val Val
    210                 215                 220
Glu Thr Asp Asn Gly Tyr Phe Ala Ile Phe Asp Gly His Ala Gly Thr
225                 230                 235                 240
Phe Ala Ala Glu Trp Cys Gly Lys Lys Leu His Leu Ile Leu Gly Arg
                245                 250                 255
Gly His Ala Gly Lys Pro Gln His Ser Gly Ser Gly Ala Ala Arg Pro
            260                 265                 270
Asp Phe His Phe Cys Gly Pro Ala Ala Gly Glu Ala Ala Val Glu Lys
        275                 280                 285
Gln Arg Val Tyr Arg Ser His Cys Ser Ser Thr Leu Gly Gly Gln Ser
    290                 295                 300
Pro
305
```

<210> 33993
<211> 70
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33993

```
Xaa Thr Asp Arg Val Gly Pro Arg Gly Leu Thr Thr Ser Leu Lys Gly
1               5                   10                  15
Ile Val Val Asn Pro Asn His His Ala Arg Gly Leu Ile Ser Gly Glu
            20                  25                  30
Ala Ser Lys Ala Met Ile Asn Gln His Phe Gly Gly Phe Val Ser Ile
        35                  40                  45
Arg Tyr Ile Arg Tyr Gln Ile Tyr Arg Phe Leu Val Thr Thr Tyr Val
    50                  55                  60
Pro Gln Leu Ser Lys His
65                  70
```

<210> 33994
<211> 65
<212> PRT
<213> A.fumigatus

<400> 33994

```
Ala Leu Leu Leu Cys Ile Leu His Lys Gln Ala His Asn Ser Tyr Val
1               5                   10                  15
Ile Leu Tyr Gly Tyr Ser Ser Cys Leu Val Ser Tyr Gln Ser Ala Trp
            20                  25                  30
Pro Pro Met Val Tyr Thr Asn Gly Leu Ser Glu Phe Thr Phe Leu Val
        35                  40                  45
Ala Val Asp Ser Phe Pro Glu Phe Val His Val His Val Ser Met Asp
    50                  55                  60
Glu
65
```

<210> 33995
<211> 211

<212> PRT
<213> A.fumigatus

<400> 33995
Lys Lys Ile His Gln Leu Gly Leu Glu Leu His Gln Arg Glu Leu Leu
1 5 10 15
Ala Met Ser Tyr Glu Met Leu Gln Gln Ile Ser Leu Arg Cys Phe Asn
20 25 30
Asp Leu Arg Thr Val Phe Leu Val His Asp Lys Arg Met Leu Gly Leu
35 40 45
Val Leu Glu Glu Leu Asp Ser Leu Val Ser Arg Asn Val Ile Ser Leu
50 55 60
His Gln Ala Asn Ile Leu Asn Arg Gly Leu Val His Thr Ile Ile Pro
65 70 75 80
Gly Ser Thr Lys Leu Glu Asn Phe Ile Val Thr Cys Gln Ser Asp Thr
85 90 95
Leu Phe Lys Asp Lys His Met Leu Lys Pro Val Arg Ser Gly Lys Gly
100 105 110
Lys Gly Ile Leu Phe Gly Asp Gln Ile Ser Gln Asp Glu Trp Leu Ser
115 120 125
Ile Leu Gln Gly Met Arg Asp Pro Phe Leu Glu Asn Gly Lys Thr Thr
130 135 140
Tyr Val Val Gln Thr Gln Ile Gln Gln Arg Arg Tyr Asp Val Leu Leu
145 150 155 160
Glu Glu Gly Lys Gly Ile Gly Asn Phe Pro Leu Ile Gly Thr Phe His
165 170 175
Ile Thr His Gly Val Phe Leu Gly Leu Gly Leu Trp Arg Ser Gly Pro
180 185 190
Gly Arg Ile Cys Ala Leu Ser Arg Gly Gly Ser Trp Leu Cys Thr Val
195 200 205
Ile Gln Gln
210

<210> 33996
<211> 132
<212> PRT
<213> A.fumigatus

<400> 33996
Val Arg His Tyr Gln His Pro Gly His Arg Glu Lys Val Cys His Pro
1 5 10 15
Ala Leu Leu Leu Ile Ile Met Glu Val Gln Val Pro Thr Lys Ser Leu
20 25 30
Ala Ser Leu Pro Ile Ile Asp Phe Glu Ala Ile Ala Asn Lys Asp Val
35 40 45
Thr Glu Ile Gln Lys Leu Val Gln Ala Gly Arg Thr Gln Gly Met Phe
50 55 60
Tyr Leu Asn Leu Gln Gly Pro Arg Thr Asn Gly Val Phe Asp Asp Ile
65 70 75 80
Pro Thr Leu Phe Lys Ala Gly Asn Ala Phe Phe Ser Leu Pro Ala Asp
85 90 95
Cys Glu Glu Lys Thr Lys Ala Leu Arg Thr Gly Val Glu Arg Gly Tyr
100 105 110
Tyr Arg Ser Cys Pro Ala Phe Ser Ser Tyr Leu Leu Met Asn Arg Gln
115 120 125
Leu Pro Pro Gln

130

<210> 33997
<211> 191
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (168),(179),(190)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33997
Ile Pro Arg Asp Glu Tyr Ala Ala Gly Ser Trp Glu Leu His Ala Thr
1 5 10 15
Leu Gln Pro Glu Gln Glu Arg Ile Ala Arg Thr Met Glu Thr Phe His
20 25 30
Gly Ala Leu Gln Ile Val Leu Ala Glu Leu Cys Ala Ser Val Gly Ile
35 40 45
Thr Ile Pro Glu Leu Ser Asp Asp Ser Thr Thr Pro Ser Asp Thr Ala
50 55 60
Leu Lys Phe Val Tyr Lys Phe Pro Ile His Glu Pro Gly Lys Val Ile
65 70 75 80
Asn Gly Ala His Thr Asp Phe Gly Leu Asp Thr Leu Leu Trp Tyr Asp
85 90 95
Glu Glu Thr Thr Gln Val Ala Ile Tyr Asp Glu Asn Gly Glu Arg Thr
100 105 110
Glu Glu Trp Leu Thr Ile Pro Val Val Gly Gly Ser Val Leu Val Asn
115 120 125
Val Ala Asp Glu Leu Ala Ala Arg Ser Asn Gly Ser Leu His Ser Thr
130 135 140
Val His Arg Val Val Ala Pro Pro Gly Ala Lys Arg Val Arg Asn Gly
145 150 155 160
Val Leu Tyr Phe Phe Pro Ala Xaa Thr Glu Leu Asp Trp Gln Lys Met
165 170 175
Ser Pro Xaa Trp Arg Ser Cys Met Gln Gln Arg Cys Asn Xaa Arg
180 185 190

<210> 33998
<211> 66
<212> PRT
<213> A.fumigatus

<400> 33998
Gly Thr Gly Cys Arg Tyr Leu Val Val Val Val Val Ala Pro Ala
1 5 10 15
Ala Val Asp Asn Val Gly Gly Ala Cys His Ile Gln Ala Ser Pro Leu
20 25 30
Phe Gln Leu Gly Ser Ile Asn Pro His Ser Ser Leu Ile Phe Ile Leu
35 40 45
Ile Leu Ser Leu Thr Ser Val Tyr Leu Ile His Ile Phe Ile Leu Gly
50 55 60
Arg His
65

<210> 33999

<211> 162
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (135),(139)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 33999
Val Lys Pro Arg Ala His Thr Pro Ser Asp Asp Lys Ala Leu Val Ser
1 5 10 15
Val Val Leu Glu Gln Lys Glu Trp Glu Ile Leu Thr Ala Tyr Pro Thr
20 25 30
Lys Ser Phe Thr Leu Arg Gly Ser Arg Gly Cys Asn Ala Asp Gly Ser
35 40 45
Arg Leu Thr His Val Ala Ile Leu Gly Leu Leu Gly Lys Met Thr Gly
50 55 60
Ala Ala Ala Val Ala Asn Ser Asp Ile Ile Met Ala Glu Asn Gly Arg
65 70 75 80
Leu Arg Phe Asp Val Ser Leu Lys Gly Leu Gly Thr Leu Gly Ile Tyr
85 90 95
Phe Ser Asp Leu Gln Asn Trp Ser Ile Ala Arg Asn Phe Met Val Thr
100 105 110
Ile Arg Gly Arg Ala Val Pro Arg Lys Thr Val Trp Lys Glu Arg Cys
115 120 125
Ala His Ala Lys Val Leu Xaa Val Asp Val Xaa Ala Ala Trp Lys Ala
130 135 140
Met Gly Leu Asp Ser Gly Trp Ser Asn Glu Val Leu Val Gln Val Phe
145 150 155 160
Val Gly

<210> 34000
<211> 178
<212> PRT
<213> A.fumigatus

<400> 34000
Thr Ser Gly Ser Gln Leu Leu Pro Glu Ala Ala Val Gln Ser Leu Arg
1 5 10 15
Thr Lys Leu Leu Pro Leu Thr Thr Ile Leu Thr Pro Asn Ile Pro Glu
20 25 30
Ala Ile Leu Leu Leu Lys Asp Ala Gly Val Asp Val Gln Leu Pro Lys
35 40 45
Asp Leu Ser Glu Leu Thr Gln Leu Ala Lys Gln Val Arg Ala Leu Gly
50 55 60
Pro Lys Thr Val Leu Leu Lys Gly Gly His Leu Pro Leu Thr Ala Ala
65 70 75 80
His Glu Ala Ala Gln Asn Pro Glu Asp Ala Ser Arg Val Ile Asp Ile
85 90 95
Leu Tyr Asp Gly Glu Asn Thr Thr Leu Phe Glu Thr Glu Phe Leu Met
100 105 110
Ser Lys Asn Thr His Gly Thr Gly Cys Ser Leu Ala Ser Ala Ile Ala
115 120 125
Ala Asn Leu Ala Leu Gly Lys Asp Met Lys Arg Ala Val His Ser Ala

```
    130                 135                 140
Val Arg Phe Val Glu Ala Gly Ile Lys Thr Ser Val Asp Met Gly Lys
145                 150                 155                 160
Gly Ser Gly Pro Ile Asn His Phe His Ser Val Tyr Ser Leu Pro Phe
                165                 170                 175
Ala Pro
```

<210> 34001
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34001

```
Leu Leu Ala Leu Gly Leu Thr His Val Ser Asp Arg Phe Leu Glu Tyr
1               5                   10                  15
Ala Leu Ala Arg Pro Asp Val Arg Pro Ile Trp Lys Lys Phe Thr Glu
            20                  25                  30
His Glu Phe Val His Gly Leu Gly Ser Gly Lys Leu Pro Val Glu Arg
        35                  40                  45
Phe Lys Gln Tyr Leu Val Gln Asp Tyr Leu Tyr Leu Val Arg Thr Ser
    50                  55                  60
```

<210> 34002
<211> 151
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34002

```
Leu Xaa Arg Thr Pro Ile Leu Ala Cys Thr Ala Tyr Ser Arg Tyr Ile
1               5                   10                  15
Leu Asp Val Gly Gln Ser Glu Asp Trp Leu Ala Leu Gln Met Ala Leu
            20                  25                  30
Ala Pro Cys Leu Ile Gly Tyr Gly Ala Ile Ala Lys Arg Leu Tyr Thr
        35                  40                  45
Glu Lys Glu Thr Leu Arg Glu Gly Asn Arg Tyr Trp Arg Trp Ile Glu
    50                  55                  60
Asn Tyr Val Ala Glu Asp Tyr Thr Glu Ala Val Arg Leu Gly Ser Gly
65                  70                  75                  80
Lys Asn Thr Phe Phe Phe Ser Ser Gln Arg Thr Gln Val Tyr Val Ala
                85                  90                  95
Asp Arg Ser Val Leu Glu Leu Leu Glu Thr His Ile Arg Gln Val Ser
            100                 105                 110
Pro Ser Arg Met Glu Glu Leu Ile Lys Ile Phe Ile Arg Ala Thr Glu
        115                 120                 125
Leu Glu Ile Ser Phe Trp Asp Met Gly Leu Gly Asp His Pro Arg Ala
    130                 135                 140
His Met Thr Ser Leu Ser Ala
145                 150
```

<210> 34003

<211> 127
<212> PRT
<213> A.fumigatus

<400> 34003
Ile Thr Ser Ser Pro Ala Met Phe Asp Thr Val Cys Thr Leu Pro Leu
1 5 10 15
Ser Ala Asp Leu Phe Ser Gln Ala Leu His Pro Lys Glu Pro Ile Val
20 25 30
Ser Val Gly Leu Ser Thr Gly His Val Gln Thr Phe Arg Leu Pro Ser
35 40 45
Glu Glu Ser Asp Thr Asp Asn Asp Gly Ala Glu Ser Thr Ser Ser Ser
50 55 60
Arg Asn Gly Lys Gly His Ile Asp Thr Met Trp Arg Thr Arg Arg His
65 70 75 80
Lys Gly Ser Cys Arg Cys Leu Gly Phe Gly Val Asp Gly Glu Met Leu
85 90 95
Tyr Ser Ala Gly Thr Asp Gly Leu Val Lys Ala Ala Asn Ala Glu Thr
100 105 110
Gly Val Val Glu Asn Lys Ile Ala Ile Pro Pro Ala Asn Asp Gly
115 120 125

<210> 34004
<211> 299
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(24)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34004
Phe Cys Gly Arg Ser Val Asp Ala Pro Thr Ile Val His Ala Leu Ser
1 5 10 15
Xaa Gln Thr Leu Leu Leu Ala Xaa Asp Ser Ser Ala Leu His Leu Tyr
20 25 30
Asp Leu Arg Ile Pro Phe Ser Pro Val Ser Ala Arg Pro Gln Gln Thr
35 40 45
His His Pro His Asp Asp Tyr Ile Ser Ser Leu Thr Pro Leu Pro Pro
50 55 60
Ser Asp Thr Ser Thr Ser Gly Phe Ser Lys Gln Trp Val Thr Thr Gly
65 70 75 80
Gly Thr Thr Leu Ala Val Thr Asp Leu Arg Arg Gly Val Leu Val Arg
85 90 95
Ser Glu Asp Gln Glu Glu Glu Leu Val Ser Ser Val Tyr Ile Gly Gly
100 105 110
Leu Arg Ala Gly Gly Thr Ser Arg Gly Glu Lys Val Ile Val Gly Gly
115 120 125
Ser Ser Gly Val Leu Thr Leu Trp Glu Lys Gly Ala Trp Asp Asp Gln
130 135 140
Asp Glu Arg Ile Tyr Val Gln Arg Glu Ala Gly Gly Gly Glu Ser Leu
145 150 155 160
Glu Thr Leu Ala Val Val Pro Asp Glu Leu Gly Lys Gly Lys Met Ile
165 170 175
Ala Val Gly Leu Gly Ser Gly Gly Val Lys Phe Val Arg Met Gly Val

```
            180                 185                 190
Asn Lys Val Val Ser Glu Val Met His Asp Glu Thr Glu Gly Val Ile
        195                 200                 205
Gly Leu Gly Phe Asp Val Glu Gly Arg Met Val Ser Gly Gly Gly Gln
    210                 215                 220
Ile Val Lys Val Trp His Glu Ala Val Asp Ser Asp Glu Met Asp Gly
225                 230                 235                 240
Asp Thr Ile Gly Gly Lys Arg Met Phe Gly Ser Gly Ser Asp Ser Asp
                245                 250                 255
Asp Ser Asp Asp Gly Asp Asp Ser Asp Asp Ser Asp Arg Gly Ser Arg
            260                 265                 270
Lys Ala Ala Gln Pro Gln Arg Lys Lys Arg Lys Asn Lys Gly Lys Gly
        275                 280                 285
Gly Gln Asp Ile Met Gly Phe Ala Asp Ile Asp
    290                 295
```

<210> 34005
<211> 331
<212> PRT
<213> A.fumigatus

<400> 34005

```
Phe Asn Thr Trp Gly Tyr Leu Thr Pro Arg Tyr Pro Val Pro Asp Cys
1               5                   10                  15
Cys Ile His Ser Ile Gly Gly Arg Asn Trp Ile Leu Asp Ala Ser Trp
            20                  25                  30
Asn Ala Trp Ile Gly Ala Met His Asn Ser Ser Gln Leu Met Gly Ile
        35                  40                  45
Leu His Ala Phe Tyr Gly Leu Gly Ala Val Val Ala Pro Ile Thr Ala
    50                  55                  60
Thr Tyr Phe Ile Thr Asp Cys Asp Trp Glu Trp Tyr Glu Phe Tyr Tyr
65                  70                  75                  80
Ala Met Ala Ile Val Ala Gly Met Glu Phe Leu Thr Ser Val Ala Ala
                85                  90                  95
Phe Cys Ser Ser Thr Gly Ser Lys Ser Lys Asp Ser Asp Ala Cys Thr
            100                 105                 110
Glu Glu Thr Leu Ser Ser Asp Ser Ser Asp Asn Leu Met Ser Ser Thr
        115                 120                 125
Pro Thr Arg Lys Pro Thr Leu Glu Ser Leu Arg Ile Pro Ser Thr Trp
    130                 135                 140
Val Ile Ser Leu Phe Leu Phe Ile Tyr Val Gly Ala Glu Val Thr Val
145                 150                 155                 160
Gly Gly Trp Val Phe Thr Phe Leu Val Asp Leu Arg Asn Val Pro Leu
                165                 170                 175
Ser Thr Ala Gly Phe Val Ser Phe Ser Tyr Trp Gly Gly Leu Thr Val
            180                 185                 190
Gly Arg Val Cys Leu Gly Phe Leu Thr Pro Phe Phe Asn Arg Gln Arg
        195                 200                 205
Leu Ala Val Ile Leu Tyr Leu Gly Cys Cys Ile Phe Leu His Ile Thr
    210                 215                 220
Phe Cys Ile Val His Asp Leu Arg Leu Leu Val Leu Ser Val Thr Leu
225                 230                 235                 240
Leu Gly Phe Phe Leu Gly Pro Leu Tyr Pro Glu Ala Val Ile Ala Gln
                245                 250                 255
Ala Lys Leu Leu Pro Lys Ser Leu His Val Ala Ala Val Gly Phe Ala
            260                 265                 270
```

```
Cys Ala Leu Gly Ser Ala Gly Gly Ser Val Phe Pro Phe Ile Thr Gly
        275                 280                 285
Ala Ile Ala Lys Gly Tyr Gly Ile Asn Val Leu Gln Pro Ile Val Leu
    290                 295                 300
Val Met Leu Val Leu Cys Leu Val Leu Trp Leu Val Leu Pro Glu Lys
305                 310                 315                 320
Arg Glu His Ser Arg Arg Gln Ala Ser Pro Val
                325                 330
```

<210> 34006
<211> 422
<212> PRT
<213> A.fumigatus

<400> 34006

```
Tyr Phe Glu His Leu Ser Thr Arg Ser Ser Thr Ser Arg Pro Cys Asp
1               5                  10                  15
Arg Trp Cys Ser His Ile Glu Phe Leu Ile Leu Ser Ile Thr Pro Gly
            20                  25                  30
His Phe Ser Met Thr Ala Val Ala Ser Pro Pro Ser Val Gln Glu Gly
        35                  40                  45
Pro Arg Leu Gly Trp Tyr Asp Ser Gly Lys Gly Gly Gln Gly Ala Leu
    50                  55                  60
Thr Ser Met Asn Asp Glu Val Ser Arg Met Phe Met Pro Arg Lys Ser
65                  70                  75                  80
Ile Gln Arg Ser Asn Ser Ser Ser Ser Leu Gly Ser Asn Ser Ser Thr
                85                  90                  95
Ser Thr Val Val Ala Gly Ser Gln Asn Val His Ala Val Gln Ser Asn
            100                 105                 110
Thr Ala Glu Ser Cys Thr Trp Ser Ser Lys Lys Lys Ser Ser Arg Ser
        115                 120                 125
Ile Trp Pro Ser Thr Lys Ser Glu Pro Ala Thr Gly Val Ser Thr Thr
    130                 135                 140
Arg Thr Gln Val Met Pro Ala Phe Ser Ser Gly Pro Gly Ala Thr Ser
145                 150                 155                 160
Ala Met Ser Val Leu His Gln Pro Ser Ser Ile Val Pro Ser Gln His
                165                 170                 175
Met Leu Gln Ser Ser Gln Gln Asn Gly Val Arg Ala Gly Ser Ala Pro
            180                 185                 190
Ser Gly Glu Pro Pro Ala Ile Leu Thr Leu Leu Pro Ile Asn Gly Thr
        195                 200                 205
Phe Glu Lys Lys Gln Ile Thr Val Pro Phe Tyr Pro Asp Val Leu Arg
    210                 215                 220
Ile Gly Arg Gln Thr Asn Ala Lys Thr Val Pro Thr Pro Val Asn Gly
225                 230                 235                 240
Phe Phe Asp Ser Lys Val Leu Ser Arg Gln His Ala Glu Ile Trp Ala
                245                 250                 255
Asp Lys Ser Gly Lys Ile Trp Ile Arg Asp Val Lys Ser Ser Asn Gly
            260                 265                 270
Thr Phe Val Asn Gly Gln Arg Leu Ser Pro Glu Asn Arg Glu Ser Glu
        275                 280                 285
Pro His Glu Leu Arg Glu Asn Asp Thr Leu Glu Leu Gly Ile Asp Ile
    290                 295                 300
Val Ser Glu Asp Gln Lys Thr Ile Val His His Lys Val Ser Ala Lys
305                 310                 315                 320
Val Glu His Ala Gly Ile Tyr Gly Thr Met Pro Asn Ile Phe Asp Leu
```

```
                325                 330                 335
Thr Leu Gly Asp Leu Asp Pro Ala Ser Gly Asn Gly Leu Leu Pro Ser
            340                 345                 350
Pro Leu Ser Gln Pro Leu Ser His Leu Arg Gly Arg Ser Gly Ser Ala
        355                 360                 365
Met Ser Asn Arg Ser Ser Gln Ser Ala Ala Ser Ser Gln Leu Ser Ala
    370                 375                 380
Leu Gln Gln Gln Arg Gln Met Asn Tyr Trp Asn Ser Pro Ile Ser Ile
385                 390                 395                 400
Glu Gln Ile Val Lys Arg Leu Thr Val Arg Leu Leu Leu Ala Phe Pro
                405                 410                 415
Pro Lys Val Ala Ser His
            420
```

<210> 34007
<211> 431
<212> PRT
<213> A.fumigatus

<400> 34007

```
Lys Leu Thr Lys Arg Cys Glu Gln Ser Thr Gln Cys Ile Ala Ala Ala
1               5                   10                  15
Thr Ser Asp Glu Leu Leu Glu Phe Ser Asn Ile His Arg Thr Asp Cys
            20                  25                  30
Gln Ala Ala Tyr Ser Thr Phe Val Ala Arg Leu Ser Ser Lys Gly Cys
        35                  40                  45
Ile Pro Leu Ile Pro Phe Ser Cys Val Gln Ser Glu Met Lys Gln Ala
    50                  55                  60
Lys Gln Gln Ala Gln Asp Val Arg Gln Thr Asp Glu Phe Leu Thr Ser
65                  70                  75                  80
Leu Thr Lys Gln Gly His Gln Glu Arg Glu Lys Ala Lys His Ser Pro
                85                  90                  95
Pro Asp Ser Gly Val Ser Arg Gln Val Asn Gly Arg Pro Lys Met Pro
            100                 105                 110
Arg Val Asp Ser Phe Ser Arg Phe Ser Asp Pro Pro Ala Pro Pro Pro
        115                 120                 125
Gln Gln Pro Leu Pro Glu Lys Pro Asp Ala Pro Pro Arg Thr Gly Ala
    130                 135                 140
Asp Ala Phe Ser Pro Leu Lys Arg Ser Asp Thr Glu Lys Pro Lys Leu
145                 150                 155                 160
Gly Ser Asn Asn Ser Pro Ala Ser Arg Glu Ser Ser Gln Ile Leu Ser
                165                 170                 175
Leu Ile Glu Ala Leu Ser Ser Ala Lys Arg Glu Leu Asp Ser Gln Gly
            180                 185                 190
Ala Arg Val Lys Glu Leu Glu Thr Leu Leu Leu Gln Glu Arg Asn Ala
        195                 200                 205
Arg Glu Ser Ala Glu Glu Lys Ala Arg Asn Leu Glu Leu Gln Ala Lys
    210                 215                 220
Gly Val Asn Gly Glu Ser Leu Glu Gln Gly Met Asn Gly Arg Ser Asp
225                 230                 235                 240
Asp Ala Ala Ile Ser Glu Lys His Ala His Glu Gln Pro Ala Asn Ala
                245                 250                 255
Glu Leu Pro Pro Asn Ser Gly Ser Asp Lys Ser Ser Thr Ser Glu Ser
            260                 265                 270
Leu Ala Asp Thr Gln Ala Tyr His Leu Gln Leu Arg Leu Glu Thr Met
        275                 280                 285
```

```
Met Glu Glu Met Glu Glu Met Lys Lys Gln Val Ala Met Phe Arg Ser
    290                 295                 300
Arg Ala Glu Lys Ala Glu Ser Glu Thr Ala Glu Ala Arg Lys Ser Leu
305                 310                 315                 320
Ala Glu Met Ile Glu Thr Leu Arg Arg Glu Arg Ala Glu Lys Cys Glu
                325                 330                 335
Leu Ser Asn Glu Ser Ala Ala Lys Asp Ile Thr Ile Thr Arg Asp Asp
            340                 345                 350
Ser Ala Thr Ala Asp Ala Gly Tyr Val Ala Gly Gly Glu Val Glu Glu
        355                 360                 365
Gln Ala His Pro Asn Thr Thr Pro Ser Ser Pro Tyr Thr Asn Val Asn
    370                 375                 380
Asn Ser Gly Thr Ala Phe Ala Lys Gln Pro Leu Lys His Asp Val Leu
385                 390                 395                 400
Glu Gln Thr Ser Pro Tyr Ala Ser Met Leu Gly Val Val Leu Leu Gly
                405                 410                 415
Val Gly Leu Met Ala Tyr Leu Asn Gly Trp Gln Lys Met Asp Lys
            420                 425                 430
```

<210> 34008
<211> 327
<212> PRT
<213> A.fumigatus

<400> 34008

```
Ala Leu Asn His Lys Met Arg Glu Lys Ala Met Ala Pro Ser Glu Thr
1               5                   10                  15
Thr Pro Leu Leu Val Val Asn Val Ala Pro Gln Arg Tyr Arg Tyr Pro
            20                  25                  30
His His Ala Leu Arg Arg Ala Cys Ser Phe Ser Leu Ile Leu Ile Leu
        35                  40                  45
Phe Ile Gly Leu Ile Leu Phe Leu Ile Pro Phe Pro Ile Leu Pro Arg
    50                  55                  60
Glu His Gly Ser Leu Trp Ser Tyr Leu Pro Gly Ala Ser Pro Phe Pro
65                  70                  75                  80
Tyr Pro Ser Trp Pro Asn Ser Pro Gly Leu Thr Tyr Glu Gln Leu Gln
                85                  90                  95
Ala Val Leu Gln Ser Thr Pro Ser Ala Ala Lys Ala Arg Glu Trp Ser
            100                 105                 110
Ser Tyr Tyr Thr Ala Gly Pro His Leu Ala Gly Lys Asn Leu Ser Gln
        115                 120                 125
Ala Leu Trp Thr Arg Glu Lys Trp Gln Asp Phe Gly Val Met Asp Thr
    130                 135                 140
Glu Ile Val Ala Tyr Asp Val Tyr Leu Asn Tyr Pro Val Asp His Arg
145                 150                 155                 160
Leu Ala Leu Leu Lys Lys Asp Gly Asp Lys Thr Asp Val Thr Phe Glu
                165                 170                 175
Ala Ser Leu Glu Glu Asp Val Leu Lys Glu Asp His Thr Ser Gly Leu
            180                 185                 190
Pro Asp Arg Val Pro Thr Phe His Gly Tyr Ser Ala Ser Gly Asn Val
        195                 200                 205
Thr Ala Pro Phe Val Tyr Val Asn Phe Gly Thr Tyr Asp Asp Tyr Gln
    210                 215                 220
Asp Leu Val Asp Ala Asn Val Ser Leu Ala Gly Lys Ile Ala Ile Ala
225                 230                 235                 240
Lys Tyr Gly Arg Ile Phe Arg Gly Leu Lys Val Lys Arg Ala Gln Glu
```

```
                245                 250                 255
Leu Gly Met Val Gly Val Ile Leu Tyr Asp Asp Pro Gln Glu Asp Gly
            260                 265                 270
Asp Ile Thr Glu Asp Asn Gly Tyr Lys Pro Tyr Pro Glu Gly Pro Ala
        275                 280                 285
Arg Asn Pro Ser Ala Val Gln Arg Gly Ser Ala Gln Phe Leu Ser Met
    290                 295                 300
Ser Ser Phe Thr Phe Gly Pro Gln Ala Leu Thr Asp Thr Asp His Ser
305                 310                 315                 320
Ala Val Arg His Arg Ser Arg
                325
```

<210> 34009
<211> 280
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34009

```
Gly Xaa Asp Ala Phe Pro Ser Ser Pro Ala Val Lys Thr Ala Ser Ser
1               5                   10                  15
Ser Ala Ser Glu Ser Lys Thr Gly Ser Ser Ser Gln Lys Thr Lys Thr
            20                  25                  30
Arg Ser Arg Lys Glu Ala Val Asp Arg Ala Pro Ser Phe Met Val Pro
        35                  40                  45
Pro Asp Ile Asp Asp Leu Leu Pro Ser Ser Ser Gly Asn Arg Thr Lys
    50                  55                  60
Pro Glu Phe Ile Ala Ser Ala Ser Ile Pro Asn Asp Thr Ile Ser Ser
65                  70                  75                  80
Ser Ser Gly Phe Ala Ser Ser Ala Gln Ile Ser His Phe Phe Asp Ser
                85                  90                  95
Asp Asp Asp Cys Ser Ser Gly Thr Ser Leu Ser Ser Val Pro Glu Asn
            100                 105                 110
Leu Leu Glu Glu Phe Ser Gln Met Glu Asp Val Phe Leu Ser Asp Met
        115                 120                 125
Asp Asp Ser Glu Asn Thr Glu Leu Lys Gln Ser Leu Cys Pro Trp Cys
    130                 135                 140
Lys Lys Thr Val Asp Ser Asp Ala Leu Arg Lys Phe Arg Ala Gln Pro
145                 150                 155                 160
Lys Gln Arg Ile Cys Glu Gln Gln Gln Phe Cys Glu Ser His Gln Lys
                165                 170                 175
Glu Thr Ala Glu Lys Glu Trp Lys Glu Arg Gly Tyr Pro Asp Ile Asp
            180                 185                 190
Trp Asp Thr Phe Asp Glu Arg Ile Lys Cys His Phe Asp Asp Leu Glu
        195                 200                 205
Ser Ile Leu Val Pro Glu Gly Asn Ser Tyr Tyr Arg Asn Val Leu Asp
    210                 215                 220
Thr Met Leu Lys Ser Gly Lys Ala Lys Asn Phe Arg Leu Thr Leu Ala
225                 230                 235                 240
Gly Asp Ala Leu Glu Thr Ile Cys Cys Gly Tyr Tyr Gly Thr Arg Gly
                245                 250                 255
Ala Asn Lys Met Tyr Ser His Leu Leu Ser Leu Leu Thr Phe Lys Arg
```

```
            260                 265                 270
Cys Pro Ile Ile Asn Pro Leu Ser
        275                 280

<210> 34010
<211> 765
<212> PRT
<213> A.fumigatus

<400> 34010
Arg Pro Glu Gln Arg Ile Asp Asp Asp Val Arg Glu Val Ser Thr Tyr
1               5                  10                  15
Ser Glu Ala Arg Glu Phe Pro Lys Met Leu His Thr Pro Thr Cys Pro
            20                  25                  30
Glu Ser Ser Ser Ala Trp Thr Met Pro Glu Phe Thr Leu His Lys Ile
        35                  40                  45
Ser Leu Asn Ser Ser Gln Leu Pro Thr Arg Arg Met Ser Asp Gly Asp
    50                  55                  60
Val Ser Arg Asp Gly Glu Phe Val Ala Lys Ser Asp Pro Leu Ser Ser
65                  70                  75                  80
Ala Phe Asp Glu Gly Arg Ala Ala Gln Thr Asn Phe Leu Cys Glu Leu
                85                  90                  95
Pro Ser Gly Ile Arg Gly Ala Cys Ser Pro Glu Phe Leu Phe Leu Val
            100                 105                 110
Ser Ser Leu Ile Glu Gln Leu Gln Pro Ser His Pro Ile Glu Ile Ile
        115                 120                 125
Asp Ser Leu Gln Lys Asp Val Ile Ser Asp Ile Val Ala His Asp Lys
    130                 135                 140
Ser Met Lys Gln Pro Lys Gln Ser Thr Ser Phe Ala Ile Arg Ala Pro
145                 150                 155                 160
Phe Ile Val Ala Lys Met Val Asn Thr Ser Asp Ser Pro Thr Asp His
                165                 170                 175
Glu Leu Ser Phe Arg Asp Glu Tyr Ser Ile Glu Ile Ser Asn Leu Arg
            180                 185                 190
Thr Glu Phe Arg Thr Arg Ile Glu Arg Arg Lys Gly Asp Leu Leu Ala
        195                 200                 205
Gly Ile Asp Arg Lys Phe Thr Val His Ala Ala Ala Gln Asn Leu Thr
    210                 215                 220
Gly Leu Val Glu Gly Gly Arg Ala Asp Ala Phe Gln Glu Lys Ala Gly
225                 230                 235                 240
Phe Arg Cys Leu Leu Ser Asp Leu Asp Phe Trp Leu Val Thr Ala Pro
                245                 250                 255
Ile Thr Arg Ser Asn Leu Gln Val Arg Ala Phe Asp Thr Ile Ser Ser
            260                 265                 270
Thr Lys Ser Val Glu Gln Leu Ala Val Leu Val Arg Arg Ala Thr Thr
        275                 280                 285
Met Phe Asp Ser Val Ala Trp Ser Phe Glu Arg Ser Ser Ser Val Gly
    290                 295                 300
Ser Lys Arg Leu Arg Tyr Ile Ile Tyr Ser Leu Thr Gln Ser Ala Gly
305                 310                 315                 320
Asn Ile Pro Asp Pro Ala Phe Leu Thr Arg Ile Ser His Val Leu Arg
                325                 330                 335
Val Ala Pro Thr His Leu Arg Gln His Asp Ser Trp Lys Ile Ile Ser
            340                 345                 350
Arg Ile Arg Asn Val Tyr Asn Asn Leu Pro Val His Gln Gln Arg Asp
        355                 360                 365
```

```
Leu Ile Leu Lys Cys Ser Thr Asp Asn Thr Ser Ile Pro Asp Asn Ala
    370                 375                 380
Lys Val Thr Val Leu Ser Gly Phe Asp Gln Trp Arg Ala Trp Asp Leu
385                 390                 395                 400
Ala His Val Gln Lys Ser Tyr Val Met Gln Lys Ile Trp Asp Thr Ser
                405                 410                 415
Glu Gln Lys Pro Ser Glu Ile Pro Thr Ala Leu Ala Ala Ser Leu Thr
            420                 425                 430
Val Lys Asn Phe Arg Phe Ser Ile Asp Pro Gly Pro Lys Glu Ser Asp
        435                 440                 445
Phe Val Leu Glu Asp Leu Ser Ser Ala Leu Ser Ile Ser Thr Gln Gln
    450                 455                 460
Thr Leu Leu Asp Lys Lys Pro Thr Arg Val Ile Val Ser Gln Thr Tyr
465                 470                 475                 480
Cys Ser Ser Val Gly Leu His Leu Arg Trp Glu Ile Leu Glu Leu Val
                485                 490                 495
Asp Gly Val Leu Lys Thr Leu Ser Ser Val Lys Leu Glu Ser Val Ser
            500                 505                 510
Ser Ala Gln Glu Ser Asp Asp Gln Pro Thr Glu Lys Asn Glu Leu His
        515                 520                 525
Leu Ile Phe Gly Ile Asp Ser Gly Phe Ile Thr Leu Asp Gly Ile Asn
    530                 535                 540
Ile Lys Ile Ala Met His Ser Lys Gly Leu Arg Ser Ser Ile Val Arg
545                 550                 555                 560
Lys Leu Lys Glu Ala Glu Asn Ser Glu Ala Leu Ser Val Leu Leu Ser
                565                 570                 575
Ala Gln Met Cys Ser Ala Glu Leu Ser Ser Leu Ser Lys Ala Leu Met
            580                 585                 590
Ala Trp Thr Val Ser Asp Pro Tyr Leu Tyr Ser Ser Arg Ile Met Glu
        595                 600                 605
Glu Asn Lys Lys Glu Leu Thr His Asp Trp Lys Ile Ala Gly Ser Cys
    610                 615                 620
Arg Lys Leu Arg Tyr Asp Met Lys Glu Asp Pro Val Ser Leu Ala His
625                 630                 635                 640
Thr Ala Asp Arg Val Ile Ala Asp Glu Val Arg Tyr Leu His Arg Leu
                645                 650                 655
Ala Lys Asn Leu Gly Asp Ser Trp Pro Ser Thr Ser Thr Val Met Arg
            660                 665                 670
Lys Pro Ala Ser Asn Asp Phe His Val Ala Met Phe Leu Asp Asp Tyr
        675                 680                 685
Arg Leu Ser Phe Cys Ile Leu Pro Ser Leu Thr Tyr Thr Ile Ala Gly
    690                 695                 700
Lys Val Ala Arg Met Ser Ile Leu Pro Lys Ala Glu Ser Lys Ile Glu
705                 710                 715                 720
Val Asp Phe Asp Leu Lys Lys Asn Phe His Thr Phe Tyr Ser Asn Glu
                725                 730                 735
Gly Asp Glu Arg Arg Ala Leu Ser Gln Leu Gly Ile Pro Pro Ile Asn
            740                 745                 750
Gly Arg Val Ala Val Asn Met Pro Pro Ser Leu His His
        755                 760                 765
```

<210> 34011
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34011
Val Gln Cys Cys Ser Asn Asn Ala Ser Val Ser Phe Tyr Asp Leu Leu
1 5 10 15
Gly Lys Ser Phe Leu Ser Asp Cys Asn Ile Arg Thr Phe Tyr Asp Phe
20 25 30
Arg Arg Ser Thr Leu Gly Asp Pro Glu Glu His Asp Gln Cys Ala Pro
35 40 45
Leu Cys Leu Thr Glu Phe Thr Arg Leu Thr Val Asn Ala Ala Val Arg
50 55 60
Val Asn Val Ile Asn Ser Leu Met Val Ser
65 70

<210> 34012
<211> 93
<212> PRT
<213> A.fumigatus

<400> 34012
Leu Thr Ala Val Ser Ser Leu Phe Ser Thr Val Phe Leu Lys Cys Tyr
1 5 10 15
Cys Thr Ser Ile Ala Pro Lys Met Pro Glu Asn Tyr Gly Asp Phe Gln
20 25 30
Thr Glu Ile Tyr Gly Arg Gly Ala Leu Met Gly Leu Lys Pro Asn Val
35 40 45
Thr Thr Asp Pro Arg Leu Leu Glu Glu Gln Ala Arg Lys Ala Leu Gly
50 55 60
Ala Arg Ser Phe Asn Tyr Val Ala Gly Gly Ala Gly Glu Lys Ala Thr
65 70 75 80
Met Asp Ala Asn Arg Leu Ala Phe Arg Gln Trp Lys Leu
85 90

<210> 34013
<211> 259
<212> PRT
<213> A.fumigatus

<400> 34013
Met Ala Asn Gln Ser Leu Thr Val Asn Leu Phe Gly Gln Glu Tyr Pro
1 5 10 15
Thr Pro Ile Leu Met Ala Pro Val Gly Val Gln Ser Leu Phe His Glu
20 25 30
Asp Lys Glu Thr Gly Leu Ala Glu Val Cys Ala Glu Val Gly Val Pro
35 40 45
Tyr Ile Leu Ser Thr Ala Ser Ser Ser Thr Ile Glu Glu Val Ala Glu
50 55 60
Ala Asn Gly Asp Gly Lys Arg Trp Tyr Gln Leu Tyr Trp Pro Gln Asp
65 70 75 80
Asp Asp Val Thr Met Ser Leu Leu Lys Arg Ala Lys Glu Asn Gly Phe
85 90 95
Ser Val Leu Val Val Thr Leu Asp Thr Trp Ser Leu Ala Trp Arg Pro
100 105 110
Ala Asp Leu Asp Asn Ala Tyr Val Pro Phe Ile Asp Gly Val Gly Asn
115 120 125
Gln Ile Gly Phe Ser Asp Pro Val Phe Arg Ala Lys Phe Glu Lys Asp
130 135 140
Gln Gly Phe Lys Val Glu Glu Asp Ile Val Gly Ala Ser Arg Ala Trp

```
145                 150                 155                 160
Ile Gly Asp Val Phe Ser Gly Lys Pro His Thr Trp Glu Gln Ile Ala
                165                 170                 175
Phe Leu Arg Lys Asn Trp Asn Gly Pro Ile Val Leu Lys Gly Ile Gln
            180                 185                 190
His Ala Glu Asp Ala Arg Leu Ala Leu Lys Ala Gly Cys Asp Gly Ile
        195                 200                 205
Ile Val Ser Asn His Gly Gly Glu Leu Ala His His Arg Glu Lys Ala
    210                 215                 220
Lys Ala Leu Lys Gln Ala His Phe Phe Leu Ser Asp Asn Ala Gln Asp
225                 230                 235                 240
Cys Thr Ser Ile Ala Leu Ser Ala His Trp Thr Cys Ser Leu Ile Met
                245                 250                 255
Trp Thr Gln
```

<210> 34014
<211> 79
<212> PRT
<213> A.fumigatus

<400> 34014

```
His Ser His Val Val Val Leu Gly Pro Val Glu Leu Val Pro Ser Phe
1               5                   10                  15
Pro Ile Ser Val Arg Leu Gly Asp Leu Phe Asn Ser Ala Ala Thr Gly
            20                  25                  30
Cys Ala Lys Asp Val Trp Asn Ser Asp Leu Ser Thr Tyr Phe Ser Lys
        35                  40                  45
Ala Arg Leu Leu Val Leu Val Glu Glu Thr Leu Asp Ser His Trp Gly
    50                  55                  60
His Glu Asp Gly Gly Gly Ile Leu Leu Ala Glu Glu Val Tyr Ser
65                  70                  75
```

<210> 34015
<211> 91
<212> PRT
<213> A.fumigatus

<400> 34015

```
Gln Gln Arg Lys Lys Lys Phe Trp Leu Val Leu Asn Val Gln Pro Ala
1               5                   10                  15
Val Leu Ile Asp Asn His Arg Glu Pro Asn Gln His Gly Ile Leu Ala
            20                  25                  30
Phe Gly His Cys Asp Thr Lys Ser Ile Asn Phe Phe Leu Leu Ala Phe
        35                  40                  45
Ser Ser Asp Leu Glu Ser Phe Ala His Thr Leu Lys Phe Ala Phe Gly
    50                  55                  60
Thr Phe His Val Asn Tyr Val Asn His Ser Leu Ala Ile Ser Val Cys
65                  70                  75                  80
Leu Pro Ser Lys Ala Ser Leu Leu Val Ile Thr
                85                  90
```

<210> 34016
<211> 238
<212> PRT
<213> A.fumigatus

<400> 34016
Thr Cys Cys Lys Glu Gly Lys Leu Ile Ser Lys Tyr Leu Ala Pro Gly
1 5 10 15
Trp Lys Gly Pro Ala Val Ile Val Ser Arg Ser Ser Tyr Ser Ser Lys
20 25 30
Thr Tyr Ser Gly Leu Cys Ser Thr Val Ser Ser Ala Ser Phe Ser Ser
35 40 45
Ser Ser Thr Val Ser Ser Val Ser Pro Thr Pro Glu Asp Ser Ala Ser
50 55 60
Glu Gly Ala Ser Thr Ala Arg Ser Leu Ser Phe Lys Ser Lys Ala Arg
65 70 75 80
Glu Thr Ile Ile Ile Phe Asn Ala Thr Leu Gln Ile Ser Leu Leu Cys
85 90 95
Thr Pro Ser Phe Phe Lys Ala Ser Ile His Thr Leu Leu Ala Ser Leu
100 105 110
Ala Cys Ser Met Ser Ser Phe Phe Cys Ser Leu Arg Cys Ala Ala Phe
115 120 125
Trp Pro Ser Ser Pro Leu Ser Ser Ser Phe Ala Val Ser Ser Leu Asp
130 135 140
Leu Tyr Ser Arg Thr Asn Ser Ala Leu Ser Arg Ser Leu His Ser Phe
145 150 155 160
Gly Pro Arg Pro Ser Phe Gly Ser His Met Met Pro Leu His Cys Ser
165 170 175
Ala Ser Ser Gly Arg Met Gly Pro Leu Pro Leu Gly Arg Lys Ala Lys
180 185 190
Ser Cys Ser Gly Leu Arg Cys Met Leu Asn Met Leu Asp Arg Cys Thr
195 200 205
Ala Gln Leu Leu Val Lys Leu Val Leu Glu Met Ile Arg Asn Gly Thr
210 215 220
Glu Arg Arg Pro Arg Val Gln Ala Tyr Arg Ser Ser Ser Ala
225 230 235

<210> 34017
<211> 378
<212> PRT
<213> A.fumigatus

<400> 34017
Arg Tyr Ala Leu Leu Gly Ser Ser His Pro Thr Cys Ala Thr Lys Lys
1 5 10 15
Leu Thr Tyr Ala Glu Leu Glu Arg Tyr Ala Cys Thr Arg Gly Leu Arg
20 25 30
Ser Val Pro Phe Leu Ile Ile Ser Asn Thr Asn Leu Thr Ser Ser Cys
35 40 45
Ala Val His Leu Ser Ser Met Leu Ser Met His Arg Asn Pro Glu Gln
50 55 60
Leu Leu Ala Phe Leu Pro Ser Gly Lys Gly Pro Ile Leu Pro Glu Glu
65 70 75 80
Ala Glu Gln Cys Lys Gly Ile Ile Trp Leu Pro Asn Asp Gly Leu Gly
85 90 95
Pro Asn Glu Cys Lys Leu Leu Asp Lys Ala Glu Leu Val Arg Glu Tyr
100 105 110
Lys Ser Asn Asp Asp Thr Ala Asn Asp Glu Leu Ser Gly Asp Asp Gly
115 120 125
Gln Asn Ala Ala Gln Arg Lys Leu Gln Lys Lys Leu Asp Ile Glu His

```
    130                 135                 140
Ala Arg Leu Ala Lys Arg Val Cys Ile Glu Ala Leu Lys Lys Glu Gly
145                 150                 155                 160
Val His Ser Asn Asp Ile Trp Arg Val Ala Leu Lys Met Met Ile Val
                165                 170                 175
Ser Arg Ala Leu Leu Leu Asn Asp Lys Asp Arg Ala Val Glu Ala Pro
            180                 185                 190
Ser Glu Ala Glu Ser Ser Gly Val Gly Glu Thr Asp Glu Thr Val Glu
        195                 200                 205
Glu Glu Glu Lys Glu Ala Glu Glu Thr Val Glu Gln Ser Pro Glu Tyr
    210                 215                 220
Val Phe Asp Glu Tyr Glu Leu Leu Glu Thr Ile Thr Ala Gly Pro Phe
225                 230                 235                 240
His Pro Gly Ala Lys Tyr Phe Glu Ile Asn Phe Pro Ser Leu Gln Gln
                245                 250                 255
Val Gln Gln Ala Gln Gln Thr Asn Gly His Asp Lys Asp Val Gln Ser
            260                 265                 270
Arg Glu Thr Lys Glu Phe Thr Pro Pro Ser Gln Pro Thr Arg Ser Gly
        275                 280                 285
Lys Gly Lys Ser His Pro Ser Ser Val Ala Arg Thr Ser Arg Lys Arg
    290                 295                 300
Glu Trp Arg Phe Gly Leu Pro Phe Ala Phe Trp Arg Gln Ile Ile Ala
305                 310                 315                 320
Asp Ala Val Gly Ala Asp Gly Ile Leu Ser Tyr Gln Gln Gln Val Arg
                325                 330                 335
Ile Met Ala Tyr Ala Ala Asp Trp Asn Ala Val Ser Tyr Glu Leu Thr
            340                 345                 350
Ile Lys Gly Ala Glu Asp His Gln Gln Ile Trp Lys Phe Leu Glu Thr
        355                 360                 365
Val Lys Cys Ile Thr Tyr Ser Ser Leu Thr
    370                 375
```

<210> 34018
<211> 271
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (271)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34018

```
Pro Pro Trp Thr Thr Asp Arg Thr Ala Ile Glu Leu Leu Gly Leu Glu
1               5                   10                  15
Ala Ile Gly Lys Val Asn Ser Thr Asn Ser Phe Leu Ser Ala Phe Cys
            20                  25                  30
Ala Ser His Thr Asn Asn Met Met Lys Asn Lys Arg Thr Asn Thr Gln
        35                  40                  45
Pro Leu Glu Asp Ala Ser Thr Ala Pro Ala Thr Phe Asn Asp Gly Leu
    50                  55                  60
Pro Leu Pro Lys Leu Ile Ala Phe Asp Leu Asp Tyr Thr Leu Trp Pro
65                  70                  75                  80
Phe Trp Val Asp Thr His Val Ser Ala Pro Ile Lys Pro Arg Asp Asn
                85                  90                  95
Asn Ser Arg Cys Val Asp Lys Tyr Val Pro Asp Ser Ser Val Gly Val
```

```
            100                 105                 110
His Leu His Ile Leu Leu Leu Thr Gln Asp Leu Arg His Arg Trp Asn
        115                 120                 125
Glu Ser Phe Ala Phe Tyr Pro Ala Val Ser Ser Ile Val Tyr Ser Cys
    130                 135                 140
Lys Thr Arg Ser Ile Pro Leu Ala Ile Ala Ser Arg Thr His Ala Pro
145                 150                 155                 160
Asp Leu Ala Arg Asp Met Leu Lys Ala Leu His Ile Ile Pro Thr Phe
                165                 170                 175
Ser Asp Asn Pro Ala Ala Lys Thr Lys Ser Val Arg Ala Leu Asp Tyr
            180                 185                 190
Phe Asp Tyr Val Gln Ile Phe Pro Ala Thr Lys Thr Gln His Phe Ala
        195                 200                 205
Lys Ile Gln Gln Ala Ser Gly Ile Ala Tyr Glu Asp Met Leu Phe Phe
    210                 215                 220
Asp Asp Glu Ala Arg Asn Lys Asn Val Glu Thr Glu Leu Gly Val Thr
225                 230                 235                 240
Phe Cys Leu Val Arg Asp Gly Met Thr Lys Glu Glu Val Asp Arg Gly
                245                 250                 255
Val Trp Ala Trp Arg Lys Arg Asn Gly Ile Lys Pro Gly Ala Xaa
            260                 265                 270
```

<210> 34019
<211> 95
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34019

```
Gly Pro Gly Ala Gly Phe Tyr Ile Asp Ala Xaa Arg Thr Leu Arg Glu
1               5                   10                  15
Asp Ile Leu Ala Arg Val Tyr Met Gln Ser Asp Leu Asp Phe Leu Glu
            20                  25                  30
Ala Asp Ala Asp Ala Val Val Gly Ile Asn Gly Glu Gly Asp His Glu
        35                  40                  45
Gly Asp Thr Ile Ala Asp Gly Leu Glu Asn Leu Lys Ile Asn Gly Lys
    50                  55                  60
Asp Asn Glu Ala Thr Lys Lys Val Ser Ser Lys Gln Ser Pro Lys Lys
65                  70                  75                  80
Ser Lys Val Ala Gln Gln Asn Gly Lys Ser Ser Ile Gln Ser Ser
                85                  90                  95
```

<210> 34020
<211> 66
<212> PRT
<213> A.fumigatus

<400> 34020

```
Pro Glu Ile Gly Gly Ala Ser Arg Ile Ile Met Thr Tyr Gly Ile His
1               5                   10                  15
Leu Leu Ile Lys Thr Ser Asn Leu Pro Pro Val Ala Leu Asn Gln Gln
            20                  25                  30
```

```
Ser Asp Ile Ile Arg Asn Pro Ile Arg Pro Lys Ser Ser Ile Ser Thr
        35                  40                  45
Tyr His His Ile Ile Asn Cys Ser Ser Asn Phe Ala Trp Ile Ile Tyr
    50                  55                  60
Phe Gln
65
```

<210> 34021
<211> 310
<212> PRT
<213> A.fumigatus

<400> 34021

```
Arg His Ala Leu Ile Glu Ser Asp Phe Val Cys Pro Gly Cys Ala Thr
1               5                   10                  15
Glu Gly Val Leu Leu Asp Asn Leu Ser Val Asp Asp Glu Ala Val Ser
            20                  25                  30
Lys Ile Lys Ala Phe Glu Asp Glu Lys Ala Asp Ser Arg Lys Asp Thr
        35                  40                  45
Gln Lys Asn Leu Thr Val His Asp Ser Ser Ser Asn Ser Lys Gly Ser
    50                  55                  60
Asp Ser Glu Arg Thr Val Ala Gly Glu Lys Gly Pro Ser Ser Leu Pro
65                  70                  75                  80
Ser Val Asn Asp Ala Leu Asp Ser Ala Thr Lys Lys Arg Pro Ala Asp
                85                  90                  95
Glu Asn Leu Pro Ser Thr Asp His Glu Gly Ser Asn Leu Ser Pro Ser
            100                 105                 110
Asn Lys Lys Gln Lys Ala Asp Leu Ile Ala Gln Ala Gly Thr Glu Ser
        115                 120                 125
Thr Asn Leu Gln Thr Gln Asp Ser Ser Asn Glu Val Ser Ser Ile Thr
    130                 135                 140
His Asp Gln Ser Met Pro Phe Gly Phe Gly Phe Met Asn Pro Gln Asn
145                 150                 155                 160
Met Pro Thr Met Pro Phe Thr Glu Ala Gly Phe Met Gly Gly Gly Met
                165                 170                 175
Gly Phe Ile Asn Pro Leu Gly Phe Pro Thr Ser Gly Phe Pro Asn Asn
            180                 185                 190
Leu Asn Gln Ala Trp Asn Pro Leu Asn Asn Pro Gly Phe Asp Ser Leu
        195                 200                 205
Gln Asn Gly Ile Tyr Gly Ser Gln Gln Ser Gly Ala Met Asn Gly Tyr
    210                 215                 220
Gly Gln Ala Asn Met Tyr Ser Asn Met Gly Asn Ala Ser Met Gln Met
225                 230                 235                 240
Met Gly Met Ser Gln Leu Ala Gly Pro Ile Pro Pro Asn Ala Gly Phe
                245                 250                 255
Gln Gln Gly Pro Gly Val Gly His Phe Ser Asn Gln Gln Arg Thr Ser
            260                 265                 270
Phe Ser Ser Pro Phe Ala Arg Glu Glu Asp Ser Pro Tyr Phe Arg Gln
        275                 280                 285
Pro Val Asn Pro Gln Arg His Gln Gly Arg His Arg Arg Ile Arg Pro
    290                 295                 300
Ser Asp Tyr Arg Glu Leu
305                 310
```

<210> 34022
<211> 447

<212> PRT
<213> A.fumigatus

<400> 34022

```
Ile Thr Val Pro Ser Gly Gly Val Cys Glu Asp Asp Ala Ala Met Thr
1               5                  10                  15
Leu Thr Glu Asn Gln Thr Pro Gln Pro Ser Lys Val His Ser Asp Ser
            20                  25                  30
Pro Ile Val Ser Asn Lys Arg Val Ser Asn Gln Asp Glu Ser Val Pro
        35                  40                  45
His Leu Thr Thr Gly Leu Gly Phe Leu Thr Gly Val Gly Ser Val Val
    50                  55                  60
Glu Ala Ser Glu Leu Pro Asn Ser Asp Ala Gln Thr Asp Gln Ser Leu
65                  70                  75                  80
Phe Ala Asp His Ser Leu Pro Val Thr His Gln Pro Asp Ser Val Thr
                85                  90                  95
Asp Ser Ser Lys Pro Ser Gly Leu Ser Ser Ser Leu Met Val Ala Gly
            100                 105                 110
Ser Pro Ile Arg Ala Ala Asn Asn Glu Asn Glu Ile Val Ile Asp Ser
        115                 120                 125
Lys Thr Thr His Val Ser Leu Pro His Arg Ser Ser Pro Lys His Asn
    130                 135                 140
Val Leu Gly Glu Leu Thr Ser Asn Glu Pro Ser Gln Arg Ala Asn Lys
145                 150                 155                 160
Gln Ile Arg His Ala Ala Asn Lys Leu Glu Asp Glu Val Thr Thr Pro
                165                 170                 175
Ile Asp Asp His Ser Arg His Arg Trp Lys Lys Val Glu Ile Ala Asp
            180                 185                 190
Arg Arg Thr Ser Ile Ser Pro Arg Ser Lys Asp Pro Thr Lys Ala Gln
        195                 200                 205
Gln Met Leu Asp Lys Gly Ile Gln Arg Ile Arg Thr Lys Thr Met Asp
    210                 215                 220
Ile Leu Gly Tyr Arg Lys Leu Gln Gly Ile Ile Lys Tyr His Asp Ser
225                 230                 235                 240
Ile Phe Thr Asn Glu Glu Lys Tyr Asp Glu Met Leu Leu Ala Leu Leu
                245                 250                 255
Asp Glu Leu Glu Ser Ser Pro Asp Asp Lys Arg Gln Pro Leu Gly Arg
            260                 265                 270
Pro Leu Asp Leu Lys Thr Gln Val Leu Leu Thr Ile Arg Leu Met Leu
        275                 280                 285
Ile His Asn Lys Ile Tyr Phe Ser Ala Tyr Cys Ser Arg Ala Leu Gly
    290                 295                 300
Ala Leu Val Leu Ala Arg Lys Tyr Tyr Asp Ala Asn Cys His Ile Val
305                 310                 315                 320
Ser Gly Leu Glu Glu Thr Ala Asp Asp Ile Ile Ala Leu Cys Glu Pro
                325                 330                 335
Ala Ala Val Ile Asp Ser Val Leu Asp Val Ile Ile Thr Glu Glu Lys
            340                 345                 350
Asp Asp Arg Glu Tyr Arg Ser Ile Leu Met Gly Val Ser Val Leu Thr
        355                 360                 365
Arg Ile Leu Ser Arg Leu Asn Ala Asp Lys Cys Arg Val Pro Glu Leu
    370                 375                 380
Pro Leu Asp Arg Leu Gly Gln Phe Ala Ala Ser Lys Leu Ala Asp Arg
385                 390                 395                 400
Gln Pro Asp Val Arg Arg Leu Ala Val Gln Leu Cys Val Gln Leu His
                405                 410                 415
```

```
Gly Met Val Ala Asn Glu Glu Glu Tyr Trp Arg Val Leu Gly His Pro
            420                 425                 430
Arg Glu Asn Ser Arg Asn Leu Leu Thr Tyr Tyr Ile Leu Lys Lys
        435                 440                 445

<210> 34023
<211> 81
<212> PRT
<213> A.fumigatus

<400> 34023
Asp Trp Asn Leu Ser Ala Asp Val Ser Asp Val Leu Ala Gln Tyr His
1               5                   10                  15
Asp Phe His Pro Thr Leu Leu Arg Ile Ile Lys Tyr Asn Trp Ser Thr
            20                  25                  30
Phe Ser Gln Asn Lys Thr His Thr Asn Gln Ala Gln Lys Ser Asn Glu
        35                  40                  45
His Gln Thr Met Ala Ala Leu Leu Pro Arg Ser Tyr Pro Asn Leu Val
    50                  55                  60
Pro Arg Pro Leu Arg Ala Asp Arg Arg Cys Arg Thr Pro Asn Ala Pro
65                  70                  75                  80
Pro


<210> 34024
<211> 62
<212> PRT
<213> A.fumigatus

<400> 34024
Gly Ile Tyr Tyr Ser Leu Trp Val Ile Ser Arg Leu Met Lys Tyr Gly
1               5                   10                  15
Pro Asn Thr Lys Asn Tyr Asn Leu Phe Cys Gln Tyr Cys Leu Lys Tyr
            20                  25                  30
Gly Val Trp Glu Glu His Ile Lys Ser Gly Val Ser Thr Val Ser Leu
        35                  40                  45
Leu His Ser Ser His Ser Ser Thr Ala Val Glu Met Gly Val
    50                  55                  60

<210> 34025
<211> 201
<212> PRT
<213> A.fumigatus

<400> 34025
Ala Cys Gln Ile Phe Glu Arg Ser Ser Phe Leu Arg Glu Val Gly Ala
1               5                   10                  15
Ala Ile His Val Gln Pro Asn Ala Ser Arg Ile Leu Ser Asp Trp Asp
            20                  25                  30
Phe Asp Pro Lys Arg Ala Arg Phe Val Thr Gly Leu Arg Thr Met Val
        35                  40                  45
Val Pro Gly Thr Ser Leu Thr Ser Asn Val Gly Val Asp Cys Ser His
    50                  55                  60
Phe Val Glu Thr Tyr Gly Ala Pro Trp Tyr Leu Ala His Arg Val Asp
65                  70                  75                  80
Leu His Thr Glu Leu Arg Arg Leu Ala Thr Thr Pro Asp Gly Pro Gly
```

```
                85                  90                  95
Phe Pro Val Glu Thr Ile Leu Arg Ser Glu Val Val Gly Phe Asp Ala
            100                 105                 110
Glu Asn Gly Ser Val Thr Leu Thr Asp Gly Ser Val His Gln Ala Asp
        115                 120                 125
Leu Val Val Ala Ala Asp Gly Val His Thr Thr Ala Ile His Gln Val
    130                 135                 140
Ile Gly His Ala Thr Pro Ala Val Ala Thr Gly Ser Ala Ala Phe Arg
145                 150                 155                 160
Phe Leu Ile Pro Thr Glu Asp Ile Gln Gly Asp Pro Glu Thr Ala His
                165                 170                 175
Leu Leu Glu Asp Gly Leu Met Arg Ile Tyr Val Ala Glu Gly Val Arg
            180                 185                 190
Arg Leu Ile Trp Tyr Ser Cys Ala Glu
        195                 200
```

<210> 34026
<211> 87
<212> PRT
<213> A.fumigatus

```
<400> 34026
Gly Arg Asn Pro Ser Leu Arg Glu Ser Gly Arg Arg Leu Ala Gly His
1               5                   10                  15
Gly Leu Leu His Arg Leu His Gly Glu Thr Arg Ser Val Arg Lys Ser
            20                  25                  30
Gly Met Leu Ser Phe Val Pro Thr Gln Pro Val Leu Ala Lys Val Tyr
        35                  40                  45
Leu Asp Pro Val Val Ser Thr Thr Glu Ser Asn Arg Arg Gly Gln Ser
    50                  55                  60
Gly Asp Ser Ala Thr Asn Tyr Asn Asp Leu His Leu Arg Val Ser Gly
65                  70                  75                  80
Ser Gly Val Tyr Leu Ile Ser
                85
```

<210> 34027
<211> 74
<212> PRT
<213> A.fumigatus

```
<400> 34027
Asp Ile Gly Ser Leu Ile Ile Arg Asn His Val Tyr Thr Phe Asn Ser
1               5                   10                  15
Ser Cys Ser Cys Ser Thr Gly Ala Arg Ile Gly Cys Gln Ala Ser His
            20                  25                  30
Leu Thr Phe Ala Trp Ser Gly His Thr Arg Val Asp Tyr Leu Gln Gly
        35                  40                  45
Met Gly Tyr Ser Thr Thr Thr Lys Thr Arg Gln Glu Thr Gly His Arg
    50                  55                  60
Tyr Ala Ala Tyr Lys Ala Gln Gly Ser Glu
65                  70
```

<210> 34028
<211> 285
<212> PRT
<213> A.fumigatus

<400> 34028
Gly Val Ser Ser Ser Val Ile Met Ser Thr Pro Ser Ile Ala Pro Ala
1 5 10 15
Pro Ala Pro Leu Val Pro Ala Leu Ala Ala Lys Pro Ala Ile Ser Pro
20 25 30
Ser Pro Gly Pro Gly Thr Pro Gly Ser Ile Thr Ser Lys Glu Trp Val
35 40 45
Ile Pro Pro Arg Pro Lys Pro Gly Arg Lys Pro Ala Thr Asp Thr Pro
50 55 60
Pro Thr Lys Arg Lys Ala Gln Asn Arg Ala Ala Gln Arg Ala Phe Arg
65 70 75 80
Glu Arg Arg Ala Ala Arg Val Asn Glu Leu Glu Glu Gln Ile Lys Lys
85 90 95
Ile Glu Asp Glu His Glu Ile His Ile Ala Ala Phe Lys Glu Gln Ile
100 105 110
Thr Asn Leu Ser Arg Glu Val Glu Gln Cys Arg Ser Glu Met Thr Trp
115 120 125
Trp Arg Asp Arg Cys His Ala Leu Glu Lys Glu Val Ser Val Glu Arg
130 135 140
Ser Ala Lys Glu Ala Ile Val Lys Glu Phe Arg Ser Ser Leu Ser Asp
145 150 155 160
Arg Glu Ala Val Arg Ser Asp Lys Gly Leu Ala Pro Leu Thr Thr Ser
165 170 175
Thr Pro Gln Thr Arg Ser Ser Asp Arg Pro Asp Asn Gly Asp Ala Ser
180 185 190
Asn Asn Asp Ser Gly Glu Gly Arg Glu Glu Val Pro Leu Gly Cys Asn
195 200 205
Asp Cys Ser Thr Ser His Cys Gln Cys Ile Glu Asp Ala Phe Thr Met
210 215 220
Pro Gly Val Val Ala Gln Glu Gln Ser Arg Arg Leu Asp Thr Thr Lys
225 230 235 240
Pro Gly Leu Ser Glu Pro Gln Ile Lys Pro Asp Pro Glu Glu Met Glu
245 250 255
Ile Asp Phe Thr Ser Arg Phe Ala Ala Thr Gln Gln Gln Asp Gln Ser
260 265 270
Pro Thr Ser Val Ser Ser Pro Ala Val Asp Pro Leu Phe
275 280 285

<210> 34029
<211> 101
<212> PRT
<213> A.fumigatus

<400> 34029
Arg Asn Leu Phe Phe Leu Val Leu Ala Ala Cys Ser Trp Gln Arg Pro
1 5 10 15
His Val Ile Val Leu Asp Glu Pro Thr Asn Tyr Leu Asp Arg Asp Ser
20 25 30
Leu Gly Ala Leu Ser Lys Ala Leu Lys Thr Phe Glu Gly Gly Val Val
35 40 45
Ile Ile Thr His Ser Arg Glu Phe Thr Glu Asn Met Ile Asn Ser Ala
50 55 60
Phe Arg Phe Leu Asp Gly Thr His Thr Ser Leu Gly Thr Leu Ser Asn
65 70 75 80
Asn Ala Lys Asn Val Cys Leu Leu Met Lys Gln Leu His Ser Met Gly

85 90 95
Glu Met Pro Gly Ala
100

<210> 34030
<211> 471
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (194)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34030
Arg Cys Leu Pro Glu Phe Phe Tyr Ser Leu Asp Arg Asn Leu Glu Asp
1 5 10 15
Val Asp Tyr Phe Tyr Lys Lys Lys Phe Ala Asp Phe Ser Arg Arg Leu
20 25 30
Lys Leu Leu Glu Glu Arg Tyr Gly His Ser Leu His Lys Gly His Glu
35 40 45
Leu Asp Ser Glu Asp Val Glu Asp Leu Leu Ala Ala Leu Leu Glu Leu
50 55 60
Arg Gly Gln Leu Arg Lys Leu Gln Trp Phe Gly Glu Val Asn Arg Arg
65 70 75 80
Gly Phe Val Lys Ile Thr Lys Lys Leu Asp Lys Lys Val Gly Val Gln
85 90 95
Ala Gln Gln Thr Tyr Leu Glu Thr Lys Val Asp Pro Leu Pro Phe Ala
100 105 110
Ser Asn Ala Gly Val Thr Glu Ser Leu Lys Thr Ile Asn Asp Trp Leu
115 120 125
Ser Val Leu Gly Asp Gln Lys Ala Ile Asp Asp Ala Ser Ser Thr Arg
130 135 140
Ser Ser Leu Ser Leu Lys Lys Gly Pro Ser Arg Pro Asn Leu Asn Leu
145 150 155 160
Pro Pro Ser Val Leu Ala Glu Val Asp Glu Ala Leu Arg Lys Asp Asp
165 170 175
Thr His Val Leu Leu Glu Leu Met Glu Thr Leu Lys Lys Ala Ala Asp
180 185 190
Asp Xaa Arg Glu Ala Val Tyr Pro Lys Gly Leu Lys Ser Leu Leu Gln
195 200 205
Pro Ser Ile Tyr Tyr Arg Ser Lys Ala Cys Ile Ser Val Leu Leu Gly
210 215 220
Arg Ile Asp Ser Leu Asp Glu Glu Asp Asp Ile Asn Lys Arg Asn Cys
225 230 235 240
Ile His Arg Leu Val Ile Ser Ile Gly Arg Ala Gln Ser Ser Thr Asp
245 250 255
Ser Glu Ser Ser Ala Ser Met Val Leu Asp Phe Ser Leu Glu Thr Ser
260 265 270
His Tyr Ile Thr Pro Ala Ala Leu Pro Thr Met Gln Pro Pro Arg Pro
275 280 285
Val Val Lys Glu Ala Asn His Pro Gln Ile Leu Gly Arg Asp Asp Pro
290 295 300
Ser Val Ser Leu Leu Gln Phe Ile Leu Asp Glu Leu Gln Pro His Gln
305 310 315 320
Arg Gly Ala Leu Leu Ala Lys Asp Leu Ser Gly Arg Thr Pro Leu His

```
                325                 330                 335
Tyr Gly Ala Gln Tyr Gly Phe Lys Val Val Cys Glu Val Ile Ile Glu
            340                 345                 350
His Leu Gln Ala Trp Asp Met Phe Asp Val Arg Glu Gly Ile Asp Ala
        355                 360                 365
Pro Gln Trp Gln Asp Asn Asp Gly Trp Ala Pro Leu His Leu Ser Val
    370                 375                 380
Val Gly Gly His Pro Leu Thr Thr Arg Thr Leu Leu Glu Ala Glu Asn
385                 390                 395                 400
Trp Gln Gly Ala Ser Glu Glu Lys Ala Ser Ile Arg Lys His Val Ser
                405                 410                 415
Lys Ser Ser Ala Val Leu Ala Leu Ala Thr Lys Ala Asn Phe Val Asp
            420                 425                 430
Ile Val Gln Leu Leu Val Asp Ala Gly Val Asp Ile Asn Tyr Gln Asp
        435                 440                 445
Glu Gln Gly Arg Asn Cys Val Ala Cys Gly Pro Ser Val Trp Ser Arg
    450                 455                 460
Cys Val Arg Lys Asp Pro Thr
465                 470
```

<210> 34031
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34031

```
Arg Leu Arg Leu Gln Pro Phe Ile Met Lys Phe Gly Arg Asn Leu Pro
1               5                   10                  15
Arg Asn Val Val Pro Glu Trp Ser Thr Ser Tyr Ile Arg Tyr Lys Ala
            20                  25                  30
Leu Lys Lys Leu Ile Lys Ser Ala Ala Glu Glu Val Lys Ala Gly Cys
        35                  40                  45
Glu Ala Asp Leu Ala Gly Gly Phe Gln Ser Pro Cys His Thr Pro His
    50                  55                  60
Gly Glu Thr Thr Cys
65
```

<210> 34032
<211> 236
<212> PRT
<213> A.fumigatus

<400> 34032

```
Thr Pro Thr Asn Ser Leu Arg His Asp Ser Gly Leu His Ile Phe Gly
1               5                   10                  15
Gly Cys Arg Gly Gly Gly Gly Gly Gly Gly Gly Ala Gly Gln Arg Arg
            20                  25                  30
Arg Gly Asp Val Gly Gly Arg Trp Met Glu Lys Thr Gly Ala Gly Thr
        35                  40                  45
Gly Arg Ala His Arg Asp Ile Asn Gly Arg Arg Arg Ser Ala Gly Ala
    50                  55                  60
Gly Gly Arg Arg Gly His Arg Gly Arg Val Asp Ala Gly Leu Asp Arg
65                  70                  75                  80
Leu Gly Asp Gly Glu Leu Val Ala Leu Arg Glu Asp Asp Val Asp Val
                85                  90                  95
Gly Ala Val Asp Ala Ala Asp Leu Val Ala Pro Phe Gly Val Gly Val
```

```
            100                 105                 110
Ala Gly Asp Leu Asn Gly Val Gly Gln Ile Gly Arg Gly Asp Val Gln
        115                 120                 125
Gly Gln Arg His Ile Ser Arg Arg Pro Gly Asp Lys Val Pro Lys Val
    130                 135                 140
Glu Ala Glu Val Gly Gly Ile Gly Val Asp Ala Gly Pro Pro Asp Gly
145                 150                 155                 160
His Ser Gly Pro Arg Cys Val Gly Gly Val Gly Cys Arg Thr Gly Asp
                165                 170                 175
Val Asp Gly Arg Ser Gln Arg Ala Lys Arg Asn Asn Gln Gly Asp His
            180                 185                 190
Gly Ala His His Val Asp Pro Arg Val Leu Ile Gly Leu Ile Leu Val
        195                 200                 205
Gly Met Gly Phe Arg Ile Tyr Trp Gly Lys Gln Trp Ser Ile Glu Gln
    210                 215                 220
Lys Thr Arg Leu Lys Thr Asn Gly Leu Glu Lys Glu
225                 230                 235

<210> 34033
<211> 103
<212> PRT
<213> A.fumigatus

<400> 34033
Gln Ser Asn Leu Leu Ile Tyr Ala Asn Ser Lys Val Pro Glu Ser Leu
1               5                   10                  15
Lys Tyr Pro His Asp Ala Val Gly His Asp Tyr Asp Ser Val Gly Ile
            20                  25                  30
Phe Gln Gln Arg Ala Ile Tyr Tyr Pro Asn Ile Ala Ala Asp Met Asp
        35                  40                  45
Pro Ala Arg Ser Ala Ala Gln Phe Phe Ala Lys Met Lys Lys Ile Ser
    50                  55                  60
Gly Trp Lys Thr Met Asp Val Gly Lys Leu Cys Gln Lys Val Gln Val
65                  70                  75                  80
Ser Ala Tyr Pro Asp Arg Tyr Ala Lys Arg Val Pro Glu Ala Lys Lys
                85                  90                  95
Ile Cys Ala Ala Gly Gly Leu
            100

<210> 34034
<211> 78
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34034
Arg Ala Glu Asp Leu Ser Pro Val Met Leu Thr Pro Xaa Met Thr Asn
1               5                   10                  15
Arg Gln Pro Cys Asn Pro Asn Phe Val Gln Ala Arg Asp Ala Ile Leu
            20                  25                  30
Asp Ala Asp Thr Ala Leu Thr Gly Gly Glu Asn Gln Cys Glu Ile Trp
        35                  40                  45
```

```
Thr Pro Phe Ala Lys Arg Gly Leu Gly Ala Gly Ala Lys Tyr Ser Ser
    50                  55                  60
Arg Asn Arg Val Gly Ser Thr Glu Val Pro Ser Gly Val Cys
65                  70                  75
```

<210> 34035
<211> 280
<212> PRT
<213> A.fumigatus

<400> 34035

```
Thr Cys Phe Leu Phe Tyr Arg Pro Leu Leu Pro Pro Val Asp Pro Glu
1               5                   10                  15
Thr His Thr His Gln Asp Gln Thr Asn Lys Asn Thr Arg Ile Asn Met
            20                  25                  30
Met Arg Ser Val Ile Pro Leu Val Val Ser Leu Gly Ser Leu Ala Ala
        35                  40                  45
Ala Ile Asn Ile Thr Ser Pro Ala Ala Asn Thr Thr Tyr Ala Ala Gly
    50                  55                  60
Ser Thr Val Ala Val Arg Trp Thr Ser Val Asp Thr Asp Pro Thr Asn
65                  70                  75                  80
Phe Ser Leu Tyr Leu Trp Asn Phe Val Ser Trp Pro Pro Thr Tyr Val
                85                  90                  95
Pro Leu Ala Leu Asp Ile Pro Thr Ala Asp Leu Ser Tyr Ser Val Gln
            100                 105                 110
Ile Pro Cys Asp Thr Asn Pro Glu Trp Gly Tyr Gln Ile Ser Gly Ile
        115                 120                 125
Asn Gly Thr Asn Val Tyr Ile Ile Phe Ala Gln Gly Asp Lys Phe Thr
    130                 135                 140
Val Ser Glu Pro Val Glu Pro Cys Val Asp Pro Ala Pro Val Pro Thr
145                 150                 155                 160
Pro Ser Thr Cys Pro Ser Ala Ala Ala Ser Thr Val Tyr Val Thr Val
                165                 170                 175
Ser Pro Thr Gly Ser Ser Ser Arg Leu Phe His Pro Ser Ser Ser His
            180                 185                 190
Val Ser Ser Ser Pro Leu Pro Ser Thr Thr Thr Thr Thr Thr Thr Ser
        195                 200                 205
Ser Ala Thr Ser Lys Tyr Val Lys Pro Gly Ile Val Pro Lys Thr Ile
    210                 215                 220
Gly Trp Cys Ser Asp Tyr Ala His Pro Val Thr Leu Asp Lys Val Pro
225                 230                 235                 240
Thr Pro Thr Pro Ala Pro Ile Met Thr Pro Ala Pro Gly Glu Gly Ser
                245                 250                 255
Gly Gly Arg Gly Pro Arg Val Lys Thr Ile Thr Thr Thr Val Ser Val
            260                 265                 270
Glu Ala Cys Pro Ile Asp Ala Met
        275                 280
```

<210> 34036
<211> 139
<212> PRT
<213> A.fumigatus

<400> 34036

```
Ser Pro Trp Leu Phe Arg Leu Ala Arg Trp Leu Arg Pro Ser Thr Ser
1               5                   10                  15
```

```
Pro Val Leu Gln Pro Thr Pro Pro Thr Gln Arg Gly Pro Leu Trp Pro
            20                  25                  30
Ser Gly Gly Pro Ala Ser Thr Pro Ile Pro Pro Thr Ser Ala Ser Thr
        35                  40                  45
Phe Gly Thr Leu Ser Pro Gly Leu Arg Leu Met Cys Arg Trp Pro Trp
    50                  55                  60
Thr Ser Pro Arg Pro Ile Cys Pro Thr Pro Phe Arg Ser Pro Ala Thr
65                  70                  75                  80
Pro Thr Pro Asn Gly Ala Thr Arg Ser Ala Ala Ser Thr Ala Pro Thr
                85                  90                  95
Ser Thr Ser Ser Ser Arg Arg Ala Thr Ser Ser Pro Ser Pro Ser Leu
            100                 105                 110
Ser Ser Pro Ala Ser Thr Leu Pro Arg Cys Pro Arg Arg Pro Pro Ala
        115                 120                 125
Pro Ala Leu Arg Arg Leu Pro Phe Met Ser Arg
    130                 135
```

<210> 34037
<211> 169
<212> PRT
<213> A.fumigatus

<400> 34037

```
Ser Arg Thr Ile Ser Ser Arg Thr Leu Leu Thr Ser Thr Asp Ile Met
1               5                   10                  15
Leu Tyr Leu Pro Leu Val Ala Leu Ser Phe Ala Thr Thr Leu Val Ser
            20                  25                  30
Ala Tyr Pro Ile Thr Gly Asn Gly Val Asn Cys Arg Ser Gly Pro Gly
        35                  40                  45
Thr Asn Tyr Pro Val Val Lys Ser Tyr Pro Lys Gly His Glu Val Ser
    50                  55                  60
Ile Val Cys Gln Ala Pro Gly Thr Asp Ile Lys Gly Asp Lys Leu Trp
65                  70                  75                  80
Asp Lys Thr Ser Asp Gly Cys Tyr Val Ala Asp Tyr Tyr Val Lys Thr
                85                  90                  95
Gly Thr Thr Gly Tyr Val Thr Lys His Cys Asp Gly Gly Ser Asp Gly
            100                 105                 110
Gly Ser Asp Gly Gly Ser Gly Asn Leu Pro Gly Leu Ser Ala Lys Gln
        115                 120                 125
Ser Ser His Ala Arg Lys Ile Ile Gly Glu Ala Lys Lys Glu Gly Leu
    130                 135                 140
Gly Arg Gln Gly Cys Leu Ala Ala Ile Ala Thr Gly Leu Val Glu Val
145                 150                 155                 160
Ser Phe Asn Pro Leu Thr Pro Cys Cys
                165
```

<210> 34038
<211> 79
<212> PRT
<213> A.fumigatus

<400> 34038

```
Glu Arg Thr Leu Arg Asn Ser Arg Leu Leu Leu Asn Ala Arg Thr Val
1               5                   10                  15
Gly Lys Pro Ala Leu Pro Gln Ser Trp Leu Leu Tyr Gly Thr Gln Ala
            20                  25                  30
```

```
Gln Asn Asn Ala Ala Gly Glu Asn Phe Val Asn Gln Asn Leu Tyr Lys
        35                  40                  45
Arg Thr Ser Ile Ile Pro Gly Leu Val Ser Glu Pro Ser Tyr Tyr Thr
    50                  55                  60
Ala Thr Ser Ser Tyr Asp Ser Val His Cys Arg Gln Glu Arg Ala
65                  70                  75
```

<210> 34039
<211> 228
<212> PRT
<213> A.fumigatus

<400> 34039

```
Arg Leu Leu Ser Ile Ser Pro Gln Ser Ile Cys Trp Pro Ala Pro Phe
1               5                   10                  15
Ala Val Ser Arg Cys Arg Thr Ala Arg Ser Gln Asp Thr Ser Thr Leu
            20                  25                  30
Leu Leu Ala Glu His Gly Leu Arg Ser Ala Arg Val Ala Pro Gly Ile
        35                  40                  45
Pro Gln Leu Ile Ser Ser Ser Leu Ser Thr Arg Tyr Ile Ser His Leu
    50                  55                  60
Thr Ser Ser Leu Lys Ser Pro Asn Leu Thr Ser Ala His Ile Gln Val
65                  70                  75                  80
Trp Glu His Gln Met Ala Thr Tyr Ser Asp Pro Met Gly Phe Lys Asn
                85                  90                  95
Tyr Gly Phe Asp Gln Val Ile Ala Gly Arg Gly Gln Ile Asn Tyr Cys
            100                 105                 110
Val Arg Trp Asp Ser Asn Gln Lys Val Thr Ala Ala Gln Arg Glu Gln
        115                 120                 125
Ile Ala Ala Ala Val Thr Arg Ser Phe Asn Lys Trp Ile Ala Gly Leu
    130                 135                 140
Ala Gly Phe Asp Gly Phe Pro Tyr Asn Thr Val Glu Val Asn Val Val
145                 150                 155                 160
Gly Tyr Ala Val Arg Asp Arg Ser Leu Leu Glu Gly Asp Thr Ser Gly
                165                 170                 175
Leu Asp Ile Tyr Thr Thr Thr Asp Glu Gly Gly Ile Pro His Cys Asp
            180                 185                 190
Pro Arg Cys Gly Arg Phe Phe His His His Gly Asp Tyr Ser Gln Cys
        195                 200                 205
Pro Gly Gly Ala Ser Arg His Tyr Gly Ile Val Leu Phe Pro Ala Val
    210                 215                 220
Asn Tyr Cys Gly
225
```

<210> 34040
<211> 93
<212> PRT
<213> A.fumigatus

<400> 34040

```
Leu Val Arg Asn Ile Leu Leu Val Ser Cys Asn Thr His Cys Leu Thr
1               5                   10                  15
Ile Ala Asp Tyr Leu Leu Ser Gln Ser Ser Thr Thr Lys Glu Ile Asn
            20                  25                  30
Tyr Glu Thr Leu Trp Thr Thr Leu Gln Thr Val Leu Leu Pro Val Trp
        35                  40                  45
```

```
Pro Ser Ser Arg Thr His Ile Asp Gly Arg Pro Leu Gly Asp Ala Trp
    50                  55                  60
Pro Arg Cys Gly Ile Val Arg Lys Thr Arg Val Lys Met Gly Ala Leu
65                  70                  75                  80
Gln Pro Ser Ile Asn Ser Arg Ser Gly Ser Gly Thr Pro
                85                  90
```

<210> 34041
<211> 142
<212> PRT
<213> A.fumigatus

<400> 34041

```
Thr His Ala Val Val Arg Val Leu Pro Asp Ser Ser Leu Arg Thr Pro
1               5                   10                  15
Ala Gly Arg Glu Met Asp Glu Tyr Gly Ser Arg Ala Leu Ser Pro Gln
            20                  25                  30
Ser Thr Ala Met Glu Ala Cys Phe Val Asp Leu Gly Val Leu Thr Leu
        35                  40                  45
Lys Leu Ala Ala Glu Glu His Gly Arg His Asn Cys Gly Ser Thr Leu
    50                  55                  60
Pro Ala Phe Glu Ala Thr Ser Asp Glu Ile Val Glu Trp Arg Ala Met
65                  70                  75                  80
Thr Val Ala Leu Leu Asp Lys Leu His Glu Gln Ile Met Asn Ser Glu
                85                  90                  95
Val Phe Ser Gly Val Arg Leu Arg Leu Ala Gln Val Leu Glu Ala Gly
            100                 105                 110
Ser Trp Lys Ala Gly Arg Glu Leu Ala Ala Glu Lys Arg Pro Glu Thr
        115                 120                 125
Arg Ser Ser Pro Ile Leu Ile Leu Gly Asp Gly Thr Leu Phe
    130                 135                 140
```

<210> 34042
<211> 232
<212> PRT
<213> A.fumigatus

<400> 34042

```
Asp Ser Ser Ala Glu Glu Asp Lys Thr Pro Phe Ile Phe Ala His Glu
1               5                   10                  15
Phe Phe Asp Ala Leu Pro Ile His Ala Phe Glu Ser Ile Pro Pro Ala
            20                  25                  30
Pro Glu Asn Ser Pro Glu Gln Lys Glu Ile Ile Thr Pro Thr Gly Pro
        35                  40                  45
Ala Lys Leu His Gln Pro Met Lys Pro Ala Asn Thr Pro Gln Trp Arg
    50                  55                  60
Glu Ile Met Val Thr Leu Asn Pro Lys Ala Val Glu Asp Asn Ile Glu
65                  70                  75                  80
Gly Glu Pro Glu Phe Lys Leu Thr Leu Ala Lys Ala Ser Thr Pro Ser
                85                  90                  95
Ser Leu Val Ile Pro Glu Ile Ser Glu Arg Tyr Arg Lys Leu Lys Ser
            100                 105                 110
Thr Pro Gly Ser Thr Ile Glu Val Ser Pro Glu Ser Arg Ile Tyr Ala
        115                 120                 125
Ser Asp Phe Ala Arg Arg Ile Gly Gly Ser Ser Gln Pro Pro Arg Thr
    130                 135                 140
```

```
Val Gly Ser Arg Asn Ser Pro Ala Ala Gln Pro Lys Lys Ile Pro Ser
145                 150                 155                 160
Gly Ala Ala Leu Ile Met Asp Tyr Gly Thr Met Ser Thr Ile Pro Ile
                165                 170                 175
Asn Ser Leu Arg Gly Ile Gln His His Arg Thr Val Pro Ala Leu Ser
            180                 185                 190
Ser Pro Gly Gln Val Asp Val Ser Ala Asp Val Asp Phe Met Ala Leu
        195                 200                 205
Ala Glu Ala Ala Ile Glu Ala Arg Ser Ser Pro Arg Gly Trp Lys Asp
    210                 215                 220
Pro Thr Arg Gly Ala Met Pro Ser
225                 230
```

<210> 34043
<211> 68
<212> PRT
<213> A.fumigatus

<400> 34043

```
Tyr Ser Gly Val Ser Leu Asp Arg Ala Leu Glu Ser Met Ile Ala Arg
1               5                   10                  15
Ile Ser Gln Tyr Leu Tyr Asn Thr Asn Pro Thr Gly Glu Thr Pro Trp
            20                  25                  30
Leu Arg Phe Leu Ser Leu Asp Ser Ser Ser Arg Ala Cys Gly Asp Arg
        35                  40                  45
Leu Ser Val Phe Thr Lys Asn Phe Ala Cys Glu Phe Phe Ile Phe Ser
    50                  55                  60
Leu Phe Ala Ile
65
```

<210> 34044
<211> 182
<212> PRT
<213> A.fumigatus

<400> 34044

```
His Gly Pro Ile Cys Ile Pro Thr Gly Glu Tyr Pro Val Gly Ser Thr
1               5                   10                  15
Lys Ser Glu Asp Cys Leu Phe Ile Asp Val Tyr Ala Pro Arg Asn Ala
            20                  25                  30
Ser Asn Leu Pro Val Phe Phe Trp Ile Gln Gly Gly Gly Phe Asn Ser
        35                  40                  45
Asn Ser Asn Ala Asn Tyr Asn Gly Thr Gly Leu Ile Glu Ala Ser Gly
    50                  55                  60
Ser Gln Ile Val Val Val Thr Phe Asn Tyr Arg Val Gly Pro Tyr Gly
65                  70                  75                  80
Phe Leu Ala Ala Thr Glu Val Gln Asn Gly Gly Ser Leu Asn Asn Gly
                85                  90                  95
Leu Lys Asp Gln Ile Lys Ala Leu Lys Trp Val Gln Lys His Ile Ser
            100                 105                 110
Lys Val Arg Arg Leu Leu Leu Tyr Leu Phe Leu Ser Arg Trp Leu Thr
        115                 120                 125
Leu Arg Gln Ser Leu Ala Ala Thr Pro Ile Met Leu Ser Ser Ala Val
    130                 135                 140
Leu Ala Gln Gly Leu Leu Pro Ser Pro Cys Cys Ser Gln Pro Met Glu
145                 150                 155                 160
```

```
Gly Glu Thr Met Ala Tyr Ser Thr Leu Gln Leu Gln Ser Arg Lys Ala
                165                 170                 175
Leu Pro Leu Cys Ser His
            180
```

<210> 34045
<211> 115
<212> PRT
<213> A.fumigatus

<400> 34045

```
Ser Pro Thr Leu Gly Val Ser Phe Arg Ala Ile Val Cys Cys Leu Ile
1               5                   10                  15
His Ala Asp Arg Ala Arg Arg Gln Lys Met His Leu Asn Asn Leu His
            20                  25                  30
Ala Leu Val Leu Leu Leu Leu Pro Ala Ala Ser Ala Arg Lys Ser Val
        35                  40                  45
Val Asp Leu Gly Tyr Thr Gln Tyr Gln Gly His Glu Leu Ser Asn Gly
    50                  55                  60
Ile Val Gln Trp Leu Gly Met Arg Tyr Ala Ala Pro Pro Val Gly Gln
65                  70                  75                  80
Leu Arg Phe Ala Ala Pro Gln Asp Pro Leu Pro Ile Lys Gly Val Gln
                85                  90                  95
Glu Ala Asn Lys Val Ala Ile Gln Ser Gln Pro Arg Cys Val Val Ser
            100                 105                 110
Phe Pro Ser
        115
```

<210> 34046
<211> 449
<212> PRT
<213> A.fumigatus

<400> 34046

```
Arg Pro Gln Arg Pro Asp Gln Gly Ser Gln Val Gly Pro Glu Thr Tyr
1               5                   10                  15
Gln Gln Gly Glu Ala Ser Pro Ala Leu Ser Ile Ser Gln Pro Val Val
            20                  25                  30
Asn Ser Ser Ser Lys Phe Gly Gly Asn Pro Asn His Val Val Leu Gly
        35                  40                  45
Gly Ala Ser Ala Gly Ala Ala Ser Ile Thr Leu Leu Leu Ser Ala His
    50                  55                  60
Gly Gly Arg Asn Asp Gly Leu Phe His Ala Ala Ala Ala Glu Ser Gln
65                  70                  75                  80
Ser Phe Ala Thr Met Leu Thr Leu Asn Glu Ser Gln Phe Ala Tyr Asn
                85                  90                  95
Asn Leu Val Ile Arg Thr Gly Cys Ala Ser Glu Asn Asp Thr Leu Ala
            100                 105                 110
Cys Leu Arg Asn Leu Asp Thr Ala Ser Leu Gln Arg Gln Asn Phe Asn
        115                 120                 125
Thr Pro Phe Pro Gly Ala Gln Leu Ala Pro Leu Tyr Met Tyr Gly Pro
    130                 135                 140
Thr Ile Asp Gly Asp Leu Val Pro Asp Tyr Thr Tyr Arg Leu Phe His
145                 150                 155                 160
Gln Gly Lys Phe Ile Arg Val Pro Val Ile Phe Gly Asp Asp Thr Asn
                165                 170                 175
```

```
Glu Gly Thr Val Phe Val Pro Lys Asp Val Ser Ser Val Ser Glu Val
            180                 185                 190
Asp Lys Phe Leu Gln Asn Gln Phe Pro Lys Ile Glu Leu His His Leu
        195                 200                 205
Ala Lys Ile Asn Glu Leu Tyr Leu Gln Glu Asn Gln Thr Gln Ser Phe
    210                 215                 220
Pro Asp Ala Ser Val Trp Trp Arg Pro Ala Ser Asn Ala Tyr Gly Glu
225                 230                 235                 240
Met Arg Tyr Ile Cys Pro Gly Ile Asn Met Ser Ala Val Tyr Glu Asn
                245                 250                 255
Ala Gly Val Lys Ser Trp Asn Tyr His Tyr Ala Val Glu Asp Glu Ala
            260                 265                 270
Ala Gln Ala Ser Gly Thr Gly Val Ser His Thr Val Glu Val Asn Ala
        275                 280                 285
Ile Trp Gly Pro Lys Tyr Thr Asn Gly Gly Ala Pro Pro Ser Tyr Thr
    290                 295                 300
Thr Thr Asn Ala Pro Ile Val Pro Val Met Gln Gly Tyr Trp Thr Ser
305                 310                 315                 320
Phe Ile Lys Thr Phe Asn Pro Asn Thr His Arg Tyr Pro Gly Ser Pro
                325                 330                 335
Glu Trp Lys Thr Trp Gly Asp Gly Gly Gly Tyr Asn Arg Asn Phe Ile
            340                 345                 350
Lys Thr Asn Glu Thr Lys Met Glu Ser Val Pro Ile Asp Gln Lys Gln
        355                 360                 365
Arg Cys Gly Tyr Leu Thr Asn Ile Gly Thr Ala Leu Gly Gln Tyr Thr
    370                 375                 380
Gln Ile Gly Tyr Thr Thr Ser Gly Pro Leu Phe Arg Gly Ile Met Met
385                 390                 395                 400
Arg Lys Arg Glu Gln Phe Ser Phe Val Leu Ser Asp Lys Cys Ile Tyr
                405                 410                 415
Asn Asn Glu Ala Leu Lys Pro Gly Thr Pro Leu Thr Ile Met Met Leu
            420                 425                 430
Glu Lys Pro Arg Ile Pro Tyr Pro Arg Thr Ala Arg Val Ser Lys Met
        435                 440                 445
Ser
```

<210> 34047
<211> 166
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (75),(79),(81),(82),(84),(93)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34047

```
Trp Cys Ser His Ser Gly Tyr Pro His His Gly Ile Ser Ala Asn Ala
1               5                   10                  15
Ala Val Val Gly Val Leu Asn Glu Phe Leu Cys Thr Lys Phe Pro Glu
            20                  25                  30
Ser Ser Leu Leu Gly Pro Ser Thr Phe Asn Ile Gly Lys Ile Glu Gly
        35                  40                  45
Gly Val Ser Tyr Asn Ile Val Pro Ala Ser Ser Thr Ala Leu Cys Ala
    50                  55                  60
```

```
Val Arg Val Ala Thr Asp Met Ala Glu Cys Xaa Lys Asn Val Xaa Glu
65                  70                  75                  80
Xaa Xaa Ala Xaa His Pro His Val Lys Leu Glu Phe Xaa Phe Arg Leu
                85                  90                  95
Ser Glu Asn Met Leu Asp His Asp Val Lys Gly Cys Gln Pro Tyr Leu
            100                 105                 110
Cys Pro Asn Pro Ala Asp Gly Leu Gln Gly Leu Lys Gln Pro Gln Cys
        115                 120                 125
His Met Glu Leu Met Cys Leu Val Ser Arg Glu Thr Ile Lys Ser Thr
    130                 135                 140
Tyr Thr Gly Leu Val Gln Ser Ser Trp Pro Met Glu Arg Met Ser Arg
145                 150                 155                 160
Ser Lys Leu Thr Ser Cys
                165
```

<210> 34048
<211> 73
<212> PRT
<213> A.fumigatus

<400> 34048

```
Gln Met Leu Gly Phe Ser Phe Leu Leu Phe Leu Phe Leu Phe Leu Phe
1               5                   10                  15
Ile Phe Leu Phe Tyr Ser Ser Ile Tyr Phe Phe Asp Leu Val Asn Gln
            20                  25                  30
Gly Ile Leu Ser Thr Lys Val Ile Trp His Asp Asn Lys Leu His Cys
        35                  40                  45
Ile Leu Pro Phe Leu Gly Met Tyr Phe Ile Tyr Lys His Leu Val Ser
    50                  55                  60
Thr Val Ser Lys Phe Arg Cys Gly Ala
65                  70
```

<210> 34049
<211> 124
<212> PRT
<213> A.fumigatus

<400> 34049

```
Phe Arg Phe Thr Ser Ile His Pro Asp Lys Met Gly Ser Thr Gln Pro
1               5                   10                  15
Glu Phe Lys Asn Pro Ala Thr Thr Thr Leu Leu Glu Leu Val Lys Ala
            20                  25                  30
Arg Arg Thr Asn Tyr Ser Leu Lys Ala Glu Ser Pro Ile Ser Asp Glu
        35                  40                  45
Ala Ile Glu Arg Ile Val Gln Asp Ala Val Leu His Val Pro Ser Ser
    50                  55                  60
Phe Asn Thr Gln Thr Ser Arg Val Val Leu Leu Leu Lys Glu Glu His
65                  70                  75                  80
Gln Lys Leu Trp Asp Ile Ala Ile Asn Ile Met Glu Gly Leu Val Ala
                85                  90                  95
Ala Gly Lys Val Pro Lys Glu Met Phe Glu Asn His Thr Lys Pro Lys
            100                 105                 110
Leu Asn Gly Phe Arg Ala Gly Tyr Gly Thr Val Gly
        115                 120
```

<210> 34050

<211> 214
<212> PRT
<213> A.fumigatus

<400> 34050
Leu Lys Met Pro Glu Ala Pro Val Val Ser Leu Leu Gln Ser Leu Ile
1 5 10 15
Gln Val Pro Ser Thr Ser Asp His Glu Gln Asp Ile Ala Arg Trp Leu
20 25 30
Asp Asn His Leu Ser Thr Leu Gly Tyr Thr Val Glu Arg Leu Ser Ile
35 40 45
Ala Pro Gly Ser Thr Arg Glu Asn Val Tyr Ala Tyr Leu Gly Ser Ser
50 55 60
Arg Arg Val Arg Ala Cys Leu Thr Ala His Met Asp Thr Val Pro Pro
65 70 75 80
His Ile Pro Leu Arg Val Glu Gly Ser Thr Ile Tyr Gly Arg Gly Ala
85 90 95
Cys Asp Asp Lys Gly Pro Met Ala Ala Gln Ile Cys Ala Leu Glu Glu
100 105 110
Leu Arg Ala Glu Gly Ala Val Arg Glu Gly Glu Val Gly Leu Leu Phe
115 120 125
Val Val Gly Glu Glu Lys Gly Gly Pro Gly Met Ile Ala Ala Asn Asp
130 135 140
His Asp Leu Lys Phe Glu Gly Val Val Phe Gly Glu Pro Thr Glu Gly
145 150 155 160
Lys Leu Val Val Gly His Lys Gly His Leu Val Phe Glu Leu Val Gly
165 170 175
Glu Gly Lys Ala Trp Tyr Val Cys Ser Asp Ala Leu Ser Ala Glu Ala
180 185 190
Asn Gly Ala Val Ile Pro Gly Ile Pro Ile Met Ala Ser Ala Pro Met
195 200 205
Pro Leu Trp Leu Glu Phe
210

<210> 34051
<211> 147
<212> PRT
<213> A.fumigatus

<400> 34051
Arg Cys Leu Cys Val Leu Gly Asn Ile Asn Thr Leu Phe Pro Thr Pro
1 5 10 15
Tyr Arg Gln Arg Arg Asn Gln Ser Pro Ser Ile Lys Ser Ser Thr Ser
20 25 30
Pro Asp Asn Ser Asp Ser Pro Leu Tyr Ile Gln Thr Lys Trp Ala Arg
35 40 45
Leu Asn Pro Asn Ser Arg Thr Pro Pro Pro Pro Leu Cys Trp Ser Trp
50 55 60
Ser Arg Pro Gly Ala Gln Thr Thr Ala Ser Arg Pro Arg Ala Leu Phe
65 70 75 80
Pro Thr Arg Pro Leu Ser Ala Ser Phe Arg Met Pro Ser Cys Thr Ser
85 90 95
Pro Ala Pro Ser Thr Leu Arg Pro Pro Val Trp Ser Ser Cys Ser Arg
100 105 110
Arg Ser Thr Arg Ser Ser Gly Thr Leu Pro Leu Thr Ser Trp Arg Ala
115 120 125

```
Ser Trp Leu Pro Ala Arg Phe Pro Arg Arg Cys Leu Arg Thr Thr Pro
    130                 135                 140
Ser Leu Ser
145
```

<210> 34052
<211> 154
<212> PRT
<213> A.fumigatus

<400> 34052

```
Val Lys Thr Asp Thr Arg Pro Ser Val Gln Thr Ile Met Lys Gly Arg
1               5                   10                  15
Lys Ser Ala Tyr Ser Ser Ile Ala Arg Ala Glu Ser Val Gln Leu Arg
            20                  25                  30
Leu Gly Val Val Leu Lys His Leu Leu Gly Asn Leu Ala Gly Ser His
        35                  40                  45
Glu Ala Leu His Asp Val Asn Gly Asn Val Pro Glu Leu Leu Val Leu
    50                  55                  60
Leu Leu Glu Gln Glu Asp His Thr Gly Gly Leu Ser Val Glu Gly Ala
65                  70                  75                  80
Gly Asp Val Gln Asp Gly Ile Leu Asn Asp Ala Leu Asn Gly Leu Val
                85                  90                  95
Gly Asn Arg Ala Leu Gly Leu Glu Ala Val Val Cys Ala Pro Gly Leu
            100                 105                 110
Asp Gln Leu Gln Gln Ser Gly Gly Gly Gly Val Leu Glu Phe Gly Leu
        115                 120                 125
Ser Arg Ala His Phe Val Trp Met Tyr Arg Gly Glu Ser Glu Leu Ser
    130                 135                 140
Gly Asp Val Asp Asp Leu Ile Asp Gly Asp
145                 150
```

<210> 34053
<211> 121
<212> PRT
<213> A.fumigatus

<400> 34053

```
Ile Met Asp Leu Asp Pro Thr Leu Met Lys Ser Thr Asn Ser Thr Thr
1               5                   10                  15
Gly Leu Arg Ser Phe Ser Val Asn Thr Asn Ala Met Asn Pro Ala Thr
            20                  25                  30
Thr Arg Leu Ser Arg Arg Leu Leu Ile Phe Gln Glu Ala Arg Asn Pro
        35                  40                  45
Ser Asn Met Ser Glu Ile Val Tyr Leu Pro Val Asn Lys Leu Gly Leu
    50                  55                  60
Pro Ile Cys Gly Ser Gly Pro Glu Leu Pro Ser Ile Leu Glu Leu Pro
65                  70                  75                  80
Leu Arg Ile Leu Arg Ala Phe Thr Glu Ile Phe Asn Gln Pro Lys Tyr
                85                  90                  95
Lys Gly Trp Tyr Val Ser Arg Pro Ala Ser Leu Leu Leu Tyr His His
            100                 105                 110
Arg Cys Ile Tyr Ile Tyr Ile Tyr Gly
        115                 120
```

<210> 34054

<211> 79
<212> PRT
<213> A.fumigatus

<400> 34054
His Asp Ser Met Leu Tyr Asn Ser Ala Ser Tyr Pro Ala Leu Gln Met
1 5 10 15
Glu Tyr Leu Leu Leu Ile Phe Arg Lys Trp Pro Glu Thr Glu Thr Tyr
20 25 30
Trp Leu Ile Asn Arg Pro Gly Leu Pro Val Ser Arg His Ser Pro Leu
35 40 45
Val Tyr Asn Ile Pro Ser Asp Pro Ile Leu Ile Pro Glu Leu Leu Ala
50 55 60
Ser Leu Thr Glu Thr Leu Thr Ser Asp Leu Ala Val Tyr Met Gly
65 70 75

<210> 34055
<211> 78
<212> PRT
<213> A.fumigatus

<400> 34055
Gln Lys Arg Glu Gly Trp Phe Pro Arg Ser Arg Met Asn Leu Cys Phe
1 5 10 15
Arg Val His Gly Gly Asp Ala Glu Lys Glu Lys Glu Phe Leu Ala Gly
20 25 30
Ala Glu Lys Arg Leu Leu Gln Gly Leu Lys Gly His Arg Ser Val Gly
35 40 45
Gly Ile Arg Ala Ser Asn Tyr Asn Ala Val Pro Leu Glu Asn Val Glu
50 55 60
Lys Leu Ala Lys Tyr Leu Glu Asp Tyr Ala Thr Gly Asn Val
65 70 75

<210> 34056
<211> 374
<212> PRT
<213> A.fumigatus

<400> 34056
Pro Gln Leu Ile His Glu Cys Leu Tyr Asn Tyr Trp Leu Arg Glu Met
1 5 10 15
Ser His Ile Thr Phe Ser Gln Thr Asp Thr Arg Ser Asn Asn Leu His
20 25 30
Ala Pro Arg Asp Ser Leu Glu Leu Ala Ser Leu Ala Ser Ser Ser Pro
35 40 45
Glu Ser Val Gly Arg Ser Ser Ala Ser Ser Ser Pro Ser Gly Ile Ser
50 55 60
Ser Ser Arg Lys Leu Ser Leu Glu Asp Glu Asp Pro Leu Ser Asp Ala
65 70 75 80
His Ser His Ala Asn Leu Glu Ser Gly Arg Ala Arg Pro Thr Arg Ser
85 90 95
Tyr Ser Ile Ser Ser Ala Phe Asp Phe Gly Asn Ala Leu Phe Pro Leu
100 105 110
Ser Gln Thr Ala Gly Gly Tyr Ala Pro Leu Gly Ala Pro Ser Ala Leu
115 120 125
Asp Arg Gln Ala Gly Thr Asp Gly Ser Leu Glu Arg Asn Lys Thr Leu

```
    130                 135                 140
Thr Tyr Leu Asn Gly Leu Ser Leu Val Val Gly Ile Ile Ile Gly Ser
145                 150                 155                 160
Gly Ile Phe Ser Ser Pro Ser Gln Val Asn Ala Asn Ala Gly Ser Pro
                165                 170                 175
Gly Ala Ser Leu Ile Ala Trp Ala Val Ala Gly Leu Leu Ala Trp Thr
            180                 185                 190
Gly Ala Ala Ser Tyr Ala Glu Leu Gly Gly Ala Ile Pro Leu Asn Gly
        195                 200                 205
Gly Ala Gln Val Tyr Leu Ser Lys Ile Phe Gly Glu Leu Val Gly Phe
    210                 215                 220
Leu Phe Thr Trp Cys Ala Val Leu Val Leu Lys Pro Gly Ser Ala Ala
225                 230                 235                 240
Ile Ile Ala Ile Ile Phe Gly Glu Tyr Val Val Arg Ala Val Ile His
                245                 250                 255
Ala Asp Ala Glu Thr Val Ser Pro Trp Ile Ser Lys Gly Val Ala Phe
            260                 265                 270
Gly Gly Val Phe Leu Val Thr Val Leu Asn Cys Ile Ser Thr Arg Leu
        275                 280                 285
Ala Ala Arg Ile Gly Asp Phe Phe Met Phe Phe Lys Phe Val Ala Leu
    290                 295                 300
Ile Gly Val Thr Val Ile Gly Ile Val Val Ala Val Thr Gly Phe Ser
305                 310                 315                 320
Ser Thr Gly Ser Ala Ser Lys Glu Trp Lys Glu Gly Trp Phe Lys Gly
                325                 330                 335
Thr Ser Lys Asp Ile Ser Gly Trp Ala Val Ala Ile Tyr Ala Gly Leu
            340                 345                 350
Trp Ala Phe Asp Gly Trp Asp Asp Val Gly Phe Ser His Ser Ala Phe
        355                 360                 365
Ser Pro Arg Ala Ile Tyr
    370

<210> 34057
<211> 77
<212> PRT
<213> A.fumigatus

<400> 34057
Ser Tyr Leu Gln Thr Asn Tyr Val Thr Gly Glu Phe Lys Asn Pro Ser
1               5                   10                  15
Arg Asp Leu Pro Arg Val Ile His Thr Ala Met Pro Leu Val Ile Leu
            20                  25                  30
Ser Tyr Leu Leu Ala Asn Val Ser Tyr Phe Leu Val Leu Pro His Ser
        35                  40                  45
Thr Ile Glu Ala Ser Asn Thr Ile Ala Val Gln Phe Gly Asp Lys Val
    50                  55                  60
Phe Gly Cys Leu His Arg Pro Gly Leu Glu Gly Asn Ala
65                  70                  75

<210> 34058
<211> 88
<212> PRT
<213> A.fumigatus

<400> 34058
Asp Val Arg Pro Pro Pro Arg Asp Ser Thr Ile Leu Ile Tyr Arg Thr
```

```
1               5                   10                  15
Cys Ser Phe Val Glu Ser Gln Pro His Glu Ile Pro Thr Thr Lys Ile
            20                  25                  30
Arg Gly Thr Phe Val Gln Pro Ala Phe Tyr Pro Gln Gln Glu Ser Ser
        35                  40                  45
Phe Ser Ser Leu Tyr Cys Val Phe Ile Thr Tyr Asn Leu Arg Thr Phe
    50                  55                  60
Ser Ala Lys Lys Ala Thr Met Ala Ser Thr Asp Asp Cys His Cys Asn
65                  70                  75                  80
Cys Gly Arg Asn Arg Ser Leu Cys
                85
```

<210> 34059
<211> 403
<212> PRT
<213> A.fumigatus

<400> 34059

```
Asp His His His Glu Thr Arg Arg Tyr Ser Phe Ile Val Arg Ala Leu
1               5                   10                  15
Ser Leu Arg Val Asn Leu Met Lys Ser Arg Leu Pro Arg Ser Gly Gly
            20                  25                  30
Leu Leu Phe Asn Pro Pro Ser Thr Leu Ser Lys Arg Ala Ala Ser Arg
        35                  40                  45
Arg Tyr Thr Ala Ser Ser Ser Pro Thr Thr Ser Ala Pro Ser Pro Pro
    50                  55                  60
Lys Arg Arg Leu Trp Leu Arg Leu Thr Ile Val Thr Ala Thr Ala Ala
65                  70                  75                  80
Gly Ile Gly Ala Tyr Val Arg Ser Gln Gln Gly Ser Glu Pro Thr Thr
                85                  90                  95
Leu Asn Pro Val Thr Phe Thr Lys Tyr Arg Leu Val Ala Arg Glu Pro
            100                 105                 110
Val Ser Ser Asn Gly Ser Ile Phe Thr Leu Lys Pro Pro Lys Pro Asp
        115                 120                 125
Asp Asn Arg Glu Val Tyr Glu Asp Ala Trp Lys Thr Gly Val Trp Ser
    130                 135                 140
Val Met Phe Lys Gln Pro Gln Leu Gln Ile Gly Arg Asp Tyr Thr Pro
145                 150                 155                 160
Leu Pro Pro Ile Ser Leu Asn Asp Gln Asp Glu Gln Glu Gly Cys Leu
                165                 170                 175
Arg Phe Phe Ile Arg Lys Asp Pro Phe Gly Glu Val Ser Arg Tyr Leu
            180                 185                 190
His Ser Leu Asp Val Gly Ser Ala Ile Glu Val Arg Gly Pro Arg Ile
        195                 200                 205
Glu Cys Glu Ile Pro Ser Asp Thr Arg Gln Ile Leu Phe Ile Ala Gly
    210                 215                 220
Gly Thr Gly Ile Ala Pro Ala Leu Gln Ala Gly His Thr Leu Leu Arg
225                 230                 235                 240
Arg Thr Asp Ala Asp His Lys Pro Arg Leu His Ile Leu Trp Ala Asn
                245                 250                 255
Arg Arg Arg Asp Asp Cys Leu Gly Gly Cys Asn Asp Ser Ser Ala Ile
            260                 265                 270
Asp Glu Val Gln Gln Arg Ser Trp Phe Thr Gly Leu Phe Arg Ser Arg
        275                 280                 285
Pro Ser Ser Pro Pro Pro Ala Cys Pro Thr Gln Asp Pro Ala Ala Thr
    290                 295                 300
```

```
Ser Leu Met Val Arg Glu Leu Glu Ala Leu Lys Ala Arg Tyr Pro Gly
305                 310                 315                 320
Gln Val Thr Val Asp Tyr Phe Val Asp Glu Glu Ser Ser Phe Ile Glu
                325                 330                 335
Lys Lys Ser Ile Thr Arg Phe Thr Asp Thr Ala Ser Ser Asn Gly Pro
            340                 345                 350
Pro Gly Gly Lys Met Ile Ile Val Ser Gly Pro Glu Gly Phe Ile Ser
        355                 360                 365
Tyr Met Ala Gly Pro Lys Leu Trp Ala Gln Gly Met Glu Leu Gln Gly
    370                 375                 380
Pro Leu Asn Gly Val Ile Lys Glu Leu Asp Leu Lys Asp Trp Ala Val
385                 390                 395                 400
Trp Lys Leu
```

<210> 34060
<211> 96
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (65)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34060

```
Arg Ile Phe Ala Thr Leu Ser Arg Tyr Asp Arg Leu Asn Leu Pro Arg
1               5                   10                  15
Leu Lys Ala Tyr Ser Glu Leu Pro Asn Arg Gln Leu Leu Pro Ala Leu
            20                  25                  30
Ala Ala Met Ile Gln Gln His Leu Val Tyr His Tyr Thr Ser Tyr Asp
        35                  40                  45
Asp Gly Val Thr Tyr Tyr Glu Ala Asn Met Gln Ser Ala Tyr Tyr Leu
    50                  55                  60
Xaa Arg Ser Gly Lys Asn Leu Glu Phe Val Glu Asp Asp Leu Ala Ser
65                  70                  75                  80
Met Arg Arg Pro Ser Phe Arg Pro Ser Cys Phe Ser Asp Thr Pro Lys
                85                  90                  95
```

<210> 34061
<211> 84
<212> PRT
<213> A.fumigatus

<400> 34061

```
Ser Leu Thr Val Ser Ala Phe Asn Gly Gln Ser Thr Leu Lys Arg Ser
1               5                   10                  15
Ala Leu Arg Ile Thr Arg Glu Val Glu Leu Leu Gly Gly Glu Val Ser
            20                  25                  30
Ser Thr His Ser Arg Glu Asn Val Val Leu Lys Thr Lys Phe Leu Ser
        35                  40                  45
Lys Asp Leu Pro Tyr Phe Ala Glu Leu Leu Ala Glu Val Ala Phe Gln
    50                  55                  60
Thr Lys Phe Ala Gly Lys Trp Thr Ala Val Val Ser His Asn Leu Gln
65                  70                  75                  80
Cys Asp Ile Gly
```

<210> 34062
<211> 105
<212> PRT
<213> A.fumigatus

<400> 34062
Tyr Ala His Ala Ile Met Leu Ser Arg Ser Ser Leu Ser Arg Asn Ala
1 5 10 15
Pro Arg Ala Leu Ser Ala Ala Ser Ala Ser Ser Arg Arg Ser Met Ala
20 25 30
Ser Ala Ala Thr Pro Gly Leu Gln Tyr Asp Val Ser Glu Ser Ala Gly
35 40 45
Val Lys Val Ala Asn Arg Glu Val Ala Gly Pro Thr Gly Thr Leu Ala
50 55 60
Leu Val Ala Lys Ala Gly Ser Arg Tyr Gln Pro Phe Pro Gly Phe Ser
65 70 75 80
Asp Ala Leu Glu Phe Phe Ala Phe Lys Val Gly Ile Ile Ala Arg Leu
85 90 95
Gln Ser Leu Gln Leu Thr Asn Val Asn
100 105

<210> 34063
<211> 295
<212> PRT
<213> A.fumigatus

<400> 34063
Thr Ser Ser Ser Ser Thr Ser Ser Ser Thr Asp Ser Lys Pro Phe Ala
1 5 10 15
Ala Asp Ala Glu Asn Ile Ala Val Asp Ala Ala His Ala Leu Ala Phe
20 25 30
His Arg Gly Leu Gly Glu Asn Ile Thr Pro Ser Ala Ser Gly Pro Phe
35 40 45
Glu Lys Tyr Ile Ser Ala Asp Ala Ile Ala Glu Phe Ala Lys Asp Ala
50 55 60
Tyr Ala Lys Ser Asn Ile Ala Ile Val Gly Ser Gly Ser Ser Thr Ala
65 70 75 80
Glu Val Ser Arg Trp Val Gly Glu Phe Phe Thr Glu Val Pro Ser Ala
85 90 95
Gly Gly Ser Ser Gln Phe Lys Val Arg Pro Asn Thr Ala Ser Lys Tyr
100 105 110
Tyr Gly Gly Glu Gln Arg Ile Ser Ser Lys Ser Gly Asn Ala Val Val
115 120 125
Ile Ala Phe Pro Gly Ser Ser Thr Phe Gly Thr Ser Gly Tyr Lys Pro
130 135 140
Glu Ala Ser Val Leu Ala Ala Leu Leu Gly Gly Glu Ser Ser Ile Lys
145 150 155 160
Trp Thr Pro Gly Phe Ser Leu Leu Ala Lys Ala Thr Gln Gly Phe Ser
165 170 175
Gln Val Arg Val Ala Thr Lys Asn Asn Ala Tyr Ser Asp Ala Gly Leu
180 185 190
Phe Thr Ile Thr Val Ser Gly Lys Ala Asp Gln Val Ala Ala Ala Ser
195 200 205
Lys Asn Val Val Asp Val Leu Lys Lys Thr Ala Ala Gly Glu Ile Ala

```
    210                 215                 220
Gly Asp Glu Ile Lys Lys Ala Ile Ala Leu Ala Lys Phe Arg Ala Leu
225                 230                 235                 240
Glu Ser Ala Gln Thr Leu Glu Thr Gly Leu Glu Ala Thr Gly Ala Ala
                245                 250                 255
Leu Ile Asn Gly Ser Lys Pro Tyr Gln Ile Gly Glu Ile Ala Gln Gly
            260                 265                 270
Phe Asp Ser Val Thr Glu Ala Gln Ile Lys Asp Val Ser Leu Phe Ser
        275                 280                 285
Phe Pro Thr His Cys Val Leu
    290                 295
```

<210> 34064
<211> 76
<212> PRT
<213> A.fumigatus

<400> 34064

```
Gln Lys Lys Gln Thr Thr Arg Ser Lys Lys Glu Ser Glu Ser Glu Ile
1               5                   10                  15
Arg Thr Cys Leu Lys Gly Ser Trp Val Ser Ile Glu Ser Ser Ala Pro
            20                  25                  30
Phe Ser Tyr Phe Ser Leu Ile Asp Ala Ile Lys Asn His Val Tyr Leu
        35                  40                  45
Tyr His Leu Ile Ser Pro Asp Thr Glu Gly Asp Gly Lys Ala Gly Ser
    50                  55                  60
Ala Arg Thr Arg His Phe Asp Gln Ser Ala Asn Glu
65                  70                  75
```

<210> 34065
<211> 288
<212> PRT
<213> A.fumigatus

<400> 34065

```
Met Glu Val Arg Tyr Gly Leu Ser Ala Cys Leu Lys Thr Ser Pro Leu
1               5                   10                  15
Thr Asn Thr Cys Phe Phe Ala Glu Lys Tyr Glu Ala Ala Pro Ile Ala
            20                  25                  30
Leu Ser Leu Asn Glu Ala Phe Ile Ala Ile Ser Leu Ala Phe Gly Asn
        35                  40                  45
Leu His Pro Ile Leu Gly Ser Phe Arg Thr Ser Gln His Leu Ile Gln
    50                  55                  60
Ala Val Ala Pro Gly Ser Ser Pro Leu Leu Gln Leu Pro Tyr Phe Asn
65                  70                  75                  80
Asn Gln Val Val Lys Ala Ile Glu Gly Ala Asp Ala Lys Asp His Tyr
                85                  90                  95
Thr Val Gln Lys Phe Met Ser Leu Pro Glu Asp Lys Arg Arg Ser Leu
            100                 105                 110
Thr Val Gly Ala Gly Leu Leu Ser Glu Lys Gln Tyr Ser Thr Ala Val
        115                 120                 125
Ser Val Ala Lys Gln Leu Pro Val Leu Glu Val Ser Arg Ala Phe Phe
    130                 135                 140
Lys Val Met Gly Glu Lys Val Ile Thr Pro Ser Ser Leu Val Gln Leu
145                 150                 155                 160
Val Val Lys Ala Arg Phe Ile Pro Pro Gly Ser Thr Asn Ile Pro Glu
```

```
                165                 170                 175
Val Asn Pro Ala Glu Leu Glu Glu Arg Asp Pro Asp Glu Asp Asp Leu
            180                 185                 190
Asp Ala Leu Met Gly Arg Lys Pro Pro Arg Thr Asp Leu Pro Gly Leu
        195                 200                 205
Ser Thr Ala Asn Arg Ser Arg Thr Arg Leu Arg Leu Phe Asn Pro Leu
    210                 215                 220
Ser Leu Thr His Pro Thr Trp Leu Ala Thr Thr Leu Leu Ala Gly Thr
225                 230                 235                 240
Phe Ser Trp Pro Met Pro Ser Arg Ala Arg Trp Pro Phe Leu His Ser
                245                 250                 255
Pro Ser Pro Pro Ser Thr Ser Pro Cys Ser Thr Arg Gln Glu Ser Gln
            260                 265                 270
Pro Ser Thr Phe Arg His Ser Arg Cys Ser Ser Arg Leu Leu Leu Arg
        275                 280                 285

<210> 34066
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34066
Arg Tyr Val Leu Leu His Ser Phe Pro Val Leu Ala Ser Gln Ile Thr
1               5                   10                  15
Asn Gln Ile Ser Met Ile Asp Ser Ile Ala Gly Gln Met Gln Ala Leu
            20                  25                  30
Lys Thr Gly Gln Pro Pro Arg Lys Lys Ala Arg Lys Pro Ser Asp Glu
        35                  40                  45
Ser Ser Glu Glu Glu Ser Asp Thr Asp Gly Asp Ala Gly Asp Thr Ser
    50                  55                  60
Asp Thr Asn Thr Glu Thr Asp Val Glu Asp
65                  70

<210> 34067
<211> 167
<212> PRT
<213> A.fumigatus

<400> 34067
Gly Arg Pro Arg Cys Ser His Gly Pro Lys Ala Pro Gln Asp Arg Pro
1               5                   10                  15
Thr Arg Thr Val Asn Gly Gln Gln Val Glu Asn Lys Ile Glu Ile Ile
            20                  25                  30
Gln Pro Pro Leu Ala His Ala Pro Tyr Leu Ala Arg Asp His Ser Pro
        35                  40                  45
Arg Trp His Ile Phe Leu Ala Asp Ala Lys Gln Gly Lys Met Ala Val
    50                  55                  60
Pro Pro Phe Thr Phe Thr Thr Phe Asp Gln Pro Leu Phe Asp Glu Ala
65                  70                  75                  80
Gly Lys Pro Thr Phe Asn Val Gln Thr Leu Lys Met Gln Phe Gln Ala
                85                  90                  95
Pro Pro Gln Val Gly Asp Phe Ser Phe Val Met His Met Met Cys Asp
            100                 105                 110
Ser Tyr Leu Gly Leu Asp Thr Lys Leu Asp Ile Thr Leu His Val Asp
        115                 120                 125
Asp Pro Ala Lys Ala Ala Ala Leu Glu Glu Glu Asp Asp Ile Ser Glu
```

```
    130                 135                 140
Pro Asp Glu Gly Met Phe Tyr Cys Ile Leu Phe Leu Tyr Trp Gln Val
145                 150                 155                 160
Lys Ser Leu Ile Lys Ser Arg
                165
```

<210> 34068
<211> 126
<212> PRT
<213> A.fumigatus

<400> 34068

```
Gly Pro Asn Asp Ser Gly Gln Thr His Gly Lys Leu Phe Cys Ser Leu
1               5                   10                  15
Ser Pro Ile Leu Gln Ala Val Met Met Ala Leu His Pro Phe Asp Pro
            20                  25                  30
Ile Thr Pro Ala Glu Ile Gln Leu Ala Val Lys Ile Leu Glu Ala Ala
        35                  40                  45
Phe Pro Gly Val Ser Leu Arg Tyr Lys Lys Ile Asp Val Asn Glu Pro
    50                  55                  60
Leu Lys Lys Glu Val Val Pro Tyr Ile Glu Ala Glu Arg Ser Arg Lys
65                  70                  75                  80
Ala Leu Pro Ala Ala Pro Thr Arg Leu Leu Gln Val Leu Phe His Arg
                85                  90                  95
Leu Asp Asn Gly Ala Phe Tyr Lys Ala Leu Leu Asn Ala Gly Thr Arg
            100                 105                 110
Ser Val Val Tyr Ala Lys Gln Leu Pro Lys Glu Val Gln Val
        115                 120                 125
```

<210> 34069
<211> 190
<212> PRT
<213> A.fumigatus

<400> 34069

```
Leu Arg Thr Arg Glu Val Ala Asn Lys Ile Asp Pro Arg Ala Pro Tyr
1               5                   10                  15
His Arg Lys Gln Ala Phe Asp Val Gly Asp Val Gly Phe Gly Ile Thr
            20                  25                  30
Ala Asn Gln Leu Ser Leu Gly Cys Asp Cys Leu Gly Tyr Ile Lys Tyr
        35                  40                  45
Phe Asp Gly Tyr Arg Ser Asp Ser Lys Ala His Pro Val Gln Leu Lys
    50                  55                  60
Asn Val Ile Cys Leu His Glu Gln Asp Asn Gly Leu Gln His Lys His
65                  70                  75                  80
Thr Asn Tyr Arg Thr Gly Ala Ala Thr Val Val Arg Asn Arg Gln Leu
                85                  90                  95
Leu Val His Met Ile Cys Asn Val Ser Asn Tyr Glu Tyr Ile Phe Ala
            100                 105                 110
Phe Ile Phe Asp Gln Ala Ala Asn Ile Tyr Leu Asp Val Arg Ala Thr
        115                 120                 125
Gly Ile Leu Ser Thr Val Pro Phe Asp Asn Glu Lys Phe Gly Thr Thr
    130                 135                 140
Val Pro Trp Gly Thr Asn Val Gly Pro Gly Val Met Ala Pro Phe His
145                 150                 155                 160
Gln His Met Phe Ser Phe Arg Ile Asp Pro Ala Ile Asp Gly Phe Lys
```

```
                165                 170                 175
Asn Thr Val Tyr Tyr Lys Asp Ser Val Pro Met Pro Asp Asp
            180                 185                 190

<210> 34070
<211> 135
<212> PRT
<213> A.fumigatus

<400> 34070
Asn Asn Pro Tyr Leu Val Gly Tyr Thr Thr Glu Gln Thr Val Leu His
1               5                  10                  15
Thr Ser Gly Asn Gly Asn Thr Ser Val Glu Arg His Pro Val Phe Lys
            20                  25                  30
Ile Arg Asn Asp Ala Cys Ile Asn Pro Ile Thr Tyr Lys Pro Val Ala
        35                  40                  45
Tyr Lys Leu Gln Thr Ala Pro Ser Gln Met Leu Leu Ala Gly Asn Arg
    50                  55                  60
Ser Phe Gly Tyr Lys Arg Ala Glu Phe Ala Thr Lys Pro Ile Trp Val
65                  70                  75                  80
Thr Lys Tyr Gln Asp Asp Glu Leu Phe Ala Ala Gly Glu Phe Thr Asn
                85                  90                  95
Gln Ser Lys Gln Ser Glu Gly Val Glu Lys Trp Val Gln Arg Asn Asp
            100                 105                 110
Pro Val Glu Asn Glu Asp Leu Val Leu Trp His Ser Lys Ser Asp Arg
        115                 120                 125
Leu Phe Leu Leu Arg Arg His
    130                 135

<210> 34071
<211> 288
<212> PRT
<213> A.fumigatus

<400> 34071
Lys Arg Arg Trp Tyr Arg Ile Leu Lys Pro Arg Asp His Gly Arg Leu
1               5                  10                  15
Cys Arg Arg His Gln Leu Gly Cys Cys Arg Cys Cys Ser Ile Val Leu
            20                  25                  30
Thr Met Glu His Ser Thr Lys Arg Cys Ser Met Arg Gly Pro Gly Leu
        35                  40                  45
Trp Cys Met Pro Asn Ser Cys Pro Lys Arg Phe Arg Tyr Arg Leu Cys
    50                  55                  60
Arg Ser Val Asn Leu Gly Gly Asn Val Ser Asp Ser Thr Gln Gly Pro
65                  70                  75                  80
Val Asp Ala Asp Glu Leu Ile Glu Ile Glu Gln Leu Cys Leu Ser His
                85                  90                  95
Pro Ala Val Gln Ala Glu Ile Ala Lys Met Gln Leu Pro Gln Gly Val
            100                 105                 110
Thr Val Cys Asn Asp Pro Trp Ile Tyr Gly Thr Asp Asp Pro Lys Glu
        115                 120                 125
Thr Arg Arg Leu Phe Gln Cys Tyr Met Tyr Val Val Thr Thr Asp His
    130                 135                 140
Pro Gln Asn Asn His Tyr Ser Thr Pro Cys Lys Phe Ser Pro Val Phe
145                 150                 155                 160
Asp Ala Leu Thr Arg Glu Leu Val Arg Met Asp Tyr Leu Pro Gly Gly
```

```
                165                 170                 175
Val Asp Thr Gln Val Ser Glu Thr Gln Pro Trp Lys Thr Val Glu Thr
            180                 185                 190
Ile Gln Tyr Ala His Asp Leu Leu Thr Glu Pro Leu Arg Thr Asp Leu
        195                 200                 205
Lys Pro Tyr Ile Val Gln Gln Pro Glu Gly Pro Ser Phe His Val Gln
    210                 215                 220
Gly Asn Leu Val Ser Trp Gln Lys Trp Lys Phe Arg Val Gly Phe Asn
225                 230                 235                 240
Thr Arg Glu Gly Leu Val Ile Tyr Asn Thr Thr Tyr Asp Gly Arg Asn
                245                 250                 255
Val Phe Tyr Arg Leu Ser Val Ser Glu Met Thr Val Pro Tyr Gly Gly
            260                 265                 270
Met Gln Trp Pro Ile His Asp Cys Gly Gln Glu Lys Ser Leu Thr Arg
        275                 280                 285
```

<210> 34072
<211> 115
<212> PRT
<213> A.fumigatus

<400> 34072

```
Trp Arg Leu Ser Thr Ser Thr Cys Ser Pro Ser Val Leu Thr Leu Pro
1               5                   10                  15
Leu Met Gly Ser Lys Thr Pro Ser Thr Thr Lys Ile Ala Cys Arg Cys
            20                  25                  30
Pro Met Thr Arg Thr Thr His Ile Trp Trp Val Thr Pro Pro Asn Lys
        35                  40                  45
Pro Ser Cys Thr Pro Ala Ala Thr Ala Thr Pro Ala Trp Ser Ala Thr
    50                  55                  60
Arg Cys Ser Arg Ser Ala Thr Thr Pro Ala Ser Thr Arg Ser Leu Ile
65                  70                  75                  80
Asn Arg Trp Pro Ile Ser Cys Arg Pro Arg Arg Ala Arg Cys Cys Trp
                85                  90                  95
Arg Gly Thr Gly Arg Leu Ala Thr Ser Gly Pro Ser Ser Leu Pro Ser
            100                 105                 110
Arg Ser Gly
        115
```

<210> 34073
<211> 240
<212> PRT
<213> A.fumigatus

<400> 34073

```
Arg Met Ala Pro Leu Ser Ser Ile Trp Ala Tyr Leu Asn Glu Asp Ile
1               5                   10                  15
Gly Glu Asp Leu Leu Leu Glu Cys Gln Leu Leu Leu Leu Ser Phe Ala
            20                  25                  30
Thr Gly Ile Gln Asp Ala Ala Thr Trp Pro Asp Tyr Ser Cys Phe Ala
        35                  40                  45
Ser Asn Gln Thr Gly Asn Thr Leu Phe Leu Ala Ile Gly Val Ala Gly
    50                  55                  60
Leu Ala Asn Asn Ala Tyr Ser Phe Pro Asn Ile Gly Met Ser Leu Gly
65                  70                  75                  80
Met Phe Ile Ala Gly Gly Leu Leu Val Gly Gln Leu Gly Asn Leu Phe
```

```
                85                  90                  95
Gly Val Arg Arg Arg Leu Trp Leu Leu Leu Ser Ser Val Ile Gln Thr
            100                 105                 110
Val Leu Val Val Ala Gly Leu Val Val Gln Tyr Thr Leu Pro Val Lys
        115                 120                 125
Gln Glu Gly Pro Ala Ala Leu Gly Val Ile Ala Cys Leu Ala Phe Ser
    130                 135                 140
Ser Gly Ala Gln Val Ala Met Ser Arg Ser Leu Lys Ile Thr Glu Ile
145                 150                 155                 160
Thr Thr Ala Met Ala Thr Ala Ala Tyr Val Asp Val Val Val Asp Pro
                165                 170                 175
Gly Leu Leu Arg Val His Asn Arg Pro Arg Thr Arg Arg Val Leu Phe
            180                 185                 190
Leu Val Met Leu Thr Ala Gly Cys Phe Val Gly Ala Phe Ala Gln Arg
        195                 200                 205
Ala Val Asn Ser Ser Phe Ala Leu Leu Trp Cys Ala Val Gly Lys Ala
    210                 215                 220
Val Val Thr Val Ser Leu Leu Trp Asn Lys Arg Leu Glu Lys Thr Cys
225                 230                 235                 240

<210> 34074
<211> 78
<212> PRT
<213> A.fumigatus

<400> 34074
Pro Ile Val Leu Val Glu Ala Ser Leu Thr Val Pro Ala Phe Gly Leu
1               5                   10                  15
Thr His Asn Pro Arg Val Glu Asp Phe Pro Val Met Pro Val Glu Arg
            20                  25                  30
Val Ser Val Met Leu Lys Pro Asp Gly Phe Phe Thr Lys Asn Pro Ala
        35                  40                  45
Leu Asp Val Pro Ala Ser Thr Gln Ser Phe Asn Arg Ser Thr Leu His
    50                  55                  60
Pro Glu Pro Ala Ala Cys Cys Ala Pro Ala Lys Val Lys Leu
65                  70                  75

<210> 34075
<211> 134
<212> PRT
<213> A.fumigatus

<400> 34075
Thr Gly Ile Asp Gln His Val Phe Ser Ser Arg Leu Phe His Ser Asn
1               5                   10                  15
Glu Thr Val Thr Thr Ala Phe Pro Thr Ala His His Ser Ser Ala Lys
            20                  25                  30
Asp Glu Phe Thr Ala Arg Cys Ala Asn Ala Pro Thr Lys His Pro Ala
        35                  40                  45
Val Ser Ile Thr Arg Asn Ser Thr Arg Arg Val Arg Gly Arg Leu Cys
    50                  55                  60
Thr Leu Asn Ser Pro Gly Ser Thr Thr Thr Ser Thr Tyr Ala Ala Val
65                  70                  75                  80
Ala Met Ala Val Val Ile Ser Val Ile Phe Ser Asp Arg Leu Ile Ala
                85                  90                  95
Thr Cys Ala Pro Asp Glu Asn Ala Lys His Ala Met Thr Pro Asn Ala
```

```
            100                 105                 110
Ala Gly Pro Ser Cys Phe Thr Gly Ser Val Tyr Cys Thr Thr Ser Pro
        115                 120                 125
Ala Thr Thr Ser Thr Val
    130
```

<210> 34076
<211> 108
<212> PRT
<213> A.fumigatus

<400> 34076

```
His His Ala Leu Ser Ser Arg Thr Lys Pro Gln Ala Lys Gln Asn Asn
1               5                   10                  15
Asn Met Gln Pro Leu Asp Tyr Arg Pro Gly Leu Ile Asn Met Ser Ser
            20                  25                  30
Pro Ala Val Tyr Ser Thr Ala Thr Arg Pro Ser Arg Gln Pro Ser Pro
        35                  40                  45
Pro His Thr Thr Val Ala Gln Arg Thr Asn Ser Leu Pro Val Ala Gln
    50                  55                  60
Thr Pro Arg Gln Asn Thr Pro Pro Ser Ala Ser Pro Gly Thr Ala Pro
65                  70                  75                  80
Ala Glu Cys Ala Ala Gly Tyr Val Pro Ser Thr Val Pro Asp Pro Pro
                85                  90                  95
Pro His Pro His Met Pro Pro Ser Pro Trp Pro Leu
            100                 105
```

<210> 34077
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34077

```
Asn Ala Pro Leu Ser Arg Arg Trp Asn Ser Thr Cys Asn Asn Arg Val
1               5                   10                  15
Gly Ala Ala Gly Lys Ala Phe Arg Asp Leu Ser Ala Ser Ile Tyr Gly
            20                  25                  30
Thr Thr Ser Phe Phe Arg Gly Ser Leu Thr Ser Ile Phe Leu Tyr Leu
        35                  40                  45
Lys Asp Thr Pro Gly Lys Ala Ala Ser Arg Ile Leu Thr Ala Asn Trp
    50                  55                  60
Ile Ser Ala Gly Val Met Gly Ser Lys Gly
65                  70
```

<210> 34078
<211> 313
<212> PRT
<213> A.fumigatus

<400> 34078

```
Arg Tyr Tyr Gly Gly Ser Leu Pro Tyr Pro Val Ser Gln Asp Met Pro
1               5                   10                  15
Val Glu His Leu Lys Tyr Leu Thr Thr Glu Gln Ala Leu Ala Asp Ile
            20                  25                  30
Pro Tyr Phe Ala Ala Asn Phe Ser Arg Leu Asn His Pro Asp Phe Asp
        35                  40                  45
```

```
Leu Thr Pro Arg Gly Thr Pro Trp Ile Met Ile Gly Gly Ser Tyr Pro
    50                  55                  60
Gly Ile Arg Ala Ala Ile Thr Arg Asn Lys Tyr Pro Asp Thr Ile Phe
65                  70                  75                  80
Ala Ala Tyr Ala Ser Ser Ala Pro Val Gln Ala Gln Leu Asn Met Ser
                85                  90                  95
Val Tyr Tyr Glu Gln Ile Tyr Arg Ala Ile Val Gly Asn Gly Tyr Ser
            100                 105                 110
Asn Cys Thr Lys Asp Ile Gln Ala Ala Leu Lys Tyr Ile Asp Gly Gln
        115                 120                 125
Leu Ser Asn Lys Arg Thr Phe Ala Leu Ile Lys Arg Leu Phe Leu Gly
    130                 135                 140
Pro Asp Ala Glu Lys Asn Ser Asn Glu Asp Phe Thr Thr Ala Leu Val
145                 150                 155                 160
Thr Leu Tyr Gly Pro Phe Gln Ala His Gly Leu Trp Ser Gly Asn Gln
                165                 170                 175
Ser Leu Pro Asp Phe Cys Asn Tyr Leu Glu Leu Asp Pro Ala Thr Asn
            180                 185                 190
Gln Ser Ala Gly Pro Glu Gly Leu Ser Pro Ile His Gly Ser Lys Tyr
        195                 200                 205
Val Ala Glu Arg Trp Ala Ser Phe Pro Tyr Phe Ile Ser Leu Val Asn
    210                 215                 220
Arg Met Tyr Gly Thr Asn Cys Asn Gly Leu Asn Ala Ser Glu Pro Leu
225                 230                 235                 240
Ser Cys Asp Phe Ser Gln Thr Asn Thr Ile Pro Glu Leu Ile Ser Trp
                245                 250                 255
Thr Trp Gln Tyr Cys Thr Glu Trp Gly Phe Phe Gln Asn Asn Asn Phe
            260                 265                 270
Gly Ser His Ala Phe Leu Ser Ser Tyr Gln Asn Pro Gly Val Ser Thr
        275                 280                 285
Arg Asn Ser Val Ile Ala Ser Ser Gln Met Ala Ser Arg Leu Ala Phe
    290                 295                 300
Tyr Arg His Asp His Arg Arg Lys Ala
305                 310

<210> 34079
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34079
Leu Val Gln Met Leu Ile Asp His Glu Asp Pro Ser Val Gly Thr Tyr
1               5                   10                  15
Arg Asn Arg Phe Trp Val Asn Glu Asp Phe Tyr Ile Ser Gly Ser Pro
            20                  25                  30
Ile Met Val Tyr Asp Ile Gly Glu Ala Thr Ala Glu Tyr Ser Val Ser
        35                  40                  45
Leu Leu Thr Asn Ser Ser Ser Trp Leu Ser Leu Leu Leu Gln Glu Phe
    50                  55                  60
Asn Ala Met Gly Ile Val Trp Glu His Arg
65                  70

<210> 34080
<211> 100
<212> PRT
<213> A.fumigatus
```

<400> 34080
Leu Ile Ala Arg Pro Val Asp Gly Leu Cys Leu Ala Lys Val Gln Arg
1 5 10 15
Gln Tyr Ser Cys Gln Arg Ser Cys Lys Ala Ser Pro Leu Gln Gln Val
20 25 30
Thr Arg Phe Leu Ala Asn Met Ser His Glu Ile Arg Thr Pro Met Asn
35 40 45
Gly Val Ile Gly Ile Ser Gln Leu Ala Arg Ser Cys Arg Gln Thr Ser
50 55 60
Arg Thr Thr Ala Asn Ala Ile Ser Phe Thr Val Asp Leu Thr Arg Pro
65 70 75 80
Phe Phe Arg Pro Ile Ile Lys Lys Pro Pro Leu Lys Asn Ser Val Arg
85 90 95
Thr Tyr Cys Thr
100

<210> 34081
<211> 91
<212> PRT
<213> A.fumigatus

<400> 34081
Thr Leu Ala Lys Gln Arg Pro Ser Thr Gly Arg Ala Ile Asn His Phe
1 5 10 15
Ser Ile Asp Cys Phe His Gln Lys Ser Thr Val Leu Ile Ser Ala Phe
20 25 30
Glu Pro Phe Ala Thr Ile Phe Thr Phe Ala Leu Pro Lys Cys Leu Ile
35 40 45
Phe Gly Asn Met Leu Thr Thr Arg Asp Val Ser Met Met Tyr Gly Gly
50 55 60
Cys Gly Arg Trp Ser Val Asp Ser Lys Asp Leu Asp His Ser Tyr Lys
65 70 75 80
Asn Val Thr Val Val Ile Leu Arg Thr Leu Ser
85 90

<210> 34082
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34082
Tyr Tyr Thr Val Leu Leu Val Ser His Val Leu Phe Lys Ser Pro Tyr
1 5 10 15
Val Val Ser Thr Arg Glu Gln Ser Ser Thr Tyr Gln Ala Tyr Val Leu
20 25 30
Cys Gln Asp Ala Ser Asn Asp Pro Phe Asn Arg Thr Gln Phe Ser Lys
35 40 45
Ser Gln Asp Leu Asn Asn Leu Pro Cys Glu Asn Gly Gln Asn Val
50 55 60

<210> 34083
<211> 233
<212> PRT
<213> A.fumigatus

<400> 34083
Asp Arg Tyr Gln Asp Trp Tyr Val Asn Tyr Phe His Arg Ile Leu Ile
1 5 10 15
Asp Val Phe Val Leu Thr His Ala Ser Gly Met Ile Met Val Phe Gly
20 25 30
Glu Ile Thr Thr Asn Ala Lys Leu Asp Tyr Gln Lys Ile Ile Arg Gly
35 40 45
Ala Ile Lys Asp Ile Gly Tyr Asp Asp Ser Asp Lys Gly Phe Asp Tyr
50 55 60
Lys Thr Cys Asn Val Leu Val Ala Ile Glu Gln Gln Ser Pro Asp Ile
65 70 75 80
Ala Gln Gly Leu His Tyr Asp Glu Ala Leu Glu Lys Leu Gly Ala Gly
85 90 95
Asp Gln Gly Ile Met Phe Gly Tyr Ala Thr Asp Glu Thr Pro Glu Leu
100 105 110
Leu Pro Leu Thr Leu Leu Leu Ser His Lys Leu Asn Ser Ala Met Thr
115 120 125
Gln Ala Arg Lys Asp Gly Ser Ile Pro Trp Leu Arg Pro Asp Thr Lys
130 135 140
Thr Gln Val Thr Val Glu Tyr Ala His Asp Gly Gly Ala Val Lys Pro
145 150 155 160
Leu Arg Val Asp Thr Val Val Val Ser Ala Gln His Ser Asp Asp Val
165 170 175
Ser Thr Glu Glu Leu Arg Thr Val Ile Lys Glu Lys Ile Ile Lys Lys
180 185 190
Val Ile Pro Ala Glu Leu Leu Asp Asp Arg Thr Ile Tyr His Ile Gln
195 200 205
Pro Ser Gly Arg Phe Val Ile Gly Gly Pro Gln Gly Asp Ala Gly Leu
210 215 220
Thr Gly Arg Lys Asn His Val Asp Thr
225 230

<210> 34084
<211> 224
<212> PRT
<213> A.fumigatus

<400> 34084
Phe Leu Ala Gly Glu Ser Thr Thr Thr Val Ala Thr Pro Ala Thr Leu
1 5 10 15
Gly Val Asp Met Ile Leu Thr Thr Ser Glu Thr Gly Ile Thr Leu Arg
20 25 30
Thr Thr Asp Asp Glu Ala Ala Arg Gly Leu Asp Val Val Asn Gly Ala
35 40 45
Val Val Gln Lys Leu Ser Gly Asp Asp Leu Leu Asp Asp Leu Leu Leu
50 55 60
Asp Asp Ser Thr Glu Leu Leu Gly Gly Asn Ile Ile Ala Val Leu Ser
65 70 75 80
Arg Asp Asp Asp Arg Val His Ala Gln Gly Leu Asp Gly Thr Ala Val
85 90 95
Val Ser Val Leu Asn Gly Asp Leu Gly Leu Gly Val Gly Thr Glu Pro
100 105 110
Gly Asp Gly Thr Val Leu Thr Ser Leu Cys His Ser Arg Val Glu Leu
115 120 125
Val Arg Glu Gln Lys Gly Glu Arg Lys Glu Leu Arg Gly Leu Val Gly
130 135 140

```
Gly Ile Thr Glu His Asp Thr Leu Val Thr Ser Thr Lys Leu Leu Lys
145                 150                 155                 160
Ser Leu Ile Val Val Glu Thr Leu Ser Asn Val Gly Gly Leu Leu Leu
                165                 170                 175
Asn Gly Asp Lys Asp Val Ala Gly Leu Val Val Lys Thr Leu Ile Gly
            180                 185                 190
Val Ile Ile Thr Asp Val Leu Asp Gly Thr Thr Asp Asp Leu Leu Val
        195                 200                 205
Val Gln Leu Gly Ile Gly Ser Asp Phe Thr Lys Asp His Asn His Thr
    210                 215                 220

<210> 34085
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34085
Pro Phe His Ile Arg Lys Gln His Lys His Lys Met Ser Lys Phe Gly
1               5                   10                  15
Val Leu Val Met Gly Pro Ala Gly Ala Gly Lys Ser Thr Phe Cys Ser
            20                  25                  30
Ala Leu Ile Gln His Leu Gln Thr Thr Arg Arg Ser Cys Phe Tyr Val
        35                  40                  45
Asn Ala Arg Pro Arg Arg Arg Lys Phe Gln Leu Arg Ala
    50                  55                  60

<210> 34086
<211> 73
<212> PRT
<213> A.fumigatus

<400> 34086
Gly Thr Gly Ala Ala Gly Ala Lys Arg Arg Ala Gly Arg Gly Leu Arg
1               5                   10                  15
Gly Cys Arg Tyr Leu Ile Leu Ile Ser Ser Thr His Asp Val Arg Leu
            20                  25                  30
Thr Thr Ser Thr Leu Tyr Asp Thr Ile His Arg Arg Ile Asp Val Cys
        35                  40                  45
Thr Ser Ser Ala Asp Val Arg Ile Thr Val Glu Ser His Gln Gly Ile
    50                  55                  60
Phe Thr Thr Gly Leu Glu Gly His Ala
65                  70

<210> 34087
<211> 256
<212> PRT
<213> A.fumigatus

<400> 34087
Met Leu Asp Pro Ala Ala Glu Ser Phe Asn Tyr Glu Pro Asp Leu Asp
1               5                   10                  15
Ile Arg Glu Leu Ile Thr Leu Glu Asp Val Met Glu Glu Met Glu Leu
            20                  25                  30
Gly Pro Asn Gly Gly Leu Ile Tyr Cys Phe Glu Phe Leu Leu Gln Asn
        35                  40                  45
Leu Asp Phe Leu Ser Gln Ala Leu Asp Pro Leu Ser Glu Glu Tyr Leu
```

```
    50                  55                  60
Ile Ile Phe Asp Met Pro Gly Gln Ile Glu Leu Tyr Thr His Ile Pro
65                  70                  75                  80
Leu Leu Pro Ser Leu Val Gln Tyr Leu Ser Arg Gln Gly Pro Leu Asn
                85                  90                  95
Ile Asn Leu Cys Ala Ala Tyr Leu Leu Glu Ser Thr Phe Val Ile Asp
            100                 105                 110
Lys Ala Lys Phe Phe Ala Gly Thr Leu Ser Ala Met Ser Ala Met Leu
        115                 120                 125
Met Leu Glu Met Pro His Val Asn Ile Leu Ser Lys Met Asp Gln Val
    130                 135                 140
Arg Asp Met Val Ser Arg Lys Glu Leu Lys Arg Phe Val Asn Val Asp
145                 150                 155                 160
Val Asn Leu Leu Gln Asp Glu Ile Gly Gly Ala Glu Glu Pro Val Glu
                165                 170                 175
Gly Asp Pro Ser Ser Lys Asp Thr Leu Leu Ser Gly Arg Ser Phe Lys
            180                 185                 190
Arg Leu Asn Arg Ala Val Gly Gln Leu Ile Asp Asp Phe Ser Met Val
        195                 200                 205
Ser Phe Leu Lys Leu Asp Val Gln Asp Glu Asp Ser Val Pro Ala Val
    210                 215                 220
Leu Ser His Ile Asp Asp Ala Ile Gln Phe His Glu Ala Gln Glu Pro
225                 230                 235                 240
Arg Glu Pro Asn Asp Glu Gln Asp Val Asp Tyr Glu Asp Ala Asp Ile
                245                 250                 255
```

<210> 34088
<211> 92
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (21)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34088

```
Asn Leu Leu Ala Pro Ser Thr Pro Cys Glu Tyr Lys His Thr Thr Asn
1               5                   10                  15
Leu Glu Thr Leu Xaa Leu Leu Tyr Ser Lys Ser His Leu Gly Phe Thr
            20                  25                  30
Leu Leu Leu Pro Ser Gln Phe Arg Ser Ala Ser Thr His Ala Gly Ser
        35                  40                  45
Ala Gly Gly Ser Pro Thr Glu Ile Ala Pro Pro Arg Leu Ser Thr Val
    50                  55                  60
Ala Lys Leu Thr Ser Ser Trp Gln Ala Gly Ser Asn Pro Arg Val Gly
65                  70                  75                  80
Pro Phe Phe Pro Ile Val Ile Ser Leu Met Ile Pro
                85                  90
```

<210> 34089
<211> 60
<212> PRT
<213> A.fumigatus

<400> 34089

```
Gln Glu Thr Leu Gln Lys Val Val Ser Val Ser Tyr Cys Asp Gly Phe
1               5                  10                  15
Ala Gln Gln Tyr Asn Val Ser Tyr Arg Ala Phe Glu Cys Leu Cys Phe
            20                  25                  30
Tyr Ala Ala Asn Lys Ser His Ser Thr Ser Ile His Leu Cys Arg Cys
        35                  40                  45
Gly Gln Ser Gly Val Lys Arg Ser Ala Leu Ser Pro
    50                  55                  60
```

<210> 34090
<211> 110
<212> PRT
<213> A.fumigatus

<400> 34090

```
Arg Leu Leu Asn Pro Ser Ser Thr Leu Gln His Met Leu Asp Leu Trp
1               5                  10                  15
Gly Gln Arg Arg Pro Met Arg Leu Asn Thr Trp Tyr Asp Lys Val Lys
            20                  25                  30
Trp Asn Asp Ile Phe Ile Phe Phe Gly Leu Met Leu Leu Val Gly Thr
        35                  40                  45
Ala Asn Leu Val Arg Glu Ser Ile Leu Leu Leu Phe Asn Pro Leu Leu
    50                  55                  60
Asp Pro Ala Arg Pro Val Ser Gly Arg Tyr Pro Pro Leu Leu Thr Ala
65                  70                  75                  80
Phe Val Cys Ala His Gly Phe Leu Phe Thr Arg Gly Glu Ile Asn Ser
                85                  90                  95
Phe Leu Leu Ser Ala Asp Gln Phe Leu Ser Ile Leu Asp Arg
            100                 105                 110
```

<210> 34091
<211> 71
<212> PRT
<213> A.fumigatus

<400> 34091

```
Tyr Ile Leu Pro Asn Ala Gly Asn Leu Ile Asn Ile Asn His Val Ser
1               5                  10                  15
His Ser Thr Ile Cys Phe Met Val Leu Cys Cys Ser Phe Ser Val Ile
            20                  25                  30
Lys Tyr His Arg Leu Pro Arg Gly Val Leu Ser Asn Ile Ser Ile Ile
        35                  40                  45
Ile Tyr Leu Ala Leu Thr Arg Phe Thr Phe Ile Lys Tyr Gln Ala Tyr
    50                  55                  60
Thr Leu Gly Val Gly Asn Pro
65                  70
```

<210> 34092
<211> 113
<212> PRT
<213> A.fumigatus

<400> 34092

```
Phe Arg Thr Ser Ser Trp Ser Ala Leu Phe Ser Ile Tyr Ile Arg Val
1               5                  10                  15
Lys Gly Lys Asn Arg Glu Ser Arg Arg Ser Phe Gly Pro Ala Phe Tyr
```

```
            20                  25                  30
Arg Glu Ile Leu Leu Phe Leu Asp Phe Arg Pro Leu Phe Asn Trp Asn
        35                  40                  45
Asp Arg Gly Leu Ile Tyr Tyr Lys Asp Asp Phe Tyr Lys Pro Thr Ser
    50                  55                  60
Ala Val Ser Leu Gln Ala Ser Gly Val Asp Val Val Arg Pro Leu Glu
65                  70                  75                  80
Tyr Asn Ile Pro Glu Ile Pro Ser Pro Ile Val Tyr Tyr Tyr Cys Thr
                85                  90                  95
Thr Ser Arg Lys Ala Arg Ser Leu Arg Phe Leu Leu Asn Asn Val Leu
            100                 105                 110
Ile
```

<210> 34093
<211> 537
<212> PRT
<213> A.fumigatus

```
<400> 34093
Ile Asp Ile Asp Leu Pro Phe Glu Thr Cys Arg Arg Pro Ile Ile Lys
1               5                   10                  15
Asn Phe Leu Gly Leu Gln His Lys Lys Glu Tyr Thr Asp Thr Arg Gly
            20                  25                  30
Leu Arg Tyr Cys His Leu Met Ile Met Thr Asp Gln Asp His Asp Gly
        35                  40                  45
Ser His Ile Lys Gly Leu Leu Ile Asn Phe Leu Gln Ala Gln Phe Pro
    50                  55                  60
Ser Leu Leu Lys Ile Pro Glu Phe Leu Ile Glu Phe Ile Thr Pro Ile
65                  70                  75                  80
Ala Lys Val Trp Lys Gly Asp Pro Lys Asn Pro Thr Lys Gln His Ser
                85                  90                  95
Phe Phe Thr Met Pro Glu Tyr Glu Ala Trp Lys Glu Glu His Lys His
            100                 105                 110
Glu Arg Gly Trp Glu His Lys Tyr Tyr Lys Gly Leu Gly Thr Ser Thr
        115                 120                 125
Thr Glu Asp Ala Gln Val Tyr Phe Arg Asp Leu Asp Arg His Leu Lys
    130                 135                 140
Glu Phe His Thr Leu Gln Asp His Glu Thr Glu Leu Ile Glu Leu Ala
145                 150                 155                 160
Phe Ser Lys Lys Lys Ala Asp Glu Arg Lys Glu Trp Leu Arg Gln Phe
                165                 170                 175
Lys Pro Gly Thr Phe Leu Asp His Ser Val Asp Lys Ile Thr Tyr Thr
            180                 185                 190
Asp Phe Ile Asn Lys Glu Leu Ile Leu Phe Ser Met Ala Asp Asn Gln
        195                 200                 205
Arg Ser Ile Pro Ser Val Val Asp Gly Leu Lys Pro Gly Gln Arg Lys
    210                 215                 220
Val Leu Tyr Thr Cys Phe Arg Arg Asn Leu Arg Lys Asp Met Lys Val
225                 230                 235                 240
Val Glu Leu Ala Gly His Val Ser Gly Met Thr Ala Tyr Gln His Gly
                245                 250                 255
Asp Ala Ser Leu Gln Gln Thr Ile Val Gly Leu Ala Gln Thr Phe Val
            260                 265                 270
Gly Ser Asn Asn Ile Asn Cys Leu Glu Pro Ser Gly Asn Phe Gly Ser
        275                 280                 285
```

```
Arg Leu Gln Gly Gly Gln Asp Cys Ala Ser Ala Arg Tyr Ile Tyr Thr
    290                 295                 300
Arg Leu Ser Pro Phe Ala Arg Arg Val Phe His Ala Ala Asp Asp Pro
305                 310                 315                 320
Leu Leu Thr Tyr Asn Glu Asp Asp Gly Lys Lys Ile Glu Pro Glu Val
                325                 330                 335
Tyr Val Pro Val Val Pro Met Ile Leu Ile Asn Gly Ala Asp Gly Ile
            340                 345                 350
Gly Thr Gly Trp Ser Ser Ser Ile Pro Asn Tyr Asn Pro Glu Asp Ile
        355                 360                 365
Val Asp Asn Leu Lys Arg Leu Met Asp Gly Gln Pro Val Lys Pro Met
    370                 375                 380
Gln Pro Trp Phe Arg Gly Phe Thr Gly Glu Val Thr Ala Leu Gly Gly
385                 390                 395                 400
Asp Arg Phe Lys Phe Ser Gly Ile Ile Lys Glu Thr Gly Asp Lys Glu
                405                 410                 415
Val Glu Ile Thr Glu Leu Pro Ile Arg Thr Trp Thr Gln Asp Phe Lys
            420                 425                 430
Asp Lys Leu Glu Glu Ile Ile Lys Ala Glu Lys Thr Pro Ser Phe Ile
        435                 440                 445
Lys Asp Tyr Lys Asp Tyr Asn Thr His Thr Lys Val His Phe Val Ile
    450                 455                 460
Gln Met Asp Glu Lys Asn Leu Gln Ser Ala Arg Glu Glu Gly Leu Glu
465                 470                 475                 480
Glu Lys Phe Lys Leu Ser Lys Thr Ile Ala Thr Thr Asn Leu Val Ala
                485                 490                 495
Phe Asp Pro Glu Gly Arg Ile Thr Lys Tyr Ala Ser Val Asp Asp Ile
            500                 505                 510
Leu Lys Glu Phe Tyr Ala Val Arg Leu Lys Phe Tyr Glu Arg Arg Lys
        515                 520                 525
Val Cys Gly Ser His Ala Ser Arg Ile
    530                 535

<210> 34094
<211> 266
<212> PRT
<213> A.fumigatus

<400> 34094
Gln Tyr Gln Leu Asn Glu Leu Gln Lys Glu Leu Asp Lys Leu Thr Asn
1               5                   10                  15
Gln Ala Arg Phe Val Gln Met Ile Ile Asp Gly Asp Leu Val Ile Ser
            20                  25                  30
Lys Lys Lys Lys Pro Ala Leu Val Ala Glu Leu Lys Lys His Gly Phe
        35                  40                  45
Lys Ala Phe Pro Lys Val Ile Asp Ala Val Lys Ala Gly Glu Asp Ala
    50                  55                  60
Pro Val Val Glu Glu Glu Glu Asp Glu Ser Gly Asn Asp Glu Thr Glu
65                  70                  75                  80
Val Leu Ser Ser Ala Tyr Asp Tyr Leu Leu Gly Met Pro Leu Trp Ser
                85                  90                  95
Leu Thr His Glu Arg Val Glu Lys Leu Arg Arg Gln Ile Gly Glu Lys
            100                 105                 110
Glu Val Glu Ile Asp Ala Leu Ile Lys Leu Ser Lys Glu Asp Ile Trp
        115                 120                 125
Lys Arg Asp Leu Asp Asp Phe Ile Asn Glu Trp Arg Phe Gln Leu Glu
```

```
    130                 135                 140
Asp Glu Ala Arg Arg Gln Arg Lys Val Ala Asn Met Gly Arg Arg Thr
145                 150                 155                 160
Ser Ala Lys Leu Met Thr Ala Ala Gly Arg Gly Lys Ala Thr Lys Lys
                165                 170                 175
Arg Lys Ala Ala Leu Asp Asp Asp Ser Asp Asp Glu Asp Phe Ala Ala
            180                 185                 190
Pro Lys Ser Lys Lys Ser Ala Ala Ala Lys Lys Thr Glu Pro Asn Gly
        195                 200                 205
Gly Leu Leu Ser Tyr Leu Gly Lys Pro Ser Ala Lys Pro Ala Pro Ser
    210                 215                 220
Gly Asp Gly Gly Asp Ser Asp Asp Asp Phe Glu Val Glu Val Leu Pro
225                 230                 235                 240
Lys Lys Asn Arg Gly Ala Ala Thr Lys Ala Thr Thr Lys Val Lys Asp
                245                 250                 255
Glu Asp Glu Val Met Asp Asp Leu Gly Glu
            260                 265
```

<210> 34095
<211> 255
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (215)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34095

```
Ile Leu Pro Lys Lys Ser Arg Gly Pro Ala Lys Pro Ala Pro Lys Pro
1               5                   10                  15
Lys Glu Glu Ala Asp Asp Asp Ser Glu Asp Ile Ala Pro Lys Lys Gly
            20                  25                  30
Arg Ala Ala Ala Lys Ala Lys Pro Lys Pro Lys Val Glu Asp Asp Asp
        35                  40                  45
Asp Leu Asp Asp Asp Glu Phe Met Glu Ile Ala Lys Ala Glu Ala Ala
    50                  55                  60
Lys Ser Val Lys Ser Gln Pro Asn Arg Thr Ser Arg Lys Ile Thr Asn
65                  70                  75                  80
Tyr Thr Ala Leu Asp Asp Ser Asp Ser Asp Asn Gly Asp Asp Leu Leu
                85                  90                  95
Gly Asp Val Ser Lys Met Val Lys Gly Ile Gly Gly Ala Thr Gly Asp
            100                 105                 110
Ser Thr Thr Asp Ser Arg Gln Leu Phe Ser Glu Arg Ser Arg Pro Ser
        115                 120                 125
Ser Ser Ser Ser Gly Leu Lys Val Ser Ser Ser Lys Pro Ser Lys Leu
    130                 135                 140
Ser Thr Asp Phe Asp Ala Asp Glu Thr Asp Tyr Ser Lys Leu Ile Pro
145                 150                 155                 160
Gln Asn Ser Pro Arg Arg Ser Leu Gln Val Lys Pro Lys Glu Thr Lys
                165                 170                 175
Val Asn Asp Asp Phe Asp Met Asp Asp Asp Asp Asp Gly Asp Pro Val
            180                 185                 190
Lys Pro Ala Ala Gln Ala Lys Pro Val Ala Lys Lys Gly Asn Ser Ala
        195                 200                 205
Gly Thr Ala Ala Ser Ser Xaa Pro Ala Thr Ala Pro Lys Pro Arg Gly
```

```
    210                 215                 220
Arg Pro Lys Lys Glu Cys Gly Glu Thr Gly Ala Pro Ala Pro Ser Leu
225                 230                 235                 240
Asn Gln Thr Ile Cys Ser Leu Pro Pro Lys Ala Phe Ser Ser Gln
                245                 250                 255

<210> 34096
<211> 134
<212> PRT
<213> A.fumigatus

<400> 34096
Phe Val Ile Phe Leu Leu Val Arg Phe Gly Trp Asp Leu Thr Asp Leu
1               5                   10                  15
Ala Ala Ser Ala Leu Ala Ile Ser Met Asn Ser Ser Ser Ser Arg Ser
            20                  25                  30
Ser Ser Ser Ser Thr Leu Gly Leu Gly Phe Ala Leu Ala Ala Ala Leu
        35                  40                  45
Pro Phe Leu Gly Ala Met Ser Ser Glu Ser Ser Ser Ala Ser Ser Phe
    50                  55                  60
Gly Leu Gly Ala Gly Leu Ala Gly Pro Arg Leu Phe Phe Gly Ser Ile
65                  70                  75                  80
Tyr Ser Pro Arg Ser Ser Ile Thr Ser Ser Ser Ser Phe Thr Leu Val
                85                  90                  95
Val Ala Leu Val Ala Ala Pro Leu Phe Phe Phe Gly Ser Thr Ser Thr
            100                 105                 110
Ser Lys Ser Ser Ser Glu Ser Pro Pro Ser Pro Glu Gly Ala Gly Phe
        115                 120                 125
Ala Asp Gly Leu Pro Lys
    130

<210> 34097
<211> 134
<212> PRT
<213> A.fumigatus

<400> 34097
Thr Ser Phe Ser Asp Ser Val Ser Ser Ala Leu Val Ala Ser Ser Ser
1               5                   10                  15
Lys Ser Thr Arg Gly Leu Arg Thr Ser Ala Arg Ala Met Ala Met Arg
            20                  25                  30
Cys Arg Cys Pro Pro Glu Arg Ser Trp Leu Pro Leu Ala Val Pro His
        35                  40                  45
Cys Val Ser Ser Pro Ser Gly Ser Glu Asp Thr Lys Ser His Ala Leu
    50                  55                  60
Ala Ala Arg His Ala Ser Ser Ser Ala Ser Ser Asp Ala Ala Ser Val
65                  70                  75                  80
Ala Glu Arg Pro Gly Ile Pro Cys Glu Met Phe Ser Arg Ile Val Pro
                85                  90                  95
Gly Lys Arg Val Gly Ser Cys Cys Thr Arg Ala Thr Cys Leu Arg Tyr
            100                 105                 110
Arg Ser Gly Leu Arg Lys Asp Lys Gly Ala Asp Glu Ser Met Val Ile
        115                 120                 125
Val Pro Leu Val Gly Ser
    130
```

<210> 34098
<211> 142
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34098
Xaa Arg Ala Tyr Ala Gln Ala Ile Leu Glu Leu Met Gly Phe Thr Val
1 5 10 15
Ala Ile Ile Leu Met Ser Gly Ile Asn Ile Val Val Ser Ser Val Leu
20 25 30
Ala Val Ala Val Ser Trp Lys Leu Gly Val Ile Gly Val Phe Val Gly
35 40 45
Leu Pro Pro Ile Met Leu Cys Gly Tyr Ala Arg Val Arg Leu Glu Thr
50 55 60
Lys Met Asp Asp Glu Ile Gly Gln Arg Leu Ser Val Ser Ala Ser Ile
65 70 75 80
Ala Ser Glu Thr Val Met Ala Ile Arg Thr Val Ala Ser Leu Ala Leu
85 90 95
Glu Asn Thr Val Leu Lys Lys Tyr Thr Asp Glu Leu Asp Arg Ala Ile
100 105 110
Ile Gln Ala Ser Gly Pro Met Phe His Met Met Ile Trp Phe Ser Leu
115 120 125
Thr Gln Ser Val Glu Tyr Phe Val Leu Ala Leu Gly Phe Trp
130 135 140

<210> 34099
<211> 230
<212> PRT
<213> A.fumigatus

<400> 34099
Ile Gln Arg Gly Asp Phe Val Gly Phe Val Gly Ala Ser Gly Cys Gly
1 5 10 15
Lys Ser Thr Met Ile Ser Leu Leu Glu Arg Phe Tyr Asp Pro Thr Asn
20 25 30
Gly Thr Ile Thr Ile Asp Ser Ser Ala Pro Leu Ser Phe Leu Asn Pro
35 40 45
Leu Leu Tyr Arg Arg His Val Ala Leu Val Gln Gln Glu Pro Thr Leu
50 55 60
Phe Pro Gly Thr Ile Arg Glu Asn Ile Ser Gln Gly Met Pro Gly Leu
65 70 75 80
Ser Ala Thr Glu Ala Ala Ser Asp Asp Ala Leu Glu Glu Ala Cys Arg
85 90 95
Ala Ala Asn Ala Trp Asp Phe Val Ser Ser Leu Pro Glu Gly Leu Asp
100 105 110
Thr Gln Cys Gly Thr Ala Ser Gly Ser Gln Leu Leu Ser Gly Gly Gln
115 120 125
Arg Gln Arg Ile Ala Ile Ala Arg Ala Leu Val Arg Asn Pro Arg Val
130 135 140
Leu Leu Leu Asp Glu Ala Thr Ser Ala Leu Asp Thr Glu Ser Glu Lys
145 150 155 160

```
Leu Val Gln Ala Ala Leu Ala Glu Ala Ala Ser Ser Gly Ala Arg Ile
                165                 170                 175
Thr Ile Ala Val Ala His Arg Leu Ser Thr Val Arg Asp Ala Asn Cys
            180                 185                 190
Ile Phe Val Phe Asp Ala Gly Ser Ile Val Glu Val Gly Ser His Asp
        195                 200                 205
Glu Leu Leu Ala Lys Gly Gly Leu Tyr Ala Arg Met Cys Glu Ala Gln
    210                 215                 220
Ala Leu Asp Gly Ser Gly
225                 230
```

<210> 34100
<211> 220
<212> PRT
<213> A.fumigatus

<400> 34100

```
Cys Ser Lys Ser Gln Pro Ser Ser Gln Ala Gln Ser Ala Lys Thr Ser
1               5                   10                  15
His Arg Gly Cys Gln Val Ser Leu Pro Arg Lys Gln His Pro Thr Thr
            20                  25                  30
His Trp Arg Arg His Ala Gly Pro Pro Thr His Gly Thr Leu Cys Pro
        35                  40                  45
Arg Cys Arg Arg Asp Ser Thr Arg Asn Ala Gly Gln Arg Ala Val Ala
    50                  55                  60
Ser Ser Phe Gln Gly Gly Ser Gly Ser Ala Leu Pro Leu Pro Gly His
65                  70                  75                  80
Trp Cys Ala Ile Pro Ala Cys Phe Cys Ser Met Arg Arg Pro Ala Arg
                85                  90                  95
Trp Ile Pro Ser Arg Lys Ser Leu Phe Lys Leu Leu Trp Arg Arg Arg
            100                 105                 110
Pro His Leu Glu Gln Gly Leu Leu Leu Pro Trp Arg Ile Val Ser Gln
        115                 120                 125
Arg Cys Val Met Leu Thr Ala Tyr Ser Tyr Leu Met Gln Gly Val Ser
    130                 135                 140
Trp Arg Leu Gly Leu Met Thr Ser Cys Leu Leu Lys Gly Asp Cys Met
145                 150                 155                 160
Leu Gly Cys Val Arg Leu Arg Arg Trp Met Ala Leu Asp Asp Leu Pro
                165                 170                 175
Pro Ser His Gly Ala Ser Thr Pro Phe Trp Glu Leu Val Met Met Leu
            180                 185                 190
Gln Pro Val Thr Thr Asn Val Ala Leu Asp Val Lys Glu Ile Asn Pro
        195                 200                 205
Thr Val Gln Ser Ser Arg Tyr Pro Cys Ala Arg Gln
    210                 215                 220
```

<210> 34101
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34101

```
Gly Ile Leu Ser Tyr Phe Pro Ser Thr Ile Leu Phe Tyr Ser Thr Ile
1               5                   10                  15
Ile His Leu Ile Pro Pro Ile Leu Pro Leu Leu Pro Leu Tyr Leu Gly
            20                  25                  30
```

```
Lys Pro Thr Ile Pro Leu Cys Ile Cys Glu Ile Ser Phe Ile Ile Asp
        35                  40                  45
Ile Leu Phe Ser Ile Tyr Cys Phe Ile Phe Ile His Ser Trp Gln Asp
    50                  55                  60
Ser Thr Arg Tyr His
65
```

<210> 34102
<211> 632
<212> PRT
<213> A.fumigatus

<400> 34102

```
Arg Glu Gln Lys Leu Thr Leu Leu Asn Cys Ala Thr Gly Lys Ile Thr
1               5                   10                  15
Val Asp Asp Val Glu Tyr Ser Ile Asn Gln Asp Phe Gln Gln Gly Ala
            20                  25                  30
Leu Gln Leu Ala Asp Ala Leu Asn Ile Asp Glu Leu Glu Ala Ala Val
        35                  40                  45
Leu Phe Phe Ala Ala Gln Glu Glu Ala Gln Val Leu Asp Arg Pro Pro
    50                  55                  60
Leu Ile Ala Ala Ile Met Arg Phe His Glu Arg Arg His Phe Leu Leu
65                  70                  75                  80
Glu Cys Leu Arg Leu Ile Leu Gln Glu Ser Phe Glu Val Glu Arg Glu
                85                  90                  95
Val Thr Gln Ala Leu Met Gln Asp Met Val Ala Phe Val Val Glu Ile
            100                 105                 110
Lys Thr Gly Pro Leu Arg Asn Ala Ser Leu Phe Ala Arg Lys Cys Met
        115                 120                 125
Lys Ser Met Glu Asp Ile Glu Gly Trp Leu Leu Leu Leu Gly Glu Gln
    130                 135                 140
Ile Gln Lys Ala Ser Ile Val Gly Gln Val Glu Asp Arg Asp Val Met
145                 150                 155                 160
Glu Ala Ile Glu Tyr Gln Arg Ser Ser Leu Gln Gln Gln His Glu Ser
                165                 170                 175
Leu Gly Ala Ile Leu Cys Tyr Phe Phe Lys Gly Pro Tyr Thr Ser Pro
            180                 185                 190
Glu Asp Leu Arg Val Leu Leu Asn Arg Leu Arg Lys Leu Glu Arg Phe
        195                 200                 205
Asp Gly Leu Leu Leu His Tyr Ile Pro Ala Met Ile Ser Ser Phe Val
    210                 215                 220
Gln His Gly Ser Pro Glu Arg Ser Asn Ser Tyr Lys Glu Ala Arg Ser
225                 230                 235                 240
Leu His Leu Ala Val Thr Ser Thr Lys Asp Gly Gln Thr Trp Thr Ile
                245                 250                 255
Pro Thr Phe His Ala Ala Val Ile Ala Leu Trp Leu Ala Val Tyr Ser
            260                 265                 270
Gly Trp Asp Ile Asp Gly Pro Thr Ser Pro Val Gln Gly Val Asp Phe
        275                 280                 285
Glu Lys Glu Ala Glu Glu Arg Thr Gln Met Phe Met Thr Ala Leu Asp
    290                 295                 300
Asp Gly Gly Leu Asp Phe Leu Leu Ala Ile Cys Ser Gly Val Asn Asn
305                 310                 315                 320
Glu Glu Trp Ala Asp Pro Ala Arg Arg Glu Leu Val Ala Leu Leu Leu
                325                 330                 335
Lys Glu Ser Ala Phe Ala Asn Leu Glu Ser Glu Pro Cys Ala Gly Phe
```

```
            340                 345                 350
Leu Lys Thr Leu Leu Met Glu Asn Leu Glu Ile Phe Val Glu Ser Cys
        355                 360                 365
Ile Ala Asn Met Pro Asp Ala Val Arg Lys Leu Lys Ser Glu Glu Asp
    370                 375                 380
Met Gln Arg Leu Asp Gln Ile Thr Ala Leu Arg Asp Gly Leu Ser Ser
385                 390                 395                 400
Ser Leu His Arg Gly Leu Val Glu Ala Arg Thr His Leu Glu Ser Phe
                405                 410                 415
Leu Met Ile Ile Ala Phe Ala Phe Glu Ser Arg Pro Asp Ala Ala Gln
            420                 425                 430
Glu Phe Trp Ala Asp Pro Asp Gly Asn Leu Tyr Gly Phe Leu Gln Trp
        435                 440                 445
Ala Ser Lys Arg Gln Thr Val Pro Arg Val Ser Ala Phe Cys Glu Leu
    450                 455                 460
Leu Cys Ser Ile Ser Gly Gly Glu Glu Asn Ala Ala Ala Ala His Arg
465                 470                 475                 480
Phe Leu Thr Glu Glu Asp Lys Phe Leu Ser Ser Lys Phe Lys Arg Ser
                485                 490                 495
Thr Ser Met Asn Trp Ser Gln Met Phe Ala Glu Leu Gln Leu Tyr Ala
            500                 505                 510
Thr Arg Val Thr Glu Lys Pro Ser Ala Ser Gln Ala Val Leu Arg Ala
        515                 520                 525
Arg Lys Ser Glu Pro Ala Asp Met Ser Glu Pro Glu Ser Pro Val Met
    530                 535                 540
Leu Thr Cys Tyr Leu Arg Leu Met Gly His Leu Cys Lys Gln Ser Gly
545                 550                 555                 560
Ser Ile Arg Glu Trp Met Leu Gln His Pro Ser Phe Ser Val Val Ser
                565                 570                 575
Thr Leu Leu Thr Leu Cys Ser Gly Pro Ile Pro Thr His Leu Arg Ala
            580                 585                 590
Thr Val Phe Thr Thr Leu Ala Ala Leu Met Thr Asp Arg Thr Ser His
        595                 600                 605
Asn Gly Asn Glu Met Trp Leu Ser Leu Asp Gln Trp Ile Ser Gly Gly
    610                 615                 620
Arg His Glu Trp Pro Arg Pro Trp
625                 630

<210> 34103
<211> 62
<212> PRT
<213> A.fumigatus

<400> 34103
Ile Gln Glu Glu His Ala Asn Glu Ile Gly Leu Val Lys Asn Asn Ser
1               5                   10                  15
His Asp Asn Cys Ile Tyr Ala Ile Glu Arg Gly Leu Met Phe Thr Ser
            20                  25                  30
Ser Asp Arg Arg Lys Leu Gln Lys Ser Pro Lys Pro Ala Lys Asp Leu
        35                  40                  45
Leu Ser Gly Tyr Leu His Gly Gly Ser Arg Ser Arg Cys Lys
    50                  55                  60

<210> 34104
<211> 478
<212> PRT
```

<213> A.fumigatus

<400> 34104

```
Asn Thr Phe Ser Ser Arg Ile Asn Gly Ala Gln Ser Cys Met Tyr Asp
1               5                  10                  15
Pro Gln Ser Val Tyr Gly Met Cys Val Ile Gln Arg Leu Thr Tyr Ala
            20                  25                  30
Tyr Leu Ile Arg Thr Ser Leu Asn Asp Lys Ala Cys His Lys Ile Phe
        35                  40                  45
Glu Ser Leu Phe Arg Phe Ile Ser Val Glu Arg Ser Leu Tyr Asn Arg
    50                  55                  60
Ala Ser Ser Lys Gly Ala Cys Ala Ser Arg Leu Ser Ala Cys Ala Ser
65                  70                  75                  80
Val Ile Arg Thr Ala Ile Asn Val Phe Leu Arg Asn Leu Arg Thr Lys
                85                  90                  95
Ser Ile Arg Ala Ile Val Asp His Ile Thr Glu Ile Leu Gln Val Pro
            100                 105                 110
Gly Glu Gly Leu Trp Glu His Leu Gly Ala Asp Tyr Leu Lys Cys Leu
        115                 120                 125
Thr Thr Leu Leu Arg Tyr Pro Pro His Leu Glu His Leu Ala Ala Asn
    130                 135                 140
Glu Trp Asp Lys Val Leu Asn Leu Cys Leu Arg Ser Ile Gly Ala Pro
145                 150                 155                 160
Glu Asp Gly Asp Ser Gln Ser Ser Asp His Asn Gly His Pro Ser Thr
                165                 170                 175
Leu Asp Asp Phe Leu Asp Ala Ser Ser Arg Ser Thr Pro Ser Arg Arg
            180                 185                 190
Thr Ser Ser Leu Ala Leu Arg Glu Lys Gln Ser Gly Asp Lys Arg Ile
        195                 200                 205
Val Ala Glu Ala Ile Val Cys Ile Gln Leu Leu Thr Ala Thr Pro Thr
    210                 215                 220
Ala Pro Val Gln Val Ala Ala Glu Lys Val Leu Arg Gly Leu Gly Thr
225                 230                 235                 240
Phe Leu Lys Leu Ser Pro Ile Ala Gly Ser Glu His Gln Ala Ala Phe
                245                 250                 255
Asn Ser Ile Asn Thr Val Val Met Arg Val Ile Phe Asp Gln Ser Asp
            260                 265                 270
Leu Val Arg Met Phe Leu Leu Asp Leu Ile Pro Val Ile Arg His Leu
        275                 280                 285
Trp Ser Thr Lys Leu Met Gly Leu Lys Asp Glu Leu Leu Val Thr Ile
    290                 295                 300
Leu Leu Cys Met Ile Ile Leu Thr Asp Ala Thr Arg Arg Ala Pro Thr
305                 310                 315                 320
Asp Ser Leu Ala Leu Ser Ile Glu Asn Leu Leu Asp Thr Ile Tyr Ser
                325                 330                 335
Glu Tyr Thr Lys Arg Ser Glu Lys Asp Ile Leu Gln Ile Asp Glu Leu
            340                 345                 350
Ile Phe Asp Arg Thr Ser Ser Thr Gln Ile Ile Asp Leu Ala Leu Gln
        355                 360                 365
Pro Arg Leu Glu Val Pro Arg Ser Glu His Asn Leu Thr Val Val Trp
    370                 375                 380
Val Met Ala Lys Leu Met Arg Leu Ser Glu Glu Ser Thr Ala Gln Leu
385                 390                 395                 400
Ser His Pro Ala Gly Glu Thr Pro Ser Lys Lys Gln Arg Leu Asn Ser
                405                 410                 415
Ala Ser Asp Gln Val Phe Arg Asp Cys Val Met Ser Ser Gly Asn Arg
```

```
            420                 425                 430
Arg Val Cys Ala Leu Gln Leu Ile Pro Ile Leu Leu Gln Gly Arg Leu
        435                 440                 445
Thr Met Glu Ser Lys Ala Ser Leu Leu Gln Arg Leu Ile Pro Tyr Ile
    450                 455                 460
Leu Asp Asp Asn Gly Val Ile Ala Ser Trp Thr Met Val Ala
465                 470                 475
```

<210> 34105
<211> 71
<212> PRT
<213> A.fumigatus

<400> 34105

```
Tyr Gln His His Ala Leu Asp Ala Asp Cys Val Arg Asn Thr Asp Ser
1               5                   10                  15
Arg Ala Ile Val Met Ala Gln Ile Thr Leu Asp Lys Ala Ile Ala Leu
            20                  25                  30
Leu Ser Ser Glu Lys Leu Lys Glu Arg Ser Asp Ser Leu Ala Gly Leu
        35                  40                  45
Ser Thr Ala Glu Pro Phe Asn Gly Asn Phe Ala Asp Pro Thr Arg Phe
    50                  55                  60
Glu Thr His Ser Pro Ala Glu
65                  70
```

<210> 34106
<211> 171
<212> PRT
<213> A.fumigatus

<400> 34106

```
Ser Thr Ala Gly Ile Asn Ala Phe Ile Tyr Met Thr Leu Gly Arg Leu
1               5                   10                  15
Ile His Phe Phe Ile Pro Glu Arg Arg Leu Gly Gly Ile Ser Ala Lys
            20                  25                  30
Arg Tyr Gly Leu Ile Phe Val Trp Leu Asp Ile Leu Ala Phe Ile Val
        35                  40                  45
Gln Leu Ala Gly Ala Ser Ile Thr Thr Gln Arg Glu Val Pro Thr Ser
    50                  55                  60
Thr Ile Met Leu Gly Ile His Ile Tyr Met Gly Gly Ile Gly Leu Gln
65                  70                  75                  80
Glu Leu Phe Val Leu Ile Phe Gly Ala Leu Thr Ile His Leu His Arg
                85                  90                  95
Arg Met Val Gln Met Glu Asn Tyr Gly Gly Leu Asp Asn Glu Lys Thr
            100                 105                 110
Thr Arg Gly Ser Val Ser Trp Arg Trp Leu Phe Ala Ala Leu Tyr Ala
        115                 120                 125
Ala Leu Ile Leu Ile Thr Val Cys Ala Ile Ala Pro Gly Glu Arg Gly
    130                 135                 140
Ile Leu Thr Lys Val Ala Asp Pro Asn His Leu Pro Ser Leu Pro Val
145                 150                 155                 160
Cys Ala Gly His Gly Ser Asp Glu Pro Cys Phe
                165                 170
```

<210> 34107
<211> 60

<212> PRT
<213> A.fumigatus

<400> 34107
Ser Leu Ile Leu Ile Pro Ser Leu Asn Ile Asn Leu Pro Leu Lys Asp
1 5 10 15
Tyr Ile Arg Arg Lys His Leu Ala Ser Ser Ile Asn Ala Phe Asn Tyr
20 25 30
Tyr Asn Pro Phe Pro Ile Thr Trp Leu Asn Lys Met Arg Leu Pro Arg
35 40 45
His Ile Ser Ser Tyr Tyr Tyr Leu Ser Ser Tyr Asn
50 55 60

<210> 34108
<211> 62
<212> PRT
<213> A.fumigatus

<400> 34108
Glu Ala Lys Tyr Pro Tyr Leu Asn Pro Tyr Pro Pro Ser Glu Pro Cys
1 5 10 15
Ile Asn Gln Leu Ile Leu Ala Cys Tyr Thr Ser Tyr Thr Ser Ala Ile
20 25 30
Thr Gln Ala Ser Ile Leu Ser Gln Glu Ala Pro Lys Thr Thr Ile Leu
35 40 45
Lys Pro Phe Asp Ala Phe Lys Ile Ser Tyr Pro Ala Ala Tyr
50 55 60

<210> 34109
<211> 429
<212> PRT
<213> A.fumigatus

<400> 34109
Arg Leu Gly Asp Ser Arg Pro Val Pro Pro Pro Pro Lys Thr Glu Thr
1 5 10 15
Ser Ala Asp Leu Gly Glu Glu Ser Asp Asp Glu Leu Ser Val Arg Ala
20 25 30
Lys Asp Leu Ser Leu Asn Ala Thr Glu Ala Glu Gln Glu Pro Pro Ala
35 40 45
Ala Ala Gln Ser Val Ser Ala His Pro Leu Pro Asp His Leu Asp Ser
50 55 60
Arg Arg Ser Ser Thr Tyr Glu Pro Thr Ser Pro Lys Ser Pro Ala Leu
65 70 75 80
Pro Ser Glu Lys Arg Met Ser Arg Pro Pro Pro Pro Ile Pro Thr Asn
85 90 95
Pro Pro Met Ser Pro Gln Phe Gln Gly Arg Ala Pro Pro Pro Pro Pro
100 105 110
Gly Asn Ile Arg Arg Arg Ser Thr Ala Asp Ser Arg Thr Ser Ala Val
115 120 125
Ser Gln Pro Arg Gln Ala Gly Glu Asp Leu Glu Gly Glu Val Thr Glu
130 135 140
Tyr Asp Gly Asp Tyr Asp Thr Asp Ile Ala Ser Gly Ala Arg Phe Lys
145 150 155 160
Asp Ala Leu Lys Ser His Gly Arg Asp Ser Ser Val Asp Glu Gly Thr
165 170 175

```
Ile Thr Asp Asp His Ser Leu Gln Ser Pro Arg Ser Pro Gln Glu Thr
            180                 185                 190
Arg Leu Pro Pro Pro Pro Pro Pro Ser Ala Pro Arg Ala Val Pro Pro
        195                 200                 205
Pro Pro Pro Ile Gln Pro Pro Arg Ser Ser Gly Gly Ala Ser Leu Glu
    210                 215                 220
Ser Pro Arg Gly Pro Pro Pro Pro Pro Pro His Arg Glu Leu Ser Phe
225                 230                 235                 240
Gly Arg Glu Glu Asp Tyr Asp Pro Tyr Arg Tyr Ser Ala Pro Gln His
                245                 250                 255
Gly Val Pro Ala Pro Arg Val Pro Pro Val Pro Leu Gly Arg Pro Glu
            260                 265                 270
Ser Pro Thr Val Ala Pro Ser Gln Ala Ala Glu His Asp Ser Glu Asp
        275                 280                 285
Met Tyr Asp Ala Ser Pro Ala Val Gln Ser Ala Ser Gly Arg Ser Ala
    290                 295                 300
Ala Pro Pro Leu Glu Lys Arg Ser Ser Phe Ala Pro Pro Pro Pro Thr
305                 310                 315                 320
Leu Pro Pro Ser Ala Pro Pro Pro Ser Ala Pro Arg Ser Asn Arg Ala
                325                 330                 335
Ser Leu Asp Ile Pro Arg Gly Gln Pro Asn Leu Arg Arg Tyr Met Asp
            340                 345                 350
Ala Ser Arg Pro Ser Ile Asp Gln Gly Phe Ile Ala Met Asp Val Asp
        355                 360                 365
Leu Ala Glu Gly Ser Leu Trp Trp Thr Gln Pro Asn Ile Pro Pro Pro
    370                 375                 380
Val Phe Gln Asn Arg Lys Asp Val Leu Phe Glu Val Glu Glu Ser Thr
385                 390                 395                 400
Ser Thr Lys Arg Ser Gly Lys Thr Thr Ile Ser Lys Asp Val Tyr Val
                405                 410                 415
Leu Phe Met Asp Tyr Ser Gln Thr Val Ile Thr Val Ala
            420                 425
```

<210> 34110
<211> 217
<212> PRT
<213> A.fumigatus

<400> 34110

```
Val Ala Arg Phe Leu Pro Ala Pro Val Gly Glu Asp Asp Tyr Ser Ala
1               5                   10                  15
Ala Ala Asp Thr Glu Asp Ala Glu Glu Thr Ser Thr Ser Lys Glu Asp
            20                  25                  30
Leu Glu Asp Arg Ser Gly Ala Asp Thr His Gln Ala Pro Lys Pro Glu
        35                  40                  45
Lys Lys Glu Ala Asn Asp Lys Leu Glu Gln Asp Glu Gly Asn Glu Ser
    50                  55                  60
Asp Glu Glu Glu Asp Glu Glu Glu Glu Glu Ile Asp Pro Glu Ile Lys
65                  70                  75                  80
Arg Arg Met Glu Leu Arg Glu Arg Met Ala Lys Met Ser Gly Gly Met
                85                  90                  95
Gly Met Met Gly Phe Phe Gly Pro Pro Gly Gly Met Pro Val Pro Gly
            100                 105                 110
Ala Gly Pro Arg Lys Pro Lys Ala Ala Ala Glu Thr Glu Lys Lys Thr
        115                 120                 125
Glu Asp Ser Asp Arg Ala Ala Arg Thr Thr Ala Pro Pro Val Pro Val
```

```
    130                 135                 140
Met Ala Leu Pro Gly Met Asn Ala Val Arg Pro Thr Ala Ala Ser Pro
145                 150                 155                 160
Ser Val Glu Lys Glu Glu Asp Val Pro Gln Ser Ala Ser Val Thr Glu
                165                 170                 175
Gln His Pro Pro Gln Asp Ile Pro Asp Val Glu Asp Val Val Lys Glu
            180                 185                 190
Asp Ser Ser His Arg Val Pro Asp Glu Thr Pro Ala Ala Pro Gln Gly
        195                 200                 205
Met His Pro Cys Phe Ser Asn Gly His
    210                 215
```

<210> 34111
<211> 130
<212> PRT
<213> A.fumigatus

<400> 34111

```
Gly Thr Ser Leu Ala Phe Leu Thr Asn Leu Trp Leu Phe Tyr Cys Arg
1               5                   10                  15
Tyr Leu Arg Ala Phe Glu Val Gly Arg Glu Pro Thr Val Ser Lys Tyr
            20                  25                  30
Glu Ile His Ile Arg Leu Lys Thr Lys Arg Asp Gly Pro Val Ile Arg
        35                  40                  45
Asn Met Leu Arg Phe Pro His Ser Val Gln Thr Glu Ser Arg Ile Cys
    50                  55                  60
Val Val Cys Pro Pro Gly Thr Arg His Glu Lys Glu Ala Arg Ala Ala
65                  70                  75                  80
Gly Ala Val Leu Val Gly Glu Gln Asp Val Phe Asp Ala Val Lys Ala
                85                  90                  95
Gly Lys Ile Glu Phe Asp Arg Leu Ile Cys His Pro Asp Ser Leu Asp
            100                 105                 110
Ala Leu Asn Lys Ala Gly Cys Leu Asn Ala Ala Ala Gly Arg Lys Gln
        115                 120                 125
Ile Pro
    130
```

<210> 34112
<211> 375
<212> PRT
<213> A.fumigatus

<400> 34112

```
Glu Asn Glu Trp Leu Ser Gln Leu Glu Ala Phe Ala Pro Leu Asp Phe
1               5                   10                  15
Lys Ala Leu Asp Pro Glu Leu Gln Arg Leu Asp Thr His Leu Leu Leu
            20                  25                  30
Arg Ser Phe Val Val Gly Tyr Ala Leu Ser Thr Ala Asp Ile Ala Leu
        35                  40                  45
Trp Gly Ala Ile Arg Gly Asn Arg Val Ala Val Ala Ala Ile Lys Lys
    50                  55                  60
Gly Ser Leu Val Asn Val Thr Arg Trp Phe Tyr Phe Leu Glu Asp Leu
65                  70                  75                  80
Cys Pro Trp Ala Thr Ser Thr Leu Glu Val Leu Asn Gln Ala Val Arg
                85                  90                  95
Glu Lys Lys Ala Ala Lys Ala Lys Glu Gly Ala Ser Tyr Asp Ile Ala
```

```
            100                 105                 110
Leu Leu Asn Thr Glu Lys Gly Val Val Thr Arg Phe Pro Pro Glu Pro
        115                 120                 125
Ser Gly Tyr Leu His Ile Gly His Ala Lys Ala Ala Leu Leu Asn Asp
    130                 135                 140
Tyr Phe Ala His Glu Lys Tyr Asn Gly Thr Leu Leu Val Arg Phe Asp
145                 150                 155                 160
Asp Thr Asn Pro Ser Asn Glu Lys Leu Glu Phe Gln Asp Ala Ile Ile
                165                 170                 175
Glu Asp Leu Ala Leu Met Gly Ile Lys Pro Asp Lys Met Ser Tyr Thr
            180                 185                 190
Ser Asp Tyr Phe Asp Glu Leu Tyr Gln Tyr Ala Leu Gln Ile Ile Lys
        195                 200                 205
Asp Gly Asn Ala Tyr Ala Asp Asp Thr Glu Lys Glu Val Met Ala Glu
    210                 215                 220
Gln Arg Met Asn Gly Lys Pro Ser Lys Arg Arg Asp Ala Ser Val Glu
225                 230                 235                 240
Glu Asn Leu Ala Arg Phe Glu Glu Met Lys Lys Gly Thr Pro Glu Gly
                245                 250                 255
Leu Arg Trp Cys Ile Arg Ala Lys Met Ser Val Asp Asn Pro Asn Lys
            260                 265                 270
Ala Met Arg Asp Pro Val Ile Tyr Arg Cys Asn Pro Ala Pro His His
        275                 280                 285
Arg Thr Gly Thr Lys Trp Lys Ile Tyr Pro Thr Tyr Asp Phe Ala Cys
    290                 295                 300
Pro Ile Val Asp Ser Ile Glu Gly Val Thr His Ala Leu Arg Thr Ile
305                 310                 315                 320
Glu Tyr Arg Asp Arg Asn Pro Gln Tyr Gln Trp Phe Leu Asp Thr Leu
                325                 330                 335
Lys Leu Arg His Val Gln Ile Trp Asp Phe Ala Arg Met Asn Phe Ile
            340                 345                 350
Arg Thr Leu Leu Ser Lys Arg Lys Leu Thr Lys Leu Val Asn Gln Gly
        355                 360                 365
Val Val Trp Gly Trp Asp Glu
    370                 375

<210> 34113
<211> 110
<212> PRT
<213> A.fumigatus

<400> 34113
Gly Ile Arg Arg Arg Gly Met Thr Ile Pro Ala Leu Arg Glu Phe Ile
1               5                   10                  15
Leu Lys Gln Gly Pro Ser Lys Asn Ile Thr Asn Leu Asp Trp Thr Leu
            20                  25                  30
Ile Trp Ala Thr Asn Lys Lys Tyr Ile Asp Pro Val Ala Pro Arg His
        35                  40                  45
Thr Ala Ile Leu Lys Lys Asp Met Val Lys Ala Ile Val Lys Gly Gly
    50                  55                  60
Pro Ala Thr Pro Tyr Thr Glu Glu Lys Pro Lys His Gly Lys Asn Pro
65                  70                  75                  80
Ala Val Gly Met Lys Lys Gly Val Leu Val Thr Arg Ser Phe Ser Thr
                85                  90                  95
Arg Lys Met Pro Arg Ala Ser Ser Lys Met Lys Arg Ser Pro
            100                 105                 110
```

<210> 34114
<211> 189
<212> PRT
<213> A.fumigatus

<400> 34114
Tyr Phe Val Tyr Ser Arg Thr Val Phe Gln Asp Ile Leu Tyr Arg Phe
1 5 10 15
Gln Arg Gln Ala Phe Leu Lys Cys Ser Ser Tyr Ser Leu Asp Ser Val
20 25 30
Tyr Arg Pro Met Pro Ser Arg Asp Arg Gly Arg Pro Val Ile Pro Arg
35 40 45
Ile Asn Lys Tyr Ile Tyr Pro His Pro Ile Leu Phe Thr Ser Ala Gln
50 55 60
Glu Pro His Ser Gln Phe Thr Ala Gln Asn Gln Asp Asp Ser Asp Trp
65 70 75 80
Leu Gly Lys Ser Ser Pro Asp Gln Thr Asn Leu Asp Ser Gln His Ser
85 90 95
Asn Asp Leu Asn Gln Tyr Gly Leu Gly Ser Met Gly Leu Ala Met Ala
100 105 110
Thr Asn Leu Gln Arg His Leu Ala Thr Lys Gly Ala Leu Asn Leu Val
115 120 125
Tyr Ser Asn Arg Thr Met Ala Arg Gly Asp Thr Leu Lys Arg Leu Gly
130 135 140
Ala Val Pro Glu Pro Ser Phe Pro Asn Leu Val Ala Gln Cys Gly Ile
145 150 155 160
Ile Phe Thr Met Val Ala Pro Phe Tyr Pro Glu Gly Asp Cys Glu Thr
165 170 175
His Asn Asn Arg Arg Arg Arg Ser Pro Thr Thr Pro Cys
180 185

<210> 34115
<211> 62
<212> PRT
<213> A.fumigatus

<400> 34115
Arg Ile Ala Phe Leu Leu Glu Val Ala Ala Asp Arg Arg Met Arg Thr
1 5 10 15
Ala Thr Thr Arg Lys Asp Ser Ala Met Ala Val Ile Leu Tyr Asn His
20 25 30
Gln Tyr Phe Val Leu Asn Ser Leu Ala Tyr Ile Tyr Thr Thr Tyr Lys
35 40 45
Asp Gln Pro Gly Arg Gln Leu Asp Gly Ser Trp Lys Pro Ile
50 55 60

<210> 34116
<211> 114
<212> PRT
<213> A.fumigatus

<400> 34116
Thr Thr Gln Ile Ser Asn Asp Thr Val Leu Ser Asn Leu Ile Thr Thr
1 5 10 15
Ala Val Glu Ser Gly His Ser Leu Lys Asp Lys Ile Phe Val Asp Cys

```
            20                  25                  30
Ser Thr Val His Pro Gln Thr Val Gly Leu Thr Val Ser Lys Leu Lys
        35                  40                  45
Glu Lys Gln Ala Ser Phe Leu Ala Ala Pro Val Phe Gly Gly Asn Pro
    50                  55                  60
Ile Ala Val Asp Gly Lys Leu Val Phe Ala Ile Gly Gly Pro Arg Ser
65                  70                  75                  80
Ala Ala Glu Val Val Lys Pro Leu Ile Gln Asp Val Met Gly Arg Lys
                85                  90                  95
Ile Ile Asp Cys Gly Glu Asp Ala Thr Lys Ser Ser Leu Leu Lys Ile
            100                 105                 110
Ala Gly
```

<210> 34117
<211> 87
<212> PRT
<213> A.fumigatus

<400> 34117

```
Met Glu Asn Gly Ile Val Lys Lys Trp Asp Asp Met Gln His Leu Trp
1               5                   10                  15
Asn Tyr Thr Phe Tyr Glu Lys Met Lys Ile Asp Pro Thr Gly Arg Lys
            20                  25                  30
Ile Leu Leu Thr Glu Pro Pro Met Asn Pro Leu Lys Asn Arg Glu Lys
        35                  40                  45
Met Cys Glu Val Met Leu Glu Gln Tyr Asn Phe Gly Gly Val Tyr Val
    50                  55                  60
Ala Ile Gln Ala Val Leu Ala Leu Tyr Ala Gln Gly Glu Cys Asn Gly
65                  70                  75                  80
Arg Ala Asp Ser Thr Asp Ser
                85
```

<210> 34118
<211> 197
<212> PRT
<213> A.fumigatus

<400> 34118

```
Ser Leu Phe Val Pro Gly Leu Ser Ser Gly Val Val Val Asp Ser Gly
1               5                   10                  15
Asp Gly Val Thr His Ile Ile Pro Val Tyr Glu Ser Thr Val Leu Lys
            20                  25                  30
His His Ile Arg Arg Leu Asp Val Ala Gly Arg Asp Val Thr Arg Asn
        35                  40                  45
Leu Ile Ala Leu Leu Leu Arg Arg Gly Tyr Ala Leu Asn Arg Thr Ala
    50                  55                  60
Asp Phe Glu Thr Val Arg Gln Ile Lys Glu Lys Leu Cys Tyr Val Ser
65                  70                  75                  80
Tyr Asp Leu Glu Leu Asp Lys Lys Leu Ser Glu Asp Thr Thr Val Leu
                85                  90                  95
Val Glu Ser Tyr Thr Leu Pro Asp Gly Arg Val Ile Arg Val Gly Ser
            100                 105                 110
Glu Arg Phe Glu Ala Pro Glu Cys Leu Phe Gln Pro His Leu Val Asp
        115                 120                 125
Val Asp Gln Pro Gly Met Ala Glu Leu Leu Phe Asn Thr Ile Gln Gly
```

```
    130                 135                 140
Ala Asp Val Asp Val Arg Ser Ser Leu Tyr Lys Ala Ile Val Leu Ser
145                 150                 155                 160
Gly Gly Ser Ser Met Tyr Pro Gly Leu Pro Ser Arg Leu Glu Lys Glu
                165                 170                 175
Leu Lys Gln Leu Trp Leu Thr Arg Val Leu Gln Gly Asp Pro Glu Arg
            180                 185                 190
Leu Gly Val Arg Pro
        195
```

<210> 34119
<211> 81
<212> PRT
<213> A.fumigatus

<400> 34119

```
Pro Lys Leu Ile Tyr Leu Leu Gln Lys Phe Lys Val Arg Ile Glu Asp
1               5                   10                  15
Pro Pro Arg Arg Arg His Met Val Phe Leu Gly Gly Ala Val Leu Ala
            20                  25                  30
Asn Leu Val Arg Asn Gln Cys Ser Leu Thr Phe Thr Phe Asn Asp Val
        35                  40                  45
Ser Asn Ile Ser Gln Ile Ala Asp Lys Glu Asp Met Trp Val Ser Lys
    50                  55                  60
Gln Glu Trp Glu Glu Gln Gly Val Arg Ala Leu Ala Lys Leu Gly Thr
65                  70                  75                  80
Ser
```

<210> 34120
<211> 149
<212> PRT
<213> A.fumigatus

<400> 34120

```
Ser Asn His Leu Pro Gln His Arg Met Pro His Arg Ser Ile Pro Pro
1               5                   10                  15
Ser Ala Arg Tyr Leu Gly Pro Ser Ala Pro Arg Arg Pro Val Pro Arg
            20                  25                  30
Pro Arg Leu Pro Ser Ser Ser Pro Ser Arg Cys Ser Cys Asn Asn Gln
        35                  40                  45
Pro Lys Gln Ser Asp Thr Leu Pro Pro Lys Lys Lys Lys Lys Lys Lys
    50                  55                  60
Lys Lys Lys Lys Lys Lys Lys Lys Lys Asn Ser Glu Gly Arg Lys Lys
65                  70                  75                  80
Asp Ser Pro Ser Asn Leu Gln Gln Gly Arg Leu Gly Cys Val Leu Pro
                85                  90                  95
Ala Val Asp Asp Leu Pro Pro His Asp Ile Leu Asp Glu Arg Leu Asp
            100                 105                 110
Asn Leu Arg Arg Thr Pro Arg Ser Thr Asp Arg Glu Asp Lys Leu Pro
        115                 120                 125
Val His Gly Asp Arg Val Ala Pro Glu Tyr Arg Cys Ser Gln Glu Arg
    130                 135                 140
Ser Leu Leu Leu Leu
145
```

<210> 34121
<211> 98
<212> PRT
<213> A.fumigatus

<400> 34121
Ala Ala Asn Ala Ser Arg Pro Pro Ser Val Ser Ser Asn Arg Thr Trp
1 5 10 15
Trp Met Ser Thr Ser Pro Ala Trp Pro Ser Cys Ser Ser Thr Leu Phe
20 25 30
Lys Ala Pro Thr Ser Thr Ser Ala Gln Ala Cys Thr Arg Pro Ser Ser
35 40 45
Ser Ala Val Glu Ala Ala Cys Thr Pro Val Cys Arg Arg Gly Trp Arg
50 55 60
Arg Asn Ser Ser Ser Cys Gly Leu Arg Gly Tyr Ser Arg Glu Thr Leu
65 70 75 80
Ser Ala Leu Val Tyr Val Pro Asn Leu Ser Phe Leu Gly Glu Asn Asp
85 90 95
Gln Ser

<210> 34122
<211> 192
<212> PRT
<213> A.fumigatus

<400> 34122
Ala Arg Pro Leu Arg Glu Asp Leu Cys Leu Ala His Gly Phe His Gln
1 5 10 15
Val His Arg His Asp Val Pro Val Thr Ile Ser Leu Asn Asn Pro Thr
20 25 30
Pro Cys Arg Gln Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
35 40 45
Lys Lys Lys Lys Ile Leu Lys Glu Glu Arg Lys Thr His Pro Ala Ile
50 55 60
Phe Ser Arg Asp Asp Leu Val Ala Ser Ser Pro Gln Ser Met Ile Phe
65 70 75 80
Arg Pro Met Thr Ser Trp Met Ser Gly Leu Thr Thr Ser Ala Ala Leu
85 90 95
Leu Gly Pro Pro Ile Ala Lys Thr Ser Phe Pro Ser Thr Ala Ile Gly
100 105 110
Leu Pro Pro Asn Thr Gly Ala Ala Arg Asn Glu Ala Cys Phe Ser Phe
115 120 125
Ser Leu Glu Thr Val Arg Pro Thr Val Cys Gly Trp Thr Val Glu Gln
130 135 140
Ser Thr Lys Ile Leu Ser Leu Ser Glu Trp Pro Asp Ser Thr Ala Val
145 150 155 160
Val Met Arg Leu Leu Ser Thr Val Ser Leu Glu Ile Cys Val Val Tyr
165 170 175
Tyr Tyr Ala Phe Arg Ser Leu Pro Arg Asp Arg Arg Gly Leu Pro Trp
180 185 190

<210> 34123
<211> 122
<212> PRT
<213> A.fumigatus

<400> 34123
Ser Ser Met Glu Glu Leu Val Ser Ser Arg Ser Asp Met Leu Arg Arg
1 5 10 15
Tyr Val Gly Tyr Tyr Thr Gln Asn Val Tyr His Ala Pro Cys Ser Cys
20 25 30
Val Phe Arg Leu Gln Asn Phe Pro Glu His Gln Phe Pro Ser Ile Val
35 40 45
Gly Arg Pro Ile Leu Arg Thr Glu Glu Gln Ala Gly Asp Ile Val Val
50 55 60
Lys Asp Ile Met Cys Gly Asp Glu Ala Ala Ala Ala Arg Ser Met Leu
65 70 75 80
Gln Ile Ser Tyr Pro Val Arg Ser Ala Ser Tyr Val Ser Val Pro Val
85 90 95
Ala Asn Ser Cys Ser Pro Ser Trp Arg Ser Ser Arg His Arg Leu Cys
100 105 110
Ser Arg Ala Leu Ile Ser Glu Thr Ile Gly
115 120

<210> 34124
<211> 129
<212> PRT
<213> A.fumigatus

<400> 34124
Phe Leu Val Cys Thr Val Ser Phe Gln Pro Arg Pro Gln Ser Ala Leu
1 5 10 15
Arg Arg Arg Arg Leu Leu Ile Gln Arg Leu Cys Phe Ile Gly Gly Ile
20 25 30
Ser Leu Leu Leu Leu Val Leu Ile Phe Pro Ser Trp Arg Ala Ala Ile
35 40 45
Leu Pro Thr Leu Ser Leu Gly Leu Ile His Ser Ser Glu Asp Leu Gln
50 55 60
Leu Gln Thr Val Arg Tyr Tyr Asp Leu Ser Lys Val Gln Gly Thr Ala
65 70 75 80
Lys Gly Trp Glu Lys Gly Glu Arg Val Leu Met Leu Thr Pro Leu Arg
85 90 95
Asp Ala Ser Ser His Leu Pro Ile Ser Ser His Thr Ser Glu Ile Ser
100 105 110
Pro Thr Leu Thr Leu Phe Ser Lys Leu Pro Arg Arg Pro Ala Tyr Ala
115 120 125
Gly

<210> 34125
<211> 89
<212> PRT
<213> A.fumigatus

<400> 34125
Glu Cys Ser Pro Arg Ala Leu Ser Thr Arg Pro Val Phe Arg Pro Arg
1 5 10 15
Ser Leu Arg Lys Ser His Ser Arg Arg Glu Thr Val Glu Leu Trp Gly
20 25 30
Arg Glu Arg Tyr Tyr Ile Leu Asp Ser Asp Tyr Glu Ala Gly Ser Val
35 40 45

```
Ile Leu Ala Leu Arg Asp Pro Pro Leu Met Asp Ser Leu Leu Lys Lys
    50                  55                  60
Met Leu Arg His Val Glu Ile Gly Val Lys Gly Met Gly Ser Pro Asp
65                  70                  75                  80
Ser Arg Ile Ser Arg Val Glu Gly Asn
                85
```

<210> 34126
<211> 64
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (51)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34126

```
Asn Gly Arg Glu Tyr Gly Asp Ala Thr Thr Gly Gly Tyr Asn Glu His
1               5                   10                  15
Leu Arg His Cys Phe Lys Leu Ile Ile Ser Asn Asp Leu Lys Leu Lys
            20                  25                  30
Asn Ser Phe Thr Leu Leu Lys Lys Gly Gln Leu Trp Gly Ile Ser Ile
        35                  40                  45
Lys Phe Xaa Leu Phe Leu Thr Asn His Lys Phe Pro Val Tyr Ser His
    50                  55                  60
```

<210> 34127
<211> 597
<212> PRT
<213> A.fumigatus

<400> 34127

```
Gly Arg Pro Gly Ser Ser Gln His Met Pro Ala Pro Pro Gln His Gln
1               5                   10                  15
Asp Asn Ser Leu Phe Leu Val Ala Asp Asp Gln Phe Cys Val Asp Ala
            20                  25                  30
Gln Lys Ala Leu Ala Ser Leu Arg Asp Ile Leu Pro Pro Tyr Met Ile
        35                  40                  45
Pro Ser Asp Leu Leu Arg Ile Ser His Leu Pro Met Val Pro Ser Gly
    50                  55                  60
Lys Thr Asp Arg Arg Leu Ile Arg Met Arg Ala Val Asp Leu Ala Pro
65                  70                  75                  80
Glu Glu Arg Arg Lys Tyr Ser Ser Val Leu Gly Gln Ser Arg Asp Gln
                85                  90                  95
Pro Val Thr Gln Leu Glu Glu Ser Leu Leu Gly Leu Trp Ala Thr Cys
            100                 105                 110
Leu Lys Leu Pro Pro Ser Gln Ile Gly Val Leu Asp Asn Phe Phe His
        115                 120                 125
Leu Gly Gly Gly Ser Leu Glu Ala Ile His Leu Ala Ala Glu Ala Arg
    130                 135                 140
Asn Met Gly Phe Ala Glu Leu Ser Ser Ala Ala Val Phe Gln Cys Pro
145                 150                 155                 160
Thr Ile Arg Glu Met Ala Gly Met Leu Asp Gly Val Thr Ala Ser Val
                165                 170                 175
Gln Gly Gln Asp Pro Arg Gly Cys Thr Ser Phe Gln Leu Glu Ser Ser
```

```
            180                 185                 190
Leu Val Ala Glu Leu Leu Arg Lys Ser Gln Arg Thr Leu Glu Asp Leu
        195                 200                 205
Gln Glu Gly Phe Leu Pro Leu Thr Pro Phe Gln Glu Lys Thr Ala Lys
    210                 215                 220
Met Lys Pro Met His Leu Leu Leu Asp Ile Pro Gly Ile Asp His Ser
225                 230                 235                 240
Arg Leu Glu Ala Ala Trp Ala Leu Val Leu Glu Lys His Ile Ser Phe
                245                 250                 255
Arg Ser Ile Tyr Val Glu His Gln Gly Arg Val Tyr Gln Ala Phe Leu
            260                 265                 270
Arg Gln Pro Asp Thr Val Ser Ile Pro Ile Arg Trp Cys Asp Glu Pro
        275                 280                 285
Val His Glu Cys Ala Ala Arg Phe Cys Glu Gln Asp Val Asp Leu Ile
    290                 295                 300
Leu Asp Gly Arg Pro Trp Trp Ser Met Thr Arg Ile Asn Asn Lys Ile
305                 310                 315                 320
Asp Gly Val Leu Val Leu Arg Leu Thr His Ala Gln Trp Asp Ala Leu
                325                 330                 335
Thr Leu Asp Val Leu Phe Lys Asp Phe Met Ala Ala Tyr Glu Ser Arg
            340                 345                 350
Glu Leu Ser Arg Arg Asp Leu Glu Phe Pro Ala Tyr Met Arg Phe Arg
        355                 360                 365
Leu Arg His Asn Ala Ser Pro Ala Thr Val Arg Phe Trp Ser Thr Phe
    370                 375                 380
Leu His Gly Ser Arg Leu Thr Gln Pro Leu Leu Leu Asp Gly Ala Ala
385                 390                 395                 400
Glu Val Asp Pro Gly Asn Glu Ala Met Val Phe Val Ser Gln Gln Ile
                405                 410                 415
Pro Met Leu Thr Pro Pro His Gly Ile Thr Leu Gly Ser Val Phe Arg
            420                 425                 430
Ala Ala Trp Ala Phe Val Leu Ala Arg Tyr Thr Gly Gln Glu Asp Val
        435                 440                 445
Val Phe Gly Glu Phe Val Glu Gly Arg Ser Leu Leu Val Lys Ser Val
    450                 455                 460
Glu Lys Val Thr Gly Cys Ala Ala Ala Glu Thr Pro Met Arg Ile Val
465                 470                 475                 480
Val Pro Pro Thr Ala Ser Val Arg Asp Leu Leu Lys His Ser Gln Glu
                485                 490                 495
Gln Tyr Val Ala Arg Ile Pro Tyr Glu Thr Cys Glu Leu Glu Asp Ile
            500                 505                 510
Val Pro Ser Ser Thr Ser Trp Pro Thr Asp Thr Thr Phe Asn His Ile
        515                 520                 525
Leu Val Ile Gln His Glu Pro Val Leu Pro Pro Val Ala Leu Asp Gly
    530                 535                 540
Arg Pro Cys Pro His Arg Trp Pro Ser Thr Asp Gly Ser Arg Thr Ser
545                 550                 555                 560
Thr Ser Lys Trp Cys Ser Ala Arg Ile Arg Cys Thr Leu Glu Cys Leu
                565                 570                 575
Val Arg Arg Ser Gly Cys Pro Gly Pro Leu Arg Pro Ser Trp Leu Arg
            580                 585                 590
Ser Trp Arg Arg Gln
        595
```

<210> 34128
<211> 116

<212> PRT
<213> A.fumigatus

<400> 34128
Asp Lys Phe Asn Ala His Glu Ser Trp Ala Gly Gly Arg Ala Ser Ile
1 5 10 15
Asp Asp Ala Leu Ala Thr Leu Ser Pro Trp Pro Gly Arg Val Arg Pro
20 25 30
Trp Ser Val Ile Arg His Thr Leu Pro Glu Lys Leu Val Asp His Ala
35 40 45
Leu Ile Tyr Arg Pro Pro Leu Asp Thr Trp Val Ser Ala Gly Gly Arg
50 55 60
Val Met Leu Ile Gly Asp Ala Ala His Pro Tyr Phe Pro Val Val Gly
65 70 75 80
Gln Gly Gly Ser Gln Ala Ile Glu Asp Gly Val Val Val Ala Thr Ala
85 90 95
Leu Glu Leu Ala Gly Lys Glu Asn Val Pro Leu Ala Leu Arg Val Ala
100 105 110
Glu Lys Ile Arg
115

<210> 34129
<211> 105
<212> PRT
<213> A.fumigatus

<400> 34129
Asp Ser Leu Met Lys Leu Pro Ala Ala Ala Gly Asp Ala Ile Val Ile
1 5 10 15
Gly Pro Asn Ala Val Arg Leu Ile Lys Ser Trp Gly Glu Gln Leu Cys
20 25 30
Glu Glu Ile Glu Pro His Leu Ser Asn Ala Thr His Ala Glu Met Leu
35 40 45
Asp His His Asp Arg Phe Ile Val Arg His Glu Leu Ala Gly Arg Gly
50 55 60
Lys Gly Trp Phe Thr Asn Arg Gly Arg Leu Leu Ser Ile Leu Tyr Glu
65 70 75 80
His Ala Arg Lys Leu Gly Ile Asp Ile Arg Leu Gly Ser Arg Val Ala
85 90 95
Asn Tyr Trp Glu Glu Asp Gly Arg Ala
100 105

<210> 34130
<211> 195
<212> PRT
<213> A.fumigatus

<400> 34130
Leu Leu Phe Ser Asp Ile Leu Met Asp Gly Pro Pro Ala Gln Ser Leu
1 5 10 15
Gly Val Glu Pro Val Asp Pro Thr Ile Met Asn Arg Pro Pro Arg Ser
20 25 30
Arg Thr Ala Arg Val Leu Thr Arg Pro Leu Ile Gln Arg Val Leu Thr
35 40 45
Ser Ala Phe Met Ile Met Leu Gly Thr Leu Ala Ile Tyr Val Tyr Glu
50 55 60

```
Met Gly Asp Ala Asp Asp Leu Ser Thr Pro Gly Lys Arg Ser Arg Val
65                  70                  75                  80
Val Thr Ala His Asp Thr Thr Met Thr Phe Thr Cys Phe Val Leu Phe
                85                  90                  95
Asp Met Phe Asn Ala Leu Thr Cys Arg Ser Glu Ser Lys Ser Val Leu
            100                 105                 110
Arg Gly Glu Leu Pro Leu Phe Gly Asn Lys Met Phe Asn Tyr Ala Val
        115                 120                 125
Leu Gly Ser Leu Phe Gly Gln Ala Cys Val Ile Tyr Val Pro Phe Phe
    130                 135                 140
Gln Arg Ile Phe Gln Thr Glu Pro Leu Asn Ala Ala His Leu Phe Lys
145                 150                 155                 160
Leu Leu Cys Val Ser Ser Thr Val Phe Trp Val Asp Glu Gly Arg Lys
                165                 170                 175
Tyr Leu Asn Ala Val Lys Arg Arg Arg Ala Val Gly Gly Arg Tyr Ser
            180                 185                 190
Val Asn Val
        195
```

<210> 34131
<211> 518
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (223),(508)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34131

```
Phe Val Glu Leu Ala Ala Lys Ala Ala Ala Ile Cys Gly Gly Arg Glu
1               5                   10                  15
Cys Ser Thr Ala Ala Thr Gln Val Gln Val Leu Asn Leu Glu Ile His
            20                  25                  30
Asn Pro Leu Gly His Ala Pro Gly Ala Arg Val Gly Leu Arg Leu Lys
        35                  40                  45
Arg Ile Gly Ser Cys Lys Trp Gly Phe Ser Val Ile Ser Asp Lys Asp
    50                  55                  60
Val Gln Ser Ile Cys His Ala Thr Gly Val Ile Ser Leu Arg Gln Glu
65                  70                  75                  80
Arg His Gly Lys Leu Glu Ile Gly Pro Gln Trp Ser Val Ile Gln Arg
                85                  90                  95
Val Ile Gly Tyr Ser His Ile Gln Asp Val Leu Asp Asp Ser Ser Ala
            100                 105                 110
Ile Ser Leu Lys Glu Gly Ile Ile Tyr Lys Val Leu Glu Lys Val Ala
        115                 120                 125
Glu Tyr Lys Pro Cys His Arg Ala Ile Lys Ser Met Thr Ile Lys Gly
    130                 135                 140
Thr Ala Ala Val Ala Gln Leu Glu Met Pro Ala Ile Ser Arg Asp Ser
145                 150                 155                 160
Ser Glu Ile Thr Val Ser Asp Pro Leu Val Met Asp Gln Phe Ala Leu
                165                 170                 175
Ile Ala Glu Val Leu Ala Leu Cys Arg Asp Asp Gly Lys Arg Asp Asn
            180                 185                 190
Val Phe Ile Cys Ser Gly Leu Ser Glu Leu Val Thr Phe Lys Ser Leu
        195                 200                 205
```

```
Gln Ser Gly Leu Gly Pro Trp Thr Val Tyr Thr His Gln Thr Xaa Cys
    210                 215                 220
Gly Pro Arg Glu Leu Leu Ser Asp Thr Phe Val Phe Asp Ser Thr Ser
225                 230                 235                 240
Lys Gln Leu Ile Ile Gly Leu Leu Gly Ala Arg Phe Val Arg Ile Thr
                245                 250                 255
Ala Ser Ser Leu Asn Gly Ile Val Lys Arg Ala Asn Leu Asn Ser Gln
            260                 265                 270
Thr Ser Glu Leu Ser Val Glu Thr Asp Ala Val Asn His Pro Ala Ser
        275                 280                 285
Val Ala Tyr Pro Pro Ser Asn Asn Asn Asp Thr Ser Asp Ile Leu Ser
    290                 295                 300
Ile Leu Ser His Leu Leu His Glu Ile Thr Gly Leu Pro Pro Ser Glu
305                 310                 315                 320
Ile Ser Ala Ser Thr Pro Leu Met Glu Ala Ser Val Asp Ser Leu Ala
                325                 330                 335
Ala Thr Glu Leu Glu Asn Arg Ile Gln Glu Glu Phe His Leu His Arg
            340                 345                 350
Pro Ile Ser Leu Tyr Glu Arg Gln Phe Asn Val Gly Thr Leu Cys Gln
        355                 360                 365
Glu Ile Gln Thr Gln Arg Asp Asp Arg Leu Ala Arg Ala Ser Arg Thr
    370                 375                 380
Thr Thr Ala Thr Arg Asn Thr Ser Phe Ser Leu Gly Arg Arg Thr Ser
385                 390                 395                 400
Ser Thr Glu Ser Leu Pro Asp Asp Ala Glu Ala Arg Phe Ile Ser Lys
                405                 410                 415
Ser Ala Ala Val Leu Ala Gln Leu Ser Arg Met Leu Ser Glu Ser Phe
            420                 425                 430
Asn Ile Thr Glu Ser Ile Leu Pro Gly Thr Glu Leu Arg Ser Leu Gly
        435                 440                 445
Leu Asp Ser Leu Val Ala Val Glu Leu Glu Tyr Asp Leu Gln Gln Ala
    450                 455                 460
Phe Gly Leu Lys Val Asp Leu Met Gln Leu Ser Pro Glu Pro Thr Val
465                 470                 475                 480
Gly Gly Leu Ala Arg Leu Ile Leu Ala Ser Glu Ser Gln Thr Ser Gly
                485                 490                 495
His Ile Ala Ser Ser Met Met Asp Cys Arg Gln Xaa Thr Glu Gly Lys
            500                 505                 510
Ser Gln Met Tyr Leu Gly
        515
```

<210> 34132
<211> 94
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (32),(59)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34132

```
Leu Asn Val Gly Gly Tyr Cys Ile Val Asn Trp Ile Asn Tyr Gly Leu
1               5                   10                  15
Ser Phe Arg Gly Ala Ser Ile Ala Trp Arg Leu Pro Ile Ala Leu Xaa
            20                  25                  30
```

```
Leu Phe Phe Ile Cys Ala Leu Phe Ala Thr Val Pro Trp Leu Pro Glu
        35                  40                  45
Ser Pro Arg Trp Leu Leu Ala His Gly Pro Xaa Lys Asp Gly Val Gln
    50                  55                  60
Val Leu Ser Cys Ile Glu Pro Lys Pro Ile Asp Asp Ala Tyr Ile Ile
65                  70                  75                  80
Thr His His His Glu Ile Gln Tyr Arg Ile Gln Tyr Gln Arg
                85                  90
```

<210> 34133
<211> 90
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (90)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34133

```
Pro Phe Val Leu Gly Gly Val Val Val Thr Pro Asp Phe Leu Glu Leu
1               5                   10                  15
His Asp Leu Val Gly Pro Thr Arg Thr Lys Ile Leu Ser Thr Val Thr
            20                  25                  30
Ala Ile Tyr Asp Val Gly Cys Phe Leu Gly Ala Ile Leu Ala Phe Thr
        35                  40                  45
Leu Gly Glu Arg Leu Gly Arg Lys Lys Ser Ile Leu Leu Gly Thr Thr
    50                  55                  60
Ile Met Ala Val Gly Thr Val Leu Gln Ala Ser Ser Phe Arg Leu Pro
65                  70                  75                  80
Gln Met Phe Val Gly Arg Val Ile Leu Xaa
                85                  90
```

<210> 34134
<211> 185
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (153)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34134

```
Trp Met Glu Gly Leu Gly Ala Asp Val Leu Arg Pro Tyr Arg Phe Val
1               5                   10                  15
Gln Gly Ser Trp Arg Pro Asp Phe Leu Leu Glu Ser Ser Glu Asn Pro
            20                  25                  30
Glu Gln Ile Glu Asn Tyr Arg Ile Cys Glu Ile Asn Ala Arg Phe Phe
        35                  40                  45
Ser Asn Gly Phe Leu Phe Thr Ala Phe Gly Gln Gln Ala Leu Ile Asn
    50                  55                  60
Met Gly Ile Glu Lys Tyr Gly Leu Lys Gly Ala Thr Asp Pro Glu Lys
65                  70                  75                  80
Val Ser His Pro Val Pro Leu Tyr Glu Thr Asn Lys Val Asn Arg Thr
                85                  90                  95
```

```
Gln Val Ile Thr Gly Leu Asn Lys Leu Val Asn Pro Ser Leu Pro Leu
            100                 105                 110
His Ile Ala Lys Gly Glu Glu Tyr Gly Phe Asp Thr His Met Trp Val
        115                 120                 125
Pro Tyr Leu Gln Gln Asn Leu Ala Met Asp Val Lys Val Ile Pro Pro
    130                 135                 140
Glu Asn Leu Arg Leu Val Pro Ala Xaa Thr Pro Gly Gly Leu Lys Leu
145                 150                 155                 160
Tyr Cys Leu Ser Ser Pro Asp Cys Lys Pro Pro Gln Val Thr Asn Glu
                165                 170                 175
Ser Trp Ala Ile Val Tyr Lys Thr Phe
            180                 185

<210> 34135
<211> 346
<212> PRT
<213> A.fumigatus

<400> 34135
Cys Ser Val His Ile Ala Trp Asn Gly Val Leu Val Asn Lys Trp Asn
1               5                   10                  15
Arg Ala Leu Asp Leu Met Ala Glu Thr Phe Glu Gly Ser Gly Ala Ser
            20                  25                  30
Val Leu Cys Ala Gly Ser Leu Met Glu Pro Asp Gln Met Ile Glu Ile
        35                  40                  45
Leu Leu Glu Tyr Arg Val Asn Ala Ile Ala Gly Asp Thr Ser Gln Ile
    50                  55                  60
Met Gln Leu Ser Arg Tyr Ile Cys Thr Leu Pro Asp Asp Thr Arg Lys
65                  70                  75                  80
Gln Leu Leu Ile Asn Lys Val Ile Tyr Thr Ser Glu Pro Met Thr Pro
                85                  90                  95
Val Gln Arg Lys Phe Leu Ser Ser Val Phe Pro Asn Val Ala Val Ser
            100                 105                 110
Ser Val Ile Gly Ser Ala Glu Ala Gly Pro Trp Ala Thr Ser Pro Ala
        115                 120                 125
Gln Leu Thr Glu Ala Ser Lys Gly Gln Asn Tyr Ala Asp Phe Val Tyr
    130                 135                 140
Asp Gln Arg Leu Met His Leu Glu Val Phe Pro Phe Asp Ile Glu Glu
145                 150                 155                 160
Ser Asp Gly Ala Gly Leu Ala Ser Ala Arg Pro Val Pro Asp Gly Glu
                165                 170                 175
Lys Gly Leu Leu Val Gln Thr Ser Leu Gln Arg Met Arg His Pro Leu
            180                 185                 190
Ile Arg Tyr Ile Cys Gly Asp Val Cys Ser Leu His Pro Leu Pro Ala
        195                 200                 205
Ser Met Lys Asn Ile Ile Pro Ala Glu Asp Ala Ala His Tyr Lys Val
    210                 215                 220
Ala Arg Leu Tyr Gly Arg Asp Arg Arg Ile Ser Phe Asp Trp Tyr Gly
225                 230                 235                 240
Glu Tyr Phe Glu Phe Ala Val Ile Gln Asp Ala Met Arg Thr Glu Ser
                245                 250                 255
Trp Gly Ile Leu Gln Tyr Gln Ile Ile Arg Arg Tyr Asn Gly Gly Asp
            260                 265                 270
Lys Asn Asn Leu Asp Ile Val Leu Glu Leu Arg Val Leu Arg His Asn
        275                 280                 285
Glu Pro Gly Ala Ile Ser Thr Asp Glu Leu Thr Arg Glu Leu Arg Lys
```

```
    290                 295                 300
Leu Phe Trp Val Phe Glu Asn Asn Glu Glu Leu Phe Asp Leu Arg Tyr
305                 310                 315                 320
Leu Gln Ser Tyr Ala Gly Phe Val Arg Ser Ser Thr Gly Arg Lys Val
                325                 330                 335
Ile Asn Phe Ile Asp Glu Thr Gln Ile Glu
            340                 345
```

<210> 34136
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34136

```
His Arg Phe Leu Gln Asn Ile Pro Ala Ile Cys Leu Asn Val Gly Pro
1               5                   10                  15
Met Leu Asn Gly Tyr Met Lys Asn Glu Leu Ala Gly Ser Gly Met Val
            20                  25                  30
Val Trp Lys Gly Arg Glu Lys Tyr Ala Ala Gly Glu Ile Ser Arg Glu
        35                  40                  45
Glu Phe Ile Asp Tyr Val Ser Arg Gly Tyr Val Pro Thr Ser Val Arg
    50                  55                  60
```

<210> 34137
<211> 455
<212> PRT
<213> A.fumigatus

<400> 34137

```
Arg Thr Ser Ser Pro Ala Gln Val Trp Trp Tyr Gly Lys Ala Glu Lys
1               5                   10                  15
Ser Met Pro Leu Ala Arg Ser Val Glu Arg Ser Ser Ser Ile Thr Cys
            20                  25                  30
Pro Glu Gly Met Ser Arg Leu Gln Ser Asp Asp Ser Arg Ile Leu Thr
        35                  40                  45
Leu Cys Arg Ala Pro Ser Val Gly His Cys Asn Thr Met Gly Thr Ala
    50                  55                  60
Ser Thr Met Asn Ala Leu Ala Glu Ala Leu Gly Met Ala Leu Pro Gly
65                  70                  75                  80
Ser Ala Ala Ile Pro Ala Pro Tyr Arg Glu Arg Gly Gln Cys Ala Tyr
                85                  90                  95
Asp Thr Gly Leu Gln Ile Val Glu Met Val His Ala Asp Arg Lys Pro
            100                 105                 110
Ser Asp Ile Met Thr Arg Glu Ala Phe Glu Asn Ala Ile Val Val Asn
        115                 120                 125
Thr Ala Ile Gly Gly Ser Thr Asn Ala Pro Ile His Ile Gly Ala Ile
    130                 135                 140
Ala Lys His Ile Gly Val Asp Leu Ser Leu Asp Asp Trp Asp Arg Leu
145                 150                 155                 160
Gly Phe His Ile Pro Leu Leu Val Asn Met Gln Pro Ala Gly Glu Leu
                165                 170                 175
Leu Gly Glu Glu Tyr Tyr Arg Ala Gly Gly Leu Pro Ala Val Met Ala
            180                 185                 190
Glu Leu Leu Asp Ala Gly Lys Leu His Ala Asp Ile Leu Thr Cys Asn
        195                 200                 205
Gly Arg Thr Val Lys Glu Asn Val Gln Gly Lys His Thr Trp Asp Arg
```

```
    210                 215                 220
Arg Met Ile Arg Ala Tyr Asp Asp Pro Leu Met Lys Asp Ala Gly Phe
225                 230                 235                 240
Leu His Leu Lys Gly Thr Leu Phe Asn Ser Ala Ile Met Lys Thr Cys
                245                 250                 255
Val Ile Ser Thr Glu Phe Arg Gln Lys Phe Leu Glu Asn Pro Asp Asp
            260                 265                 270
Pro Asn Ala Phe Glu Gly Ala Val Ile Val Phe Asp Gly Pro Glu Asp
        275                 280                 285
Tyr His His Arg Leu Glu Asp Pro Asn Thr Pro Ile Asp Asp Arg Thr
    290                 295                 300
Ile Leu Ile Met Arg Gly Ala Gly Pro Leu Gly Tyr Pro Gly Ala Ala
305                 310                 315                 320
Glu Val Val Asn Met His Pro Pro Gly Arg Leu Leu Arg Gln Gly Val
                325                 330                 335
His Ser Leu Pro Cys Ile Gly Asp Gly Arg Gln Ser Gly Thr Ser Gly
            340                 345                 350
Ser Pro Ser Ile Leu Asn Ala Ser Pro Glu Ala Ala Ala Gly Gly Asn
        355                 360                 365
Leu Ala Leu Leu Arg Asp Gly Asp Arg Leu Arg Val Asp Leu Asn Lys
    370                 375                 380
Arg His Val Asp Ile Leu Val Pro Ala Glu Glu Leu Glu Lys Arg Lys
385                 390                 395                 400
Lys Ala Leu Glu Ala Asn Gly Gly Tyr Gly Val Pro Glu Ser Gln Thr
                405                 410                 415
Pro Trp Gln Asp Leu Phe Arg Arg Glu Val Ala Gln Leu Ser Glu Gly
            420                 425                 430
Met Val Leu Arg Glu Ala Val Lys Tyr Gln Arg Leu Ala Gln Arg Phe
        435                 440                 445
Glu Glu Pro Arg His Asn His
    450                 455

<210> 34138
<211> 232
<212> PRT
<213> A.fumigatus

<400> 34138
Asp His Gln Glu Asp Leu Thr Met Pro Cys Asn Pro Gln Ala Ser Ala
1               5                   10                  15
Ser Cys Glu Gly Cys Ser Cys Asp Ala Gly Ala Asn Arg Ala Pro Val
            20                  25                  30
Asn Ile Glu Asp Cys Glu Pro Glu Leu Leu Ala Leu Arg Arg Arg Thr
        35                  40                  45
Leu Glu Leu Glu Lys Ser Leu Ala Ser Met Thr Ala Gly Ala Ala Lys
    50                  55                  60
Val Ser Arg Ala Gly Arg Lys Leu Arg Ser Ser Arg Trp Phe Asn Cys
65                  70                  75                  80
Glu Asn Asp Pro Gly Met Met Ala Leu Tyr Ile Glu Arg Tyr Leu Asn
                85                  90                  95
Tyr Gly Met Thr Lys Glu Glu Leu Met Ser Gly Lys Pro Ile Ile Gly
            100                 105                 110
Ile Ala Gln Ser Gly Ser Asp Leu Ala Pro Cys Asn Arg His His Leu
        115                 120                 125
Glu Leu Val Lys Arg Val Arg Glu Gly Ile Arg Ala Ala Gly Gly Val
    130                 135                 140
```

```
Pro Phe Glu Phe Pro Thr His Pro Ile Gln Glu Ser Ser Arg Arg Pro
145                 150                 155                 160
Thr Ala Ala Ile Asp Arg Asn Leu Ser Tyr Leu Gly Leu Val Glu Ile
                165                 170                 175
Leu His Gly Tyr Phe Leu Asp Gly Val Val Leu Leu Thr Gly Cys Asp
            180                 185                 190
Lys Thr Thr Pro Ala Ala Leu Met Ala Ala Ala Thr Val Val Cys Asp
        195                 200                 205
Leu Cys Ser Pro Leu Pro Gly Ala Glu Pro Phe Leu Thr Pro Phe Ser
    210                 215                 220
Thr Glu His Ser Arg Asn Met Pro
225                 230
```

<210> 34139
<211> 238
<212> PRT
<213> A.fumigatus

```
<400> 34139
Val Arg Ser Gln Arg Gly Gly Ser Lys Gly Trp Asn Leu Arg Cys Pro
1               5                   10                  15
Cys Arg Asp Asn Pro Val Lys Lys Glu Asp Ala Gln Leu Leu Leu Asn
            20                  25                  30
Asn Leu Gly Leu Ser Val Lys Pro Asp Glu Val Asp Asp Phe Arg Thr
        35                  40                  45
Leu Leu Ala Ala Val His Asp Cys Ala Glu Asp Val Ala Lys Leu Pro
    50                  55                  60
Asp Tyr Gln Pro Val Pro Asp Leu Ser Arg Tyr Pro Arg Gln Asn Ile
65                  70                  75                  80
Arg Arg Pro Ser Pro Glu Glu Gln Val Phe Gly Gln Ala Trp Ala His
                85                  90                  95
Lys Phe Leu Ile Lys Gly Asn Ala Asp Gly Gly Pro Leu Ala Gly Lys
            100                 105                 110
Thr Val Ser Leu Lys Asp Cys Ile Ala Val Ala Gly Val Pro Gln Leu
        115                 120                 125
Leu Gly Ser Asp Val Ile Pro Ser Trp Thr Pro Ile Thr Asp Ala Thr
    130                 135                 140
Val Val Thr Arg Ile Leu Asp Ala Gly Ala Asp Ile Leu Gly Thr Ser
145                 150                 155                 160
Thr Cys Glu Asn Phe Cys His Ser Thr Gly Ser Tyr Thr Ser Ala Gln
                165                 170                 175
Gly Val Val Glu Asn Pro Phe Ala Ala Gly Tyr Ser Ala Gly Gly Ser
            180                 185                 190
Thr Ser Gly Gly Ala Ala Leu Val Ala Gly Gly Leu Val Asp Ile Thr
        195                 200                 205
Ile Gly Gly Asp Gln Gly Gly Ser Ile Arg Val Pro Ala Ser Leu Cys
    210                 215                 220
Gly Cys Met Ile Ala Pro His Gln Thr Val Ala Trp Pro His
225                 230                 235
```

<210> 34140
<211> 150
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34140
Tyr Leu Gly Thr Gly Asp Xaa Trp Thr Lys Ile Asp Tyr Ser Lys Lys
1 5 10 15
Ala Glu Glu Trp Met Lys Pro Leu Val Pro Gly Arg Glu Thr Gly Leu
20 25 30
Val Glu Ile Pro Ala Asn Trp Tyr Met Asp Asp Leu Pro Pro Met Met
35 40 45
Phe Ile Lys Ala Ala Ser Asn Ser His Gly Phe Val Asn Pro Arg Asp
50 55 60
Val Glu Asp Ile Trp Arg Asp His Phe Asp Tyr Phe Tyr Arg Glu Tyr
65 70 75 80
Asp Thr Phe Ile Phe Pro Ile Thr Ile His Pro Asp Val Phe Gly Arg
85 90 95
Pro Pro Val Leu Leu Met His Glu Arg Leu Ile Glu His Phe Lys Lys
100 105 110
His Asp Gly Val Glu Phe Val Thr Met Glu Gln Val Cys Asp Ile Phe
115 120 125
Lys Lys Glu Asn Pro Pro Pro Ala Gly Ala Leu Met Pro Ala Glu Pro
130 135 140
Gly Ala Ile Leu Lys Lys
145 150

<210> 34141
<211> 67
<212> PRT
<213> A.fumigatus

<400> 34141
Pro Lys Pro Phe Gly Ser Arg Tyr Glu Leu Lys Ile Ala Glu Met Gly
1 5 10 15
Lys Lys Arg Val Leu Val Thr Tyr Gly Val Asp Val Asp Ala Val Ala
20 25 30
Gly Trp Leu Gly Ser Tyr Gly Gly Glu Asp Ser Thr Asn Asp Ile Ser
35 40 45
Arg Gly Glu Ser Cys Gly Gln Arg Gly Phe Ala Gly Ser Ser Trp Leu
50 55 60
Thr Arg Pro
65

<210> 34142
<211> 94
<212> PRT
<213> A.fumigatus

<400> 34142
Thr Gly Val Trp Ala Gly Thr Val Gly Thr Arg Arg Leu Leu Lys Phe
1 5 10 15
Phe Asp Lys Tyr Gly Ile Lys Ala Thr Trp Phe Ile Pro Gly His Ser
20 25 30
Leu Glu Ser Phe Pro Glu Asp Met Ala Ala Val Arg Asp Ala Gly His
35 40 45
Glu Ile Gly Leu His Gly Tyr Ser His Glu Asn Pro Lys Asp Met Thr

```
    50                  55                  60
Ile Glu Gln Gln Arg Asp Val Leu Asp Lys Thr Tyr Arg Met Leu Thr
65                  70                  75                  80
Glu Phe Cys Gly Lys Pro Pro Arg Gly Ser Val Ala Pro Trp
                85                  90
```

<210> 34143
<211> 142
<212> PRT
<213> A.fumigatus

<400> 34143

```
Leu Asn Pro Ile Val Ile Phe Ala Thr Gly Ile Leu Ser Ile Pro Ser
1               5                   10                  15
Val Met Tyr Asp Leu Gly Ala Phe Pro Gly Ala Val Asn Leu Val Gly
            20                  25                  30
Trp Cys Val Leu Asn Ala Tyr Gly Ala Ile Val Leu Gly Asn Phe Arg
        35                  40                  45
Asn Ser Tyr Pro Gly Cys His Ser Ile Val Asp Met Val His Leu Ala
    50                  55                  60
Gly Gly Arg Trp Gly Pro Leu Met Arg Glu Ile Val Gly Val Met Phe
65                  70                  75                  80
Ile Ile Ala Tyr Val Ile Val Ala Ser Ser Gly Ile Ile Gly Val Ser
                85                  90                  95
Ala Ala Phe Asn Ala Leu Ser Arg His Ala Met Cys Thr Val Tyr Trp
            100                 105                 110
Ser Leu Val Ser Thr Ala Ile Val Ala Leu Phe Ala Ser Val Arg Lys
        115                 120                 125
Phe Ala His Val Val Phe Ala Thr Arg Trp Lys Ile Arg Val
    130                 135                 140
```

<210> 34144
<211> 108
<212> PRT
<213> A.fumigatus

<400> 34144

```
Lys Ala Lys His Lys Pro Gln Glu Gly Thr Ala His Thr Ile Ser Phe
1               5                   10                  15
Lys Ser Leu Ser Leu Phe Ser Pro Ser Pro Pro Pro Pro Phe Ser Pro
            20                  25                  30
Pro Ala Pro His Pro Pro Ala Val Pro Pro Ile Gln Pro Ser Thr Arg
        35                  40                  45
Arg Ser Pro Pro Ala Gln Pro His Thr Ser Ala Ala Thr Pro Ala Leu
    50                  55                  60
Ser Gly Arg Gly Ala Gln Ile Ser Pro Ser Pro Val Pro Pro Gly Tyr
65                  70                  75                  80
Glu Pro Ile Asp Pro Asp Ala Ala Ala Ala Gly Arg Glu Thr Pro Thr
                85                  90                  95
Leu Gly Arg Pro Gly Gln Ala Gly His Leu Thr Lys
            100                 105
```

<210> 34145
<211> 138
<212> PRT
<213> A.fumigatus

<400> 34145
Gln Asn Ser Asp Asp Arg Phe Pro Asp Leu Phe Arg Pro Thr Pro Ser
1 5 10 15
Gln Ser Val Pro Glu Asn Leu Thr Thr Gln Asn Leu Ala Ser Ile Val
20 25 30
Leu Ser Tyr Ala Ser Ala Phe Pro Glu Thr Ala Ser Arg Leu Thr Ser
35 40 45
Leu Asn Asp Leu Pro Val Pro Asp Ala Gln Ala Ser Ala Ser Leu Val
50 55 60
Gln Leu Gln Pro Arg Leu Asp Gln Leu Ala Arg Thr Gln Glu Glu Gln
65 70 75 80
Ala Arg Glu Ile Ser Glu Leu Arg Val Arg Thr Ala Arg Val Leu Gln
85 90 95
Arg Trp Tyr Glu Val Gly Leu Val Gly Ser Gly Glu Cys Trp Ala Glu
100 105 110
Trp Glu Gly Arg Leu Glu Asp Val Glu Arg Glu Val Lys Arg Glu Glu
115 120 125
Val Val Arg Glu Arg Arg Ala Arg Glu Ile
130 135

<210> 34146
<211> 79
<212> PRT
<213> A.fumigatus

<400> 34146
Ala Thr Pro Val Arg Ala Gly Arg Phe Ser Asn Val Leu Ala Glu Phe
1 5 10 15
Lys Glu Tyr Gln Lys Arg Ser Gly Trp Ile Ile Ala Phe Ile Gly Ala
20 25 30
Ser Asn Val Phe Tyr Gln Asn Ala Arg Glu Tyr Thr Thr Thr Gln Phe
35 40 45
Gly Thr Glu Arg Val Leu Asn Leu Ile Thr Asn Asp Val Leu Asn Glu
50 55 60
Arg Ala Gly Lys Arg Ile Ile Val Gln Ser Lys Asn Cys Ser Ile
65 70 75

<210> 34147
<211> 156
<212> PRT
<213> A.fumigatus

<400> 34147
Tyr Ser His Ile Gly Gln Tyr Pro Cys His Arg Glu Tyr Ser Ser Leu
1 5 10 15
Cys Phe Thr Ser Leu Ala Cys Ser Lys Ala Arg Arg Gln Lys Met Leu
20 25 30
Gly Thr Arg Gly Glu Gln Val Val Asp Leu Arg Asp Gly Val Gly Thr
35 40 45
Thr Gly Asn Ser Leu Leu Ala Ala Leu Ala Leu Pro Asp Thr Asn Ser
50 55 60
Leu Ala Leu Asp Gly Val Leu Ser Ala Glu Gly Ala Asp Val Ala Gly
65 70 75 80
Val Leu Gly Asp Phe His Leu Leu His Leu Leu Thr Gln Gly Gly Thr
85 90 95

```
Val Ser Val Met Asn Lys Pro Cys Gln Pro Thr Ile Leu Ala Leu Pro
            100                 105                 110
Asn Ser Ile Phe His Ala Leu Asn Ser Gly Phe Asn Gly Val Glu Arg
        115                 120                 125
Ile Ala Asp Asp Phe Arg Ser Ile Val Arg Gly Ala Arg Ala Lys Ser
    130                 135                 140
Ile Pro Gly Thr Ile Phe Thr Arg Asp Thr Asp Leu
145                 150                 155
```

<210> 34148
<211> 92
<212> PRT
<213> A.fumigatus

<400> 34148

```
Cys His Ile Val Lys Leu Phe Glu Phe Ser Val His Ser Ile Leu Pro
1               5                   10                  15
Ser Arg Phe Asp Ser Pro Arg Ile Thr Thr Asp Met Glu Ser Glu Lys
            20                  25                  30
Glu Phe Asp Leu Val Leu Val Gly Pro Thr Gly Tyr Thr Gly Arg Leu
        35                  40                  45
Cys Ala Glu His Ile Val Lys Asn Leu Pro Thr Asn Leu Lys Trp Ala
    50                  55                  60
Leu Ala Gly Arg Ser Val Gln Lys Ile Glu Val Ile Ala Lys Glu Leu
65                  70                  75                  80
Lys Thr Leu Asn Pro Asp Arg Ala Ala Pro Gly Lys
                85                  90
```

<210> 34149
<211> 62
<212> PRT
<213> A.fumigatus

<400> 34149

```
Leu Asn Phe Ala Lys Ser Arg Thr Leu Ser Glu Pro Thr His Asn Gln
1               5                   10                  15
Ser Leu Lys Lys Ala Ala Gly Ser Ile Ser Ser Tyr Arg Thr Val Ser
            20                  25                  30
Ile Phe Asp Leu Asn Ser Arg Thr Arg Asp Lys Met Thr Lys Arg Thr
        35                  40                  45
Lys Ser Glu Cys Ile Arg Ser Arg Leu Thr Thr Glu Lys Arg
    50                  55                  60
```

<210> 34150
<211> 66
<212> PRT
<213> A.fumigatus

<400> 34150

```
Asn Gly Trp Leu Thr Trp Leu Val His Tyr Arg Tyr Gly Ala Ser Leu
1               5                   10                  15
Arg Lys Gln Val Lys Lys Met Glu Ile Thr Gln His Ala Arg Tyr Val
            20                  25                  30
Cys Thr Phe Cys Gly Lys Asn Thr Val Lys Arg Gln Ala Val Gly Ile
        35                  40                  45
Trp Glu Cys Lys Gly Cys Lys Lys Thr Val Ala Gly Gly Ala Tyr Thr
```

```
    50                  55                  60
Val Ser
65

<210> 34151
<211> 112
<212> PRT
<213> A.fumigatus

<400> 34151
Ala Asn Asn Ser His Arg Thr Thr Ala Glu Thr Arg Lys Phe Ile Asp
1               5                  10                  15
Glu Phe Ile Lys Ala Val Pro Arg Ser Arg Asn Ala Gln Leu Ala Arg
            20                  25                  30
Leu Asp Leu Ile Asp Trp Ser Phe Lys Ser Gly Ser Leu Lys Ser His
        35                  40                  45
Glu Leu Ile Thr Ala Cys Gln Glu Tyr Phe Asp Arg Asn Lys Thr Lys
    50                  55                  60
Leu Tyr Cys Phe Val Asp Leu Arg Lys Tyr Leu Ser Asp Leu Asp Lys
65                  70                  75                  80
Ala Ser Leu Thr Glu Phe Ile Gln Tyr Ala Ser Arg Thr Ala Gly Ile
                85                  90                  95
Gln Gly Asp Val Cys Pro Thr Met Ile Ala Leu Tyr Val Leu Tyr Tyr
            100                 105                 110

<210> 34152
<211> 130
<212> PRT
<213> A.fumigatus

<400> 34152
Ser Asn Leu Gly Ile Ile Ala Thr Leu Thr Pro Gln Ser Tyr Leu Thr
1               5                  10                  15
Pro Asn Asn Ile Ala Asp Pro Gly Met Ile Glu Gln Phe Gly Ala Asp
            20                  25                  30
Trp Gly Leu Asn Ala Arg Gly Ile Tyr Tyr Arg His Phe Tyr Ser Pro
        35                  40                  45
Gly Trp Val Thr Ser Asp His Glu Leu Trp Leu Pro Ser Leu Asp Gly
    50                  55                  60
Ile Asp Trp Asn His Phe Ser Glu Ser Ser Arg Leu Ser Arg Ala Glu
65                  70                  75                  80
Ala Phe Leu Lys His Val Leu Asn Asn Glu Arg Trp Lys Lys Ser Glu
                85                  90                  95
Tyr Ala Trp Glu Ala Asp Ala Trp Ser Asp Val Phe Gly Gln Met Lys
            100                 105                 110
Asn Asp Pro Val Leu Ala Val Ser Val Ser Pro His Cys Cys Ser Leu
        115                 120                 125
Ser Asn
    130

<210> 34153
<211> 422
<212> PRT
<213> A.fumigatus

<400> 34153
```

```
Tyr Ser Ser Ile Ile Val Pro Leu Ser Thr Lys Ser Lys Met Pro Arg
1               5                  10                  15
Ser Gln Ala Phe His Ala Gly Arg Gln Pro Leu Gln Asp Gln Arg Val
            20                  25                  30
Pro Leu Gly Ser Ala His Ile Ser Gly Pro Leu Ala Phe Cys Asn Pro
        35                  40                  45
Thr Arg Ala His Phe Pro Leu Ser Thr His Ser Gln Leu His Gln Glu
    50                  55                  60
Pro Val Glu Lys Pro Arg Ile Glu Arg Leu Trp Arg Ser Arg Asp Asn
65                  70                  75                  80
Arg Lys Gly Arg His Ala Leu Thr Ile His Gln Arg Pro Pro Gly Leu
                85                  90                  95
Ala Gly Lys Thr Tyr Pro Arg Lys Thr Ile His Pro Ile Ala Ile Ala
            100                 105                 110
Asn Gly Ile Leu Arg Met Phe Thr Thr Phe Pro Tyr Trp Asp Ile Ser
        115                 120                 125
Phe Trp Val Ala Leu Val Phe Thr Val Gly Ser Gly Ile Trp Val Ile
    130                 135                 140
Asn Ala Phe Phe Val Trp Leu Pro Leu Glu Asp Pro Ser Thr Glu Phe
145                 150                 155                 160
Ala Asn Glu Val Leu Thr Gly Gly Gly Val Thr Ala Phe Ile Gly Ala
                165                 170                 175
Thr Val Phe Glu Phe Gly Ser Ile Leu Leu Val Leu Glu Ala Val Asn
            180                 185                 190
Glu Asn Gln Thr Gly Cys Phe Gly Trp Ala Val Glu Thr Ala Ala Lys
        195                 200                 205
Glu Ala Thr Asp Ala Ala Glu Glu Ala Val Val Arg Ile Lys Ser Asp
    210                 215                 220
Arg Asp Leu Cys Arg His His His Ala Asn Arg Arg Ser Phe Leu Ser
225                 230                 235                 240
Pro Ser Glu Ala Arg Gln Asp Ser Asn Glu Gln Thr Gly Ile Ala Arg
                245                 250                 255
Arg Arg Ser Phe Ala Trp Leu Pro Thr Leu Asn Glu Leu Arg Ser His
            260                 265                 270
Tyr Arg His Glu Ile Gly Phe Trp Ala Ser Ala Val Gln Leu Val Gly
        275                 280                 285
Ala Thr Ile Phe Trp Ile Ala Gly Phe Thr Gly Leu Pro Gly Ile Met
    290                 295                 300
Asn His Thr Ser Pro Ala Val Thr Asn Gly Val Phe Trp Val Pro Gln
305                 310                 315                 320
Ile Val Gly Gly Ala Cys Phe Ile Leu Ser Gly Leu Leu Phe Ala Ile
                325                 330                 335
Glu Thr Gln Pro Lys Trp Tyr Ile Pro Ala Met His Ile Leu Gly Trp
            340                 345                 350
His Ile Gly Phe Trp Asn Phe Ile Gly Gly Ile Gly Phe Thr Leu Cys
        355                 360                 365
Gly Ala Leu Gly Pro Ala Thr Ala Asn Ser Gly Val Glu Tyr Gln Ser
    370                 375                 380
Thr Leu Ala Thr Phe Trp Gly Ser Trp Ala Phe Leu Trp Gly Ser Val
385                 390                 395                 400
Ile Gln Trp Tyr Glu Ser Leu Glu Lys His Pro Val Glu Glu Lys His
                405                 410                 415
Pro Val Glu Glu Lys Gln
            420
```

<210> 34154

<211> 172
<212> PRT
<213> A.fumigatus

<400> 34154
Thr Leu Ala Arg Ile Phe Ala Val Val Val Lys Thr Leu Leu Pro Arg
1 5 10 15
Leu His Leu His Ala Ala Ala Pro Gln Pro Arg Pro Gln Pro Pro Leu
20 25 30
Cys Ala Arg His Arg Arg Arg Leu Arg Gln Pro Pro Val Pro Leu Arg
35 40 45
Arg Arg Arg Thr Arg Pro Pro Ala Arg Gly Val Glu Gly Pro Pro Pro
50 55 60
Pro Ser Val Ser Val His Cys Arg Pro Pro Ser Pro Ala Leu His Arg
65 70 75 80
Arg Arg Ile Pro Ala Pro Ala Leu Pro His Leu Gln Glu Arg His Leu
85 90 95
Pro Ala Leu Pro His Leu Gly Ala Val Asp Asp Arg His Arg Asp Gly
100 105 110
Gly Ala Phe Pro Ala Ala Ala Leu Gly Arg Met Gln Asp Leu Ser Arg
115 120 125
Gly Val Leu Ala Ala Cys Ala Glu Leu Gly Glu Leu Ser Ala Tyr Gly
130 135 140
Ala Gly Gly Tyr Val Asp Leu Leu Val Val Val Trp Ile Phe Met Ala
145 150 155 160
Arg Asp Pro Trp Leu Trp Ile Thr Leu Met Met Val
165 170

<210> 34155
<211> 158
<212> PRT
<213> A.fumigatus

<400> 34155
Arg Leu Tyr Cys Leu Ala Cys Ile Ser Met Arg Arg Leu Leu Asn Arg
1 5 10 15
Val His Asn Leu Leu Tyr Ala Arg Asp Thr Gly Val Ala Phe Asp Asn
20 25 30
His Gln Phe Pro Ser Val Val Ala Glu Leu Ala His Gln Leu Glu Glu
35 40 45
Trp Lys Asp Leu Leu Pro Pro Pro Phe Gln Phe Thr Val Asp Pro Arg
50 55 60
Pro Leu Pro Cys Thr Ala Ala Ala Phe Leu Arg Gln Arg Tyr Leu Thr
65 70 75 80
Cys Lys Ser Val Ile Tyr Arg Pro Tyr Leu Thr Trp Ala Leu Ser Met
85 90 95
Thr Ala Thr Ala Thr Val Glu His Phe Pro Pro Gln Leu Leu Glu Gly
100 105 110
Cys Lys Ile Cys Leu Glu Ala Cys Trp Leu His Ala Gln Asn Leu Gly
115 120 125
Ser Tyr Pro His Thr Val Leu Val Asp Thr Trp Ile Cys Ser Leu Ser
130 135 140
Tyr Gly Ser Leu Trp Pro Gly Thr Leu Gly Phe Gly Ser Arg
145 150 155

<210> 34156

<211> 360
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (40),(290),(335),(344),(345),(359)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34156

```
Leu Glu Thr Ile Lys Ile Tyr Ala Val Arg Met Lys Glu Ile Ser Gln
1               5                  10                  15
Asp Ile Tyr Asn Cys His Pro Cys Ser Gln Ser Arg Tyr Gln Arg Arg
            20                  25                  30
Gln Ala Phe Thr Met Arg Leu Xaa Cys Leu Leu Phe Met Ala Ile Val
        35                  40                  45
Gly Thr Phe Ser Ser His Ala Ile His His Gln Pro Ser Gln Asp Thr
    50                  55                  60
Leu Arg Phe Gly Thr Pro Glu Ser Val Gly Leu Leu Ser Ala Pro Leu
65                  70                  75                  80
Arg Gln Leu Val Ala Asn Ile Thr Gly Tyr Gln Gln Pro Ala Asn Tyr
                85                  90                  95
Gly Gly Phe Ser His Asn Glu Met His Pro Ile Glu Pro Ser Ser Ala
            100                 105                 110
Val Ile Val Gly His Asp Arg Thr Ile Val Ser Leu Phe Ala Ser Gly
        115                 120                 125
Asn Met Leu Leu Tyr Ala Asp Ala Asn Gly Thr Glu Leu Pro Arg Gly
    130                 135                 140
Gln Gln Leu Ser Ala Arg Pro Asp Thr Ile Tyr Asp Leu Ala Ser Leu
145                 150                 155                 160
Thr Lys Leu Phe Thr Thr Ile Ala Ala Leu Arg Glu Ile Asp Thr Gly
                165                 170                 175
Arg Leu Ala Leu Asp Gln Thr Val Ala Ser Tyr Met Pro Ser Phe Ala
            180                 185                 190
Ala Asn Gly Lys Glu Asn Ile Thr Ile Leu Met Leu Leu Thr His Thr
        195                 200                 205
Ser Gly Phe Ala Pro Asp Pro Glu Pro Pro Leu Tyr Asp Pro Val Tyr
    210                 215                 220
Thr Thr Val Glu Gln Arg Thr Ala Ala Ile Leu Asn Gln Ser Leu Leu
225                 230                 235                 240
His Ala Pro Gly Ser Thr Tyr Leu Tyr Ser Asp Leu Asn Phe Met Ser
                245                 250                 255
Leu Gly Leu Leu Leu Glu His Ile Thr His Lys Ala Leu Asp Glu Leu
            260                 265                 270
Ile Arg Glu Tyr Thr Asp Pro Leu Gly Met His Asp Thr Phe Phe Asn
        275                 280                 285
Arg Xaa Asn Ile Glu Gly Pro Ala Phe Pro Phe Tyr Pro Arg Met Ala
    290                 295                 300
Ala Glu Glu Tyr Gln Ile Glu Val Leu Gly Ser Met Glu Ala Ala Arg
305                 310                 315                 320
Pro Gln Pro Val Arg Gly Thr Val His Asp Glu Asn Ala Leu Xaa Ser
                325                 330                 335
Gly Trp Gly Gly Arg Thr Arg Xaa Xaa Leu Leu Glu Arg Arg Arg Tyr
            340                 345                 350
Ser Gln Ser Leu Pro Lys Xaa Ser
        355                 360
```

<210> 34157
<211> 156
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(32)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34157
Lys Ala Pro Gly Ala Leu Leu Glu Ser Arg Thr Glu Asn Ile Glu Gly
1 5 10 15
Xaa Gly Phe Gln Ile Ala Gln Pro Trp Ser Gly Tyr Ala Val His Xaa
20 25 30
Thr Thr Leu Ser Arg Pro Ala Phe Trp Gly Asn Leu Leu Leu Leu Phe
35 40 45
Leu Cys His Lys Ala Thr Ile Leu Trp Glu Gly Asn Ser His Ala Leu
50 55 60
Ala Met Gln Ala Leu Gly Val Trp Met Phe Ile Ser Lys Phe Ile Lys
65 70 75 80
Leu Leu Gly His Tyr Ile Arg Tyr Pro Val Asp Val Leu Leu Leu Pro
85 90 95
Val Ser Ile Leu Phe Gly Tyr Phe His Gly Gly Ile Lys Met Tyr Ala
100 105 110
Val Leu Thr Leu Asn Val Val Ser Ile Pro Phe Ser Gln Ser Leu Leu
115 120 125
Ala Cys Thr Lys His Gly Val Asp Ser Ser Leu Leu Cys Pro Glu Ile
130 135 140
Gln Met Leu Arg Asn Phe Phe Phe Phe Tyr Val Ser
145 150 155

<210> 34158
<211> 307
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (43)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34158
Cys Arg Gln Thr Thr Ile Ala Gly Val Lys Thr Ile Val Asp Ser Arg
1 5 10 15
Glu Ala Ile Leu Glu Lys Cys Arg Cys Gln Glu Lys Ala Arg Tyr Leu
20 25 30
Thr Leu Ser Phe Val Arg Ile Val Asn Ser Xaa Ser Ala Leu His Lys
35 40 45
Thr Asp Phe Ser Phe Cys Val Asp Gly Glu Tyr Gln Val Leu Leu Asp
50 55 60
Thr Arg Pro Ile Arg Thr Pro Thr Lys Asp Ile Leu Ser Ile Pro Ser
65 70 75 80
Thr Lys Pro His Leu Ala His Ala Ile Ala Leu Glu Trp Asp Val Met
85 90 95

```
Thr Ser Ala Arg Gln Ala Leu Lys Asn His Leu Ile Pro Leu Thr Ser
            100                 105                 110
Leu Thr Ala Arg Ala Gly Asp Ile Ala Gln Glu Asp Ala Arg Gly Glu
        115                 120                 125
Thr Thr Thr Arg Asp Gln Ile Val Lys Leu Ala Met Arg Tyr Leu Asp
    130                 135                 140
Thr Asp Thr Leu Leu Cys Trp Val Pro Glu Arg Arg Pro Tyr Ala Gly
145                 150                 155                 160
Glu Glu Ser Gly Glu Asn Gly Glu Arg Pro Glu Ser Leu Arg Glu Ala
                165                 170                 175
Gln Met Arg Val Ala Lys Asp Ile Ile Ala Phe Leu Gly Thr Lys Val
            180                 185                 190
Trp Pro Gly Val Asp Ile Val Pro Ile Leu Asp Ala Asp Ser Ile Leu
        195                 200                 205
Pro Val Ser Gln Pro Gln Ala Thr Lys Asp Ile Ile Lys Gln Trp Val
    210                 215                 220
Ser Ser Leu Gln Pro His Asp Leu Ala Ala Leu Glu Arg Gly Ile Val
225                 230                 235                 240
Ala Ser Lys Ser Leu Leu Val Ala Val Arg Leu Val Val Glu Trp Ser
                245                 250                 255
Glu Asn Phe Arg His Leu Gln Arg Ser Gly Gln Lys Lys Phe Gly Ile
            260                 265                 270
Glu Glu Ala Ala Glu Ala Ser Ser Leu Glu Val Arg Trp Gln Thr Asp
        275                 280                 285
Met Trp Gly Glu Val Glu Asp Thr His Asp Val Asp Lys Glu Asp Leu
    290                 295                 300
Arg Arg Thr
305
```

<210> 34159
<211> 164
<212> PRT
<213> A.fumigatus

<400> 34159

```
Val Ser Phe Ser Ser Leu Ala Ser Pro Gln Arg Leu Met Asp Gln His
1               5                   10                  15
Ala His Leu Glu Ser Ser Thr Ala Arg Val Trp Gly Ala Ala Tyr His
            20                  25                  30
Ile Pro Ala Ser His Ala Glu Glu Val His Asp Tyr Leu Asp Glu Arg
        35                  40                  45
Glu Ile Asp Gly Tyr Thr Val His Tyr Thr Pro Phe His Pro Ile Ser
    50                  55                  60
Ala Val Ala Thr Ser Thr Val Ser Arg Ala Pro Glu Thr Glu Thr Val
65                  70                  75                  80
Pro Glu Thr Gln Ser Leu Ser Pro Ala His Ala Ala Pro Ile Thr Cys
                85                  90                  95
Met Val Tyr Ile Gly Gln Pro Ser Asn Pro Gln Phe Leu Arg Asp Pro
            100                 105                 110
Ala Arg Arg Glu Pro Gln Asp Val Ala Glu Val Ile Ser His Gly Arg
        115                 120                 125
Gly Gln Ser Gly Lys Asn Thr Glu Tyr Leu Tyr Leu Leu Glu Lys Ala
    130                 135                 140
Leu Glu Gly Leu Gly Leu Gly Ser Ala Asp Met His Val Thr Asp Leu
145                 150                 155                 160
Val Arg Arg Val
```

<210> 34160
<211> 254
<212> PRT
<213> A.fumigatus

<400> 34160
Val Leu Thr Thr Phe Arg Ser Ala Ser Gln Gly His Asn Gln Pro Arg
1 5 10 15
Gln Gly Ser Ser Asn Asn Leu Tyr Ser Ser Thr Phe Ser Trp Asn Ser
20 25 30
Pro Asp Ile Ser His Thr Asp Gln Arg Arg Gly Val Gly Arg Lys Ala
35 40 45
Met Ala Thr Ser Gly Ala Asp Asp Pro Gly Pro Pro Pro Thr Ser Ser
50 55 60
Ser Ser Ser Lys Gln Leu Gln Leu Asn Pro Asn Gln Ile Asp Tyr Phe
65 70 75 80
His Gln Asn Pro Asn Ala Ser Trp Ser Ser Ser Pro Lys Ile Ala Pro
85 90 95
Met Asp Ser Ser Gly Thr Phe Ser His Asp Phe Ser Glu Gln Glu Ala
100 105 110
Ser Pro Ala Ser Ala Thr Phe Arg Pro Ser Thr Gly Arg Thr Phe Ala
115 120 125
Ser Glu Pro Val Asp Phe Asp Tyr Asn Arg Asp Asp Arg Arg Pro Ser
130 135 140
Val Ala Ser Ala Thr Thr Ile Ser Ser Gln Gly Ser Lys Ser Ser Thr
145 150 155 160
Gly Gly Arg Phe Arg Lys Lys Leu Gln Gly Phe Phe Gly Asp Glu Tyr
165 170 175
Leu Pro Pro Gly Glu Ser Lys Gln Glu Gln Glu Gln Asp Thr Arg Ser
180 185 190
Leu Ser Ser Arg Pro Ala Ser Ile Asp His Phe Lys Ala Arg Glu Arg
195 200 205
Ala Asn Ser Asp Gly Ala Arg Asn Phe Pro Glu Arg Ser Gln Asp Asp
210 215 220
Thr Ser Ser Leu His Pro Ser Arg Pro Arg Thr Pro Leu Pro Ser Ser
225 230 235 240
Glu Ile Thr Pro Trp Leu Tyr Gln Ser Phe Asn Val Ser Ser
245 250

<210> 34161
<211> 473
<212> PRT
<213> A.fumigatus

<400> 34161
Asp Ile Pro Gln Phe Gly Glu Ala Pro Ile Arg Glu Val Pro Ile Ala
1 5 10 15
Pro Glu Gly Ser Arg Leu Ala Gly Gln Thr Ala Thr Asn Ser Gly Ala
20 25 30
Pro Arg Glu Ala Arg Arg His His Gly Ser His Arg His Ser Arg Ser
35 40 45
Lys Glu Glu Lys Pro Thr Val Ala Gly Asp Leu Ala Gly Tyr Pro Ala
50 55 60
Arg Pro Ala Thr Gly Arg Asp Asp Ser Tyr Leu Gly Leu Arg Pro Phe

```
65                  70                  75                  80
Arg Asp His Ser Leu Asn Ala Ser Thr Ala Met Ser Ser Thr Thr Thr
                85                  90                  95
Leu Gly Gly Arg Ser Thr Ser Pro Thr Pro Ser Ile Gln Ser Ala Tyr
            100                 105                 110
Ser Arg Glu Gln Ser Gln Asn Ser Pro Gly Ala Pro Ser Asn Lys Arg
        115                 120                 125
Ser Ile Leu Asp Lys Ile Arg Arg Thr Lys Ala His Gly Pro Leu Lys
    130                 135                 140
His Phe Pro Gly Ser Lys Ser Ala Gln Glu Ala Ser Lys Ser Ser Ser
145                 150                 155                 160
Lys Leu Ala Arg Arg Glu Ala Ser Pro Arg Arg Gly Arg Gln Gly Ser
                165                 170                 175
Leu Glu Gly Gly Thr Ser Leu Arg Asn Leu Asp Leu Gly Asp Tyr Glu
            180                 185                 190
Arg Arg Lys Asp Gly Lys Gly Ile Val Met Gly Ser Thr Lys Leu Arg
        195                 200                 205
Asn Arg Arg Gly Leu Gly Asn Glu Ala Pro Pro Gly Lys Asp Val Lys
    210                 215                 220
Leu Ser Glu Glu Pro Gly Val Trp Arg Leu Asp Thr Asp Leu Ser His
225                 230                 235                 240
Met Glu Gly Ile Val Ser Gln Gln Pro Pro Pro Ser Pro Gly Asp Lys
                245                 250                 255
Ser Lys Ala Gln Asp Gly Val Pro Pro Lys His Glu Glu Gly Lys Lys
            260                 265                 270
Ser Glu Gly Leu Pro Pro Gly His Trp Asp Ala Pro Glu Ser Trp Gln
        275                 280                 285
Val Lys Lys His Gly Glu Asp Leu Ala Ala Arg Leu Pro Asn Val Ala
    290                 295                 300
Ser Asp Ala Thr Gly Ile Ala Arg Glu Pro Asp Gly Thr Ser Tyr Phe
305                 310                 315                 320
Ile Arg Val Phe Arg Ile Asp Ser Thr Phe Ala Thr Leu Ser Ala Gly
                325                 330                 335
Leu Asn Ala Thr Val Ala Asp Ile Leu Leu Met Leu Gly Arg Lys Ser
            340                 345                 350
Phe Leu Gln Asp His Leu Asn Asn Tyr Glu Ile Val Met Lys Arg Asn
        355                 360                 365
Asp Leu Ser Arg Gln Leu Asp His Ser Glu Arg Pro Ile Leu Met Gln
    370                 375                 380
Lys Arg Leu Leu Glu Gln Val Gly Tyr Thr Ala Lys Asp Arg Ile Glu
385                 390                 395                 400
Glu Ile Gly Arg Glu Asp His Ser Tyr Ile Cys Arg Phe Ile Phe Leu
                405                 410                 415
Pro Thr Lys Leu Ser Gly Tyr Ser Ser Leu Asp Gly Asp Pro Gly Phe
            420                 425                 430
Ser Arg Met Gln Lys Phe Ser His Val Asp Leu Gln Gly Arg Ser Leu
        435                 440                 445
Val Thr Ile Pro Ile Thr Leu Tyr Lys Lys Ala Ser Glu Ile Ile Ser
    450                 455                 460
Leu Asn Leu Ser Arg Asn Leu Val Pro
465                 470
```

<210> 34162
<211> 117
<212> PRT
<213> A.fumigatus

<400> 34162
Val His Asp Pro Ile Ala His Ile Arg Ser Arg Leu His Met Ser Ser
1 5 10 15
Leu Ser Val Phe Gly Asn Phe Gly Val Ser Tyr Phe Val Thr Ile Ile
20 25 30
Arg Thr Phe Arg Asn Leu Glu Lys Leu Leu Phe Glu Lys Ser Pro Ser
35 40 45
Pro Leu Lys Glu Val Ala Leu Leu Val Arg Leu Leu Arg Thr Gln Val
50 55 60
Arg Gln Glu Lys Leu Gly Gly Thr Met Ala Ala Thr Val Ile His Glu
65 70 75 80
Ala Arg Lys Lys Ser Arg Leu Ser Arg Val Ile Leu Leu Val Ile Gln
85 90 95
Leu Val Gln Leu Gln Asp Val Met Ile Leu Ile Ser Asp Tyr Ala Pro
100 105 110
Ser Glu Thr Ile Ala
115

<210> 34163
<211> 308
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (48),(52)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34163
Ala Val Pro Ser Ser Thr Asp Leu Ile Ile Leu Leu Leu Gly Phe Leu
1 5 10 15
Ala Ala Val Ala Ser Gly Val Pro Phe Pro Ile Met Ser Ile Val Phe
20 25 30
Gly Gln Leu Val Asn Gly Leu Asn Ser Ala Thr Cys Asp Val Asp Xaa
35 40 45
Ser Thr Ala Xaa Ser Tyr Gln Ala Gly Ile Asn Ser Lys Ile Leu Leu
50 55 60
Ile Val Tyr Val Gly Ile Ala Tyr Phe Ala Leu Ile Tyr Ile His Thr
65 70 75 80
Leu Cys Trp Asn Ile Phe Ser Glu Arg Leu Ala Gln Arg Ile Arg Glu
85 90 95
Arg Tyr Phe Ser Ala Ile Leu Arg Gln Asp Thr Met Phe Phe Asp Asn
100 105 110
Arg Pro Ala Gly Glu Val Ser Ala Arg Ile Thr Asp Glu Ile Ala Val
115 120 125
Leu Gln Gln Gly Thr Asn Glu Lys Val Gly Ile Val Ile Ser Ser Val
130 135 140
Ser Phe Phe Val Ala Ala Tyr Val Val Ala Phe Ile Lys Asp Pro Lys
145 150 155 160
Leu Ala Gly Met Leu Val Ser Leu Thr Pro Ala Tyr Leu Thr Met Ala
165 170 175
Leu Gly Gly Gly Tyr Leu Val Gln Lys Tyr Val Gly Arg Ser Ile Glu
180 185 190
Ala Met Ala Met Ala Ser Ser Ala Ala Leu Glu Ala Ile Ser Asn Pro
195 200 205

```
Leu Val Val His Ala Phe Ser Ala Asn Ala Arg Leu Glu Gln Arg Phe
    210                 215                 220
Val Glu Val Leu Ala Pro Ala Leu Ser Ala Gly Val Trp Lys Ser Val
225                 230                 235                 240
Ala Val Ala Leu Gln Ala Gly Leu Leu Tyr Phe Ile Ala Phe Ser Ala
                245                 250                 255
Asn Gly Leu Ala Phe Trp Gln Gly Ser Arg Gln Ile Ala Ser Ala Val
            260                 265                 270
Glu Ser Asn Ile Ser Gly Ile Thr Val Gly Asp Thr Phe Thr Val Ile
        275                 280                 285
Leu Ile Leu Ile Asp Gly Thr Leu Ile Ser Leu Ala Gln Ile Leu Asn
    290                 295                 300
Gly Ser Val Tyr
305
```

<210> 34164
<211> 177
<212> PRT
<213> A.fumigatus

<400> 34164

```
Met Gly Val Tyr Thr Lys Pro Thr Ala Ala Ala Ser Leu Val Leu Ser
1               5                   10                  15
Gln Ala Ala Pro Phe Leu Arg Ser Phe Asp Ala Ala Ser Val Ala Phe
            20                  25                  30
Ala Lys Leu Glu Ala Asp Met Asn Arg Pro Ala Val Ile Asp Gly Thr
        35                  40                  45
Val Glu Gly Thr Gly Gly Leu Leu Ser Asp Val Ala Gly Glu Val Glu
    50                  55                  60
Leu Arg Asn Val Asp Phe Ala Phe Pro Ser Arg Pro Asp Lys Pro Val
65                  70                  75                  80
Leu Gln Gly Leu Ser Phe Val Cys Pro Ala Gly Arg Gln Thr Ala Ile
                85                  90                  95
Val Gly Leu Ser Gly Ser Gly Lys Ser Thr Val Ala Gly Leu Ile Ala
            100                 105                 110
Arg Phe Tyr Asp Pro Val Glu Gly Thr Val Leu Leu Asp Gly Arg Asp
        115                 120                 125
Leu Arg Glu Leu Asn Val Arg Ser Val Arg Asn His Ile Ser Leu Val
    130                 135                 140
Gln Gln Glu Pro Tyr Leu Leu Asn Arg Ser Ile Leu Glu Asn Ile Ala
145                 150                 155                 160
Leu Gly Leu Ile Asn Ser Pro Lys His Glu His Leu Arg Pro Ala Leu
                165                 170                 175
Met
```

<210> 34165
<211> 92
<212> PRT
<213> A.fumigatus

<400> 34165

```
Cys Phe Tyr Leu Arg Arg Gly Phe Arg Ser Gly Ser His Asp Gly Gly
1               5                   10                  15
His Leu Phe Pro Leu Asp Thr Trp Phe Leu Tyr Leu Gly Ser Phe Ser
            20                  25                  30
```

```
Thr Leu Gly Val Ser Glu Asp Gln Ile Arg Gly Cys Lys Asn Ala Ser
        35                  40                  45
Thr Asp Ala Arg Val Ser Thr Pro Tyr Ser Pro Thr Thr Pro Val Ala
    50                  55                  60
Lys Val Tyr Thr Pro Phe Leu Arg Lys Ile Ile Val Thr Ala Glu His
65                  70                  75                  80
Val Ser Thr Ser Pro Gly Val Ser Phe Gln Asn Gly
                85                  90
```

<210> 34166
<211> 286
<212> PRT
<213> A.fumigatus

<400> 34166

```
Ser Lys Tyr Leu Gly His Cys Thr Gly Arg Arg Asn Arg Leu Val Ala
1               5                   10                  15
Gly Pro Phe Arg Ser Cys Lys Arg Ser Gln Thr Gly Pro Glu Ser Cys
            20                  25                  30
Glu Asp Gly Ile Gly Leu Leu Thr Ser Thr Ser Tyr Ile Val Asp Gly
        35                  40                  45
Asn Ala Leu Phe Leu Thr Ala Thr Glu Ala Ala Trp Arg Arg Ala Ala
    50                  55                  60
Ala Ser His Phe Ala Gly Gly Gly Ile Ile Val Ala Ile Gly Tyr Pro
65                  70                  75                  80
Leu Lys Gly Lys Leu Tyr Asp Ala Arg Arg Arg Ser Phe Asp Leu Thr
                85                  90                  95
Pro Pro Thr Ala Cys Ala Pro Val Gly Tyr Gly Gly Ala Asp Val Phe
            100                 105                 110
Leu Asp Phe Ile Glu Asn Ser Val Arg Pro Ala Val Gln Ala Arg Phe
        115                 120                 125
Pro Gln Val Ser Leu Ala Arg Glu Ala Leu Tyr Gly His Ser Tyr Gly
    130                 135                 140
Gly Leu Leu Ala Leu His Ala Leu Phe Thr Arg Pro Gln Ser Phe Asp
145                 150                 155                 160
Cys Tyr Ile Ala Ser Ser Pro Ser Ile Trp Trp Asn Ser Leu Cys Ile
                165                 170                 175
Leu His Glu Ala Lys Ala Phe Val Glu Thr Lys Lys Val Ser His Asp
            180                 185                 190
Gln Ser Pro Ser Leu Met Val Ser Trp Gly Ser Trp Glu Gln His Pro
        195                 200                 205
Pro Arg Trp Ala Asp Glu Leu Leu Asp His Tyr Glu Ala Arg Lys Arg
    210                 215                 220
Thr Ala Ala Glu Leu Arg Met Ala Asp Asn Ala Leu Asp Leu Cys Ala
225                 230                 235                 240
Met Leu His Gly Cys Ser Arg Leu His Ala Leu Ile Lys Thr Glu Tyr
                245                 250                 255
Glu Gly Glu Asp His Thr Ser Val Met Ser Cys Ser Val Ser Arg Gly
            260                 265                 270
Leu Thr Met Phe Phe Glu Glu Trp Pro Phe His Gln Ser Gly
        275                 280                 285
```

<210> 34167
<211> 385
<212> PRT
<213> A.fumigatus

<400> 34167

```
Asp Leu Thr Asn Asn Asn Ala Pro Ser Ser Ser Arg Met Arg Pro Arg
1               5                  10                  15
Leu Ser Pro Phe Asp Phe Asp Ile Gln Ser Glu Thr Phe Pro Ser Leu
            20                  25                  30
Cys Leu Arg Leu Leu Pro Pro Pro Pro Ser Leu Phe Ser Thr Asn Pro
        35                  40                  45
Phe Pro Ser Pro Ser Ser Phe Pro Leu Lys Pro Pro Gly Val Glu His
    50                  55                  60
Leu Asp Ile Val Arg Gln Ala Ile Arg Ala Lys Ile Asp Gln Trp Gln
65                  70                  75                  80
Ser Asp Gln Leu Ser Thr Gln Ser Ala Asn Asn Ser Pro Gly Arg Pro
                85                  90                  95
Pro Leu Gly Leu Asp Ala Asn Met Ile Ser Arg Ser Ala Gln Gln His
            100                 105                 110
Glu Asp Met Ser Leu Arg His Leu Glu Leu Ala Phe Lys His Trp Ala
        115                 120                 125
Ser Leu Pro Pro Glu Thr Arg Leu Glu Ala Trp His Leu Glu Ile Thr
    130                 135                 140
Arg Ala Phe Ala Arg Glu Val Glu Lys Arg Lys Thr Leu Asp Glu Gln
145                 150                 155                 160
Leu Ala Arg Val Gln Gln Glu Ala Asn Gln Leu Arg Ala Gln Val Glu
                165                 170                 175
Lys Leu Gly Ser Cys Gln Trp Pro Arg Glu Phe Ala Leu Phe Pro Pro
            180                 185                 190
Asp Thr Leu Pro Leu Pro Pro Ala Val Ala Arg Glu Leu Asp Ala Lys
        195                 200                 205
Glu Ser Gln Ile Ser Pro Gly Ser Pro Arg Trp Asp Tyr Asp Ser Val
    210                 215                 220
Val Ala Lys Trp Lys Arg Val Val Met His Asp Lys Ser Met Gly Arg
225                 230                 235                 240
Val Gly Val Gly Tyr Gly Asn Pro Pro Leu Asp Asp Arg Ser Ser Ala
                245                 250                 255
Asp Thr Lys Ala Arg Ala Thr Glu Glu Pro Pro Ala Ser Ala Ala Leu
            260                 265                 270
Ala Ser Thr Ser Thr Ser Ala Pro Pro Ser Ala His Pro Pro Pro Arg
        275                 280                 285
Ala Leu Gln Pro Ala Pro Gly Pro Ala Leu Ala Ala Ser Pro Asp Gln
    290                 295                 300
Ser Ser Ser His Thr Gly Gly Ala Ser Ala Pro Ser Ser Gln Asn Thr
305                 310                 315                 320
Ser Pro Tyr Leu Arg Ser Pro Gln Ala Gly Pro Gln Ala Lys Arg Pro
                325                 330                 335
Arg Leu Met Asn Gly Ala Asp Gly Gly His Thr Ser Ala Ala Asn Pro
            340                 345                 350
Ser Ala Thr Ala Pro Asn Thr Trp Asn Pro His Ser His Gln Ser Leu
        355                 360                 365
Pro Gly Ser Asn Leu Ala Ser Ala Ser Gly Pro Pro Pro Ser Ser Gly
    370                 375                 380
Ala
385
```

<210> 34168
<211> 151
<212> PRT

<213> A.fumigatus

<400> 34168
Ala Ala Cys Ser Val Phe Asp Val Pro Ala Ser Leu Ser Arg Lys Gly
1 5 10 15
Ala Gly Val Gly Leu Ala Gly Leu Thr Arg Trp Gly Arg Glu Leu Gly
20 25 30
His Leu Pro Ala Asp Ala Ala Asp Gly Asp Val Met Gly Glu Asp Ala
35 40 45
Glu Glu Ala Leu Glu Glu Val Val Glu Gly Gly Glu Pro Val His Pro
50 55 60
Gly Leu Pro Glu Val Gly Glu Cys Asp Val Gly Asp Asp Asp Ala Ala
65 70 75 80
Glu Gly Asp Asp Glu Gly Glu Glu Ala Gly Asp Glu Glu Gly Gly Glu
85 90 95
Glu Leu Val Gly Gly Glu Gly Gly Asp Glu Leu Ala Glu Ala Asp Val
100 105 110
Val Lys Leu Glu Asp His Glu Gln His Pro Gly Val Ala Gly Ala Glu
115 120 125
Gly Val Ala Gly Glu Pro Tyr Ala Pro Val Pro Ser Cys Val Ser Gly
130 135 140
Gly Arg Gln Leu Asp Leu Gly
145 150

<210> 34169
<211> 165
<212> PRT
<213> A.fumigatus

<400> 34169
Leu Ser Pro Thr Thr Asn Thr Thr Arg Tyr Trp Gly Val Trp Phe Pro
1 5 10 15
Arg Asp Ser Phe Ser Ser Gly Tyr Thr Trp Met Leu Leu Met Val Phe
20 25 30
Glu Leu Tyr Tyr Val Ser Phe Gly Gln Phe Ile Ala Ala Phe Ser Pro
35 40 45
Asn Glu Leu Phe Ala Ser Leu Leu Val Pro Cys Phe Phe Thr Phe Val
50 55 60
Val Ala Phe Cys Gly Val Val Val Pro Tyr Val Ala Leu Pro His Phe
65 70 75 80
Trp Gln Ser Trp Met Tyr Trp Leu Thr Pro Phe His Tyr Leu Leu Glu
85 90 95
Gly Phe Leu Gly Val Leu Thr His Asn Ile Pro Val Arg Cys Val Ser
100 105 110
Arg Glu Val Thr Gln Phe Ser Pro Pro Ser Gly Gln Thr Cys Gln Thr
115 120 125
Tyr Ala Gly Ala Phe Ala Arg Gln Ala Gly Gly Tyr Val Glu Asp Ala
130 135 140
Ala Gly Gly Leu Cys Ser Tyr Cys Pro Tyr Ser Ile Gly Asp Ala Phe
145 150 155 160
Val Arg Phe Ser Leu
165

<210> 34170
<211> 187
<212> PRT

<213> A.fumigatus

<400> 34170

```
Met Asn Ser Gln Ser Gly Pro Gly Ser Ser Arg Asn Leu Gly Arg Gln
1               5                  10                  15
Met Gly Ile Asp Asp Glu Thr Arg Asn Pro Ser Ala Gly Val Pro Glu
            20                  25                  30
Ala Ala Gly Asn Gly Thr Ser Asp Ser Ser Arg Ser Asn His Pro Lys
        35                  40                  45
Glu Arg Glu Arg Gly Gly Lys Lys Gln Lys Arg Ala Arg Val Asp Glu
    50                  55                  60
Asp Ala Asp Glu Asp Val Asp Val Met Gln Ala Glu Ile Gln Leu Met
65                  70                  75                  80
Gln Ala Gln Gln Asp Arg Ala Ser Ala Glu Ile Ser Arg Ser Ser Lys
                85                  90                  95
Arg Lys Arg Leu Asp Leu Ala Ile Pro Gly Ala Glu Gln Glu Val Ala
            100                 105                 110
Asp Val Met Pro Val Ala Leu Glu Thr Glu Asp Ile Ser Glu Glu Val
        115                 120                 125
Gln Arg Arg Leu Lys Ile Lys Glu Glu Arg Arg Lys Lys Arg Asp Ala
    130                 135                 140
Lys Ala Glu Lys Arg Lys Arg Asp Ser Leu Ala Ser Asn Gly Ser Ala
145                 150                 155                 160
Ser Ala Ser Ser Pro Gly Gly Val Ala Arg Pro Arg Lys Lys Lys Val
                165                 170                 175
Lys Thr Ser Gly Ala Gly Glu Gly Gly Lys Arg
            180                 185
```

<210> 34171
<211> 60
<212> PRT
<213> A.fumigatus

<400> 34171

```
Cys His Phe Pro Leu Pro Gln Ala Leu Gln Gln Lys Asp Ser Val Phe
1               5                  10                  15
Arg Arg Gln Phe Pro Ser Ala Ser Leu Asp Phe Gly Trp Asn Arg Asp
            20                  25                  30
Gln Thr Asp Tyr Ser Ser Lys Arg Pro Ile Arg Thr Lys Glu Lys Leu
        35                  40                  45
Pro Gly Arg Ala Lys Asn Asp Ser Arg Ala Phe Ser
    50                  55                  60
```

<210> 34172
<211> 191
<212> PRT
<213> A.fumigatus

<400> 34172

```
Ser Tyr Glu Glu Ala Ala Ala Asp Ala Thr Pro Pro Tyr Trp Glu Thr
1               5                  10                  15
Thr Ile Leu Ala Pro Gly Ile Ser Ser Asp Glu Val Tyr Val Asp Gly
            20                  25                  30
Leu Pro Val Gly Ser Ile Phe Ser Phe Val Trp Asn Ala Met Ile Ser
        35                  40                  45
Met Ser Phe Gln Leu Val Gly Phe Leu Leu Thr Tyr Leu Leu His Thr
```

```
    50                  55                  60
Thr His Ala Ala Lys Asn Gly Ser Arg Ala Gly Leu Gly Leu Thr Leu
65                  70                  75                  80
Val Gln Tyr Gly Phe Tyr Met Lys Gly Gly Ser Asp Gly Gly Ser Asp
                85                  90                  95
Gly Gly Ala Asp Tyr Val Pro Pro Pro Asp Pro Asn Ser His Asn Phe
            100                 105                 110
Asp Pro Thr Ser Val Ser Glu Asn Ser Gly Gly Asn Ser Gly Ser Gly
        115                 120                 125
Ala Ile Ser Asp Ile Thr Thr Ser Glu Trp Ile Ser Tyr Val Leu Met
    130                 135                 140
Ile Val Gly Trp Phe Ile Leu Ile Arg Ala Ile Ser Asp Phe Leu Arg
145                 150                 155                 160
Ala Arg Arg His Glu Gln Leu Val Leu Gln Ser Pro Glu Arg Gly Leu
                165                 170                 175
Ser Val Pro Val Ile Ala Glu Gly Glu Arg Ser Glu Thr Val Val
            180                 185                 190

<210> 34173
<211> 464
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (33),(318)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34173
Glu Leu Ala Pro Arg Gln Ser Phe Lys Pro Thr Ala Ser Glu Asp Asp
1               5                   10                  15
Gly Thr Val Leu Thr Arg Thr Asp Val Phe Leu Ser Pro Leu Lys Pro
            20                  25                  30
Xaa Thr Lys Ser Ser Ile Ser Ala Glu Ala Ile Asn Ala Phe Leu Tyr
        35                  40                  45
Tyr Leu His Val Ala Thr Pro Glu Asp Glu Leu Leu Leu Gln Glu Ala
    50                  55                  60
Glu Glu Glu Arg Glu Gln Gln Ala Lys Leu Arg Lys Glu Gln Trp Gly
65                  70                  75                  80
Asp Gly Ala Pro Pro Glu Phe Ala Arg Leu Asn Asn Val Arg Arg Lys
                85                  90                  95
Pro Val Pro Gly Ser Pro Leu Pro Glu Thr Pro Leu Gln Gln Glu Asn
            100                 105                 110
Tyr Ser Pro Cys Ser Thr Ala Val Asp Pro Leu Pro Pro Pro Thr Pro
        115                 120                 125
Pro Arg Pro Thr Leu Arg Gln Asp Phe Pro Ser Ser Glu Ser Ala Thr
    130                 135                 140
Ala Val Ser Asp Ile Ser Asp His Leu Gly Asp Ser Arg Gly Asn Thr
145                 150                 155                 160
Gly Glu Thr Arg Ala Pro Pro Leu Pro Pro Arg Pro Leu Pro Phe Val
                165                 170                 175
Pro Thr Glu Gly Ala Pro Ser Asp Pro Ile Asn Asn Ser Ser Ala Lys
            180                 185                 190
Lys Ser Asn Arg Trp Ser Ala Leu Ser Gly Tyr Leu Asn Ser Lys Gly
        195                 200                 205
Leu Asp Ser Trp Lys Glu Lys Tyr Glu Ala Leu Ser Ala Gly Arg Leu
```

```
    210                 215                 220
Ser Leu Asp Ser Arg Gly Ser Glu Leu Arg Pro His Thr Ser Asp Gly
225                 230                 235                 240
Ala Gly Ser Asn Ala Arg Arg Ala Ser Pro Ser Arg Ser Pro Gly Gln
                245                 250                 255
Ser Pro His Arg Arg Pro Arg Asp His Gly Gln Ala Ser Asp Arg Gln
            260                 265                 270
Gly Phe His Ile Thr Leu Ile Arg Arg Asp Pro Thr His Gly Ile Gln
        275                 280                 285
Trp Asn Val Ala Thr Ile Ser Thr Ser Lys Ala Asp Ser Thr Ala Val
    290                 295                 300
Asp Ile Glu Val Ser Thr Pro Gly Tyr Asn Arg Phe Leu Xaa Gln Asp
305                 310                 315                 320
Glu Pro Phe Ser Leu Gln Ser Leu Gly Ile Asn Leu Pro Ser Asp Ala
                325                 330                 335
Gln Ala Leu Pro Ser Ser Thr Leu Lys Phe Pro Thr Gln Ser His Pro
            340                 345                 350
Glu Thr Arg Thr Pro Asp Ser Ser Leu Pro Arg Lys Phe Arg Arg Gln
        355                 360                 365
Leu Cys Val Ser Arg Pro Tyr Asn His Trp Asp Asp Ser Arg Gly Ser
    370                 375                 380
Leu Asp Leu Pro Thr Ser Arg Ser Ser Leu Asp Thr Phe Thr Gly Ser
385                 390                 395                 400
Pro Thr Arg Pro His Thr Gln Ala His Ser Lys Leu Lys Ser Gly Tyr
                405                 410                 415
Tyr Thr Phe Pro Ser Pro Trp Asn Gly Ile Cys Thr Phe Ser Thr Ser
            420                 425                 430
Val Asn Gly Arg Asn Leu Lys Cys Lys His Ile Asp Pro Thr Pro Ser
        435                 440                 445
Tyr Pro Gly His Gly Asn Glu Arg Phe His Pro Cys Lys Ala Ser Arg
    450                 455                 460

<210> 34174
<211> 237
<212> PRT
<213> A.fumigatus

<400> 34174
Arg Val Val Thr Leu Arg Gln Pro Phe Lys Asp Pro Arg Asn Cys Ser
1               5                   10                  15
Phe Ala Met Lys Thr Leu Arg Ile Val Arg Ser Thr Ile Ser Ile Leu
            20                  25                  30
Ala Val Leu Ser Gln Leu Gln Leu Ser Asp Ala Thr Pro Leu Glu Val
        35                  40                  45
Glu Glu Val Ser Leu Lys Glu Ala Gly Leu Glu Lys Arg Cys Ala Asn
    50                  55                  60
Pro Cys Gly Tyr Tyr Ser Gln Leu Cys Cys Thr Ser Ser Gln Thr Cys
65                  70                  75                  80
Gly Thr Asn Ser Gln Gly Gln Ala Val Cys Leu Asp Ser Ser Gly Gly
                85                  90                  95
Ser Gly Gly Gly Gly Thr Trp Glu Tyr Tyr Thr Thr Thr Tyr Val Leu
            100                 105                 110
Thr Glu Thr Asp Thr Lys Thr Ile Thr Ser Thr Trp Ser Ser Leu Ile
        115                 120                 125
Pro Thr Ala Thr Gly Ser Thr Ser Cys Arg Thr Asp Leu Gly Glu Thr
    130                 135                 140
```

```
Ala Cys Gly Asn Thr Cys Cys Gly Ala Ala Phe Val Cys Ala Asn Asp
145                 150                 155                 160
Gln Cys Ile Val Gly Ser Ser Ser Ile Trp Val Thr Ala Thr Ala Thr
                165                 170                 175
Pro Pro Val Arg Gly Thr Thr Gln Ser Thr Met Thr Gln Ile Ala Thr
            180                 185                 190
Ala Thr Thr Thr Gln Gly Phe Ile Pro Pro Val Gly Thr Asp Gly Ala
        195                 200                 205
Thr Leu Ile Gly Ile His Ala Cys Gly Gly Gly Leu Ser Gly Gly Ala
    210                 215                 220
Asn Cys Gly Ile Val Ile Gly Val Ile Cys Gly Val Phe
225                 230                 235
```

<210> 34175
<211> 75
<212> PRT
<213> A.fumigatus

<400> 34175

```
Ser Arg Phe His Glu Val Phe Glu Asn Glu Arg Asn Val Lys Lys Phe
1               5                   10                  15
Cys Val Met Ile Glu Leu Asn Lys Val Ser Met Arg Glu Lys Asn Gly
            20                  25                  30
Arg Met Arg Ser Asp Pro Ala Ala Arg Gly Asp Leu Thr Val Glu Thr
        35                  40                  45
Gln His Asn Ser Gln Pro Pro Leu Ile Gln Asn Pro Thr Thr Gly Phe
    50                  55                  60
Ser Asp Ser Asn Tyr Gln Ser Leu Gln His Thr
65                  70                  75
```

<210> 34176
<211> 455
<212> PRT
<213> A.fumigatus

<400> 34176

```
Leu Leu Pro Leu Val Asp Phe Val Arg Ala Pro Ala Gly Pro Asn Met
1               5                   10                  15
His Ala Ala Glu Leu Ala Tyr Leu Leu Gly Gly Ile Ser Ile Ala Leu
            20                  25                  30
Asn Leu Val Ala Ser Val Leu His Gly Leu Cys Leu Ala Ser Ser Gly
        35                  40                  45
Ala Ser Ser Ile Glu Ser Ile Thr Val Thr Leu Ser Ala Ala Ser Cys
    50                  55                  60
Leu Val Leu Leu Met Leu Val Val Leu Trp Arg Lys Ser Ile Trp Leu
65                  70                  75                  80
Gln Pro Arg Asp Cys Trp Ala Lys Trp Arg Thr Val Ala Tyr Gly Leu
                85                  90                  95
Ile Leu Ala Tyr Leu Ala Ile Ser Ser Gly Phe Thr Ala Gly Ala Val
            100                 105                 110
Val Trp Ser Thr Ser Lys Leu Glu Val Arg Gly Lys Glu Met Gly Ile
        115                 120                 125
Pro Pro Ser Gln Leu Gly Leu Tyr Ile Ser Arg Ser Val Val Trp Thr
    130                 135                 140
Leu Ala Val Leu Ser Gln Gly Leu Phe Ala Gly Phe Leu Leu Ile Asp
145                 150                 155                 160
```

```
Asn Pro His Asn Gln Cys Pro Ser Ser Leu Ser Gln Glu Leu Val Leu
                165                 170                 175
Gln Ala Asp Gln Ser Ser Leu Lys His Lys Ser Ala Thr Lys Glu Pro
            180                 185                 190
Ala Leu Thr Ile Glu Ser Gly Arg Gln Ser Val Asp Arg Lys Thr Ser
        195                 200                 205
Cys Asp Ser Gly Pro Phe Ala Asn Gln Pro Ala Thr Ser Ile Ala Ser
    210                 215                 220
Ser His Arg Tyr Ser Gly Arg Thr Leu Tyr Gln Pro Asp Ser Lys Asn
225                 230                 235                 240
Asn Ser Val Asp Leu Gln Pro Pro Gly Leu Ser Met Pro Ser Pro Asp
                245                 250                 255
Ser Asn Ala Ser Arg Asn Leu Leu Glu Thr Ser Pro Asp Glu Arg Asp
            260                 265                 270
Ser Cys Ser Ile Thr Thr Glu Glu Arg Gln Gly Met Arg Leu Phe His
        275                 280                 285
Gly Thr Gln Pro Glu Ile Lys Arg Cys Leu Asp Ser Leu Met Leu Gln
    290                 295                 300
Pro Ser Ser Gly Thr Ser Ser Pro Ala Ala Ser Thr Pro Lys Leu Glu
305                 310                 315                 320
Ala Ser Arg Ala Pro Ala Pro Pro Lys Leu His Phe Pro Asp Glu Ser
                325                 330                 335
Asn Ile His Pro Leu Phe Arg Ser Asp Ser Pro Ser Pro Pro Pro Thr
            340                 345                 350
Pro Leu Pro Gly Thr Asn Leu His Gly Leu Ala Val Ala Gly Gln Thr
        355                 360                 365
Ile Ser Val Lys Thr Leu Asn Arg Met Arg Ser Thr Asn Ser Leu Arg
    370                 375                 380
Pro His Gly Ala Arg Ser Arg Ser Pro Leu Phe Glu Arg Ile Asn Gln
385                 390                 395                 400
Gln Gly Glu Thr Thr Gly Asp Gln Lys Leu Asn Pro Cys Cys Glu Asn
                405                 410                 415
Arg Gly Arg Leu Ala Glu Lys Thr Ala Ile Pro Gly Phe Leu Met Ala
            420                 425                 430
Ala Asp Val Arg Gln Ser Ile Ala Arg Tyr Glu Lys Lys Tyr Glu Leu
        435                 440                 445
Asn Glu Ser Pro Asp Glu Ser
    450                 455
```

<210> 34177
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34177

```
Tyr Arg Glu Arg Thr Trp Val Thr Leu Leu Phe Ser Ser Thr Ile Leu
1               5                   10                  15
Leu Pro Leu Lys Thr Pro Leu His Tyr Ser Asp Pro Leu Ser Arg Leu
            20                  25                  30
Arg Gln Asn Asn Cys Ala Phe Asn Ser Thr Leu Val Leu Leu Ala Ser
        35                  40                  45
Arg Thr Cys Ile His Leu Leu Leu Ile Val Ala Ala Gly
    50                  55                  60
```

<210> 34178
<211> 78

<212> PRT
<213> A.fumigatus

<400> 34178
Lys Lys Phe Ser Gly Pro Pro Leu Val Ser Pro Ile Asp Tyr Pro Gln
1 5 10 15
Val Pro Lys Gly Lys Ser Arg Val Arg Val Met Ile His Ala Gly Asn
20 25 30
Thr Glu Glu Gln Val Asp Tyr Leu Val Ala Thr Leu Cys Asp Phe Ala
35 40 45
Asn Glu Met Ile Asp Ile Glu Glu Gly Gly Glu Lys Gly Lys Ile Pro
50 55 60
Lys Ala Ala Gln Glu Ile Tyr Ala Leu Met Ala Ala His Ala
65 70 75

<210> 34179
<211> 137
<212> PRT
<213> A.fumigatus

<400> 34179
Ser His Gly Glu Arg Arg Thr Glu Leu His Leu Val Val Asp Arg Val
1 5 10 15
Asp Arg Pro Leu Pro Ala Trp Arg Asp Ala Ala Pro His Pro Gly Gly
20 25 30
Arg Arg Pro Gln Pro Gly Arg Ala Ala Asp Arg Gln Gln Leu Asn Arg
35 40 45
Leu Arg Val Gln Ser Val Gly Val Trp Leu Val Arg Pro Val His Leu
50 55 60
Arg Leu Arg Ala Ala Gly Val Pro Arg Leu Ala Leu Arg Gln Arg Pro
65 70 75 80
Ala Pro Pro Arg Arg Thr Leu Arg Ala Arg Val Arg Gln Arg Arg Leu
85 90 95
Arg His Gly His Leu Leu Leu Ala Leu Gln Pro Val His Ser Ala Ala
100 105 110
Glu Gln Asp Arg Ser Pro Arg Pro Gly Gln Gly Arg Leu Phe Gln Asp
115 120 125
Pro His Gly His Arg Pro Gly Arg Gly
130 135

<210> 34180
<211> 159
<212> PRT
<213> A.fumigatus

<400> 34180
His Arg Arg Leu Arg Pro Glu Pro Val Leu Arg Val Pro Gln Leu His
1 5 10 15
Arg Gly Leu Leu Ala Gln Pro Arg Ala Gly Cys Arg Arg Arg Arg Arg
20 25 30
Gly Arg Pro Glu His Pro Ala Ala Pro Ala His Pro Ala Arg Pro Pro
35 40 45
Arg Arg Arg Asp Leu Arg Arg Arg Leu Val Gly Arg Arg Ala Leu Gln
50 55 60
Leu Ala Glu Trp Leu Arg Pro Arg Arg His Leu Arg Ala Lys Pro Glu
65 70 75 80

```
Gln Leu Gly Asn Arg Gln Arg His Arg Leu Pro Arg Arg Ala Arg Arg
                85                  90                  95
Glu His Leu Cys Gln Pro Arg Pro Glu His Pro Ala His Leu Leu Arg
            100                 105                 110
Leu Arg Ser Gly Glu Pro Val Arg Ala Gly Ala Leu Gly Gly Ile Pro
        115                 120                 125
Ala Lys Arg Ala Val Gln His Ala Gln Gln Tyr Leu His Leu Pro Ala
    130                 135                 140
Gly Val Leu Gly Phe Arg Ala Arg Arg Asp Tyr His Lys Trp Val
145                 150                 155
```

<210> 34181
<211> 703
<212> PRT
<213> A.fumigatus

<400> 34181

```
Ala Leu Asn Asp Trp Gln Leu Phe Trp Lys Ile His Gly Leu Ser Thr
1               5                   10                  15
Ala Cys Leu Arg Phe Val Glu Lys Gly Ser Ile Leu Arg Trp Val Asp
            20                  25                  30
Glu Gly Ser Arg Leu Phe Arg Lys Tyr Val Leu Ser Pro Arg Thr Ser
        35                  40                  45
Val Tyr Leu Leu Arg Pro Ser Glu Leu Ser Ala His Leu Ala Ser His
    50                  55                  60
Phe Trp Lys Thr Ser Asn Gly Thr Asp Met Lys Ala Leu Leu Ser Leu
65                  70                  75                  80
Leu Thr Ala Val Ala Val Ala Thr Ala Thr Pro Leu Asp Leu Ser Leu
                85                  90                  95
Arg Ala Leu Pro Asn Ala Pro Asp Gly Tyr Thr Pro Ala Lys Val Ser
            100                 105                 110
Cys Pro Ala Thr Arg Pro Ser Ile Arg Gly Ala Gly Ser Leu Ser Pro
        115                 120                 125
Asn Glu Thr Ser Trp Leu Glu Ile Arg Arg Lys Asn Thr Val Glu Pro
    130                 135                 140
Met Thr Asp Leu Leu Gly Arg Leu Asn Leu Gly Phe Asp Ala Ala Gly
145                 150                 155                 160
Tyr Ile Asp Arg Val Ser Ser Asn Ala Ser Asn Leu Pro Asn Ile Ala
                165                 170                 175
Ile Ala Val Ser Gly Gly Gly Tyr Arg Ala Leu Thr Asn Gly Ala Gly
            180                 185                 190
Ala Ile Lys Ala Phe Asp Ser Arg Thr Gln Gly Ser Thr Gln Ser Gly
        195                 200                 205
His Leu Gly Gly Leu Leu Gln Ser Ala Thr Tyr Val Ser Gly Leu Ser
    210                 215                 220
Gly Gly Gly Trp Leu Val Gly Ser Val Tyr Leu Asn Asn Phe Thr Thr
225                 230                 235                 240
Ile Ala Asp Leu Gln Ser Gly Asp His Gly Asn Val Trp Gln Phe Ser
                245                 250                 255
Thr Ser Ile Leu Glu Gly Pro Lys Ala Lys His Leu Gln Phe Leu Ser
            260                 265                 270
Thr Ala Asp Tyr Trp Lys Asp Leu Leu Lys Ala Val Asp Gly Lys Ser
        275                 280                 285
Asp Ala Gly Phe Asn Thr Ser Leu Thr Asp Tyr Trp Gly Arg Ala Leu
    290                 295                 300
Ser Tyr Gln Phe Ile Asn Asp Arg Thr Gly Asn Gly Gly Leu Ser Tyr
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305                 310                 315                 320
Thr Trp Ser Ser Ile Ala Leu Thr Asp Pro Phe Arg Arg Gly Glu Met
                325                 330                 335
Pro Leu Pro Ile Leu Val Ala Asp Gly Arg Asn Pro Gly Glu Leu Leu
            340                 345                 350
Ile Gly Ser Asn Ser Thr Val Tyr Glu Phe Asn Pro Trp Glu Phe Gly
        355                 360                 365
Ser Phe Asp Pro Ser Ile Phe Gly Phe Ala Pro Leu Glu Tyr Leu Gly
    370                 375                 380
Ser Arg Phe Asp Asn Gly Gln Leu Pro Arg Gly Glu Pro Cys Val Arg
385                 390                 395                 400
Gly Phe Asp Asn Ala Gly Phe Val Met Gly Thr Ser Ser Ser Leu Phe
                405                 410                 415
Asn Gln Phe Ile Leu Arg Leu Asn Lys Thr Asp Leu Pro Asp Leu Ala
            420                 425                 430
Lys Asp Val Phe Ser Lys Ile Leu Thr Ala Ile Gly Arg Asp Gly Asp
        435                 440                 445
Asp Ile Ala Val Tyr Gly Pro Asn Pro Phe Tyr Gly Tyr Arg Asn Ser
    450                 455                 460
Thr Ala Ala Tyr Ser Arg Ser Arg Glu Leu Asp Val Val Asp Gly Gly
465                 470                 475                 480
Glu Asp Gly Gln Asn Ile Pro Leu His Pro Leu Ile Gln Pro Val Arg
                485                 490                 495
His Val Asp Val Ile Phe Ala Val Asp Ser Ser Ala Asp Gly Pro Tyr
            500                 505                 510
Ser Trp Pro Asn Gly Ser Ala Leu Val Ala Thr Tyr Glu Arg Ser Leu
        515                 520                 525
Asn Ser Ser Gly Ile Gly Asn Gly Thr Val Phe Pro Ala Val Pro Asp
    530                 535                 540
Val Asn Thr Phe Val Asn Leu Gly Leu Asn Thr Arg Pro Thr Phe Phe
545                 550                 555                 560
Gly Cys Asp Pro Ala Asn Leu Ser Ala Pro Ala Pro Leu Val Val Tyr
                565                 570                 575
Leu Pro Asn Ala Pro Tyr Ser Thr His Ser Asn Thr Ser Thr Phe Gln
            580                 585                 590
Leu Ala Tyr Ser Asp Ser Glu Arg Asp Glu Ile Ile Thr Asn Gly Tyr
        595                 600                 605
Asn Val Val Thr Arg Gly Asn Ala Thr Val Asp Lys Ser Trp Pro Ser
    610                 615                 620
Cys Val Gly Cys Ala Ile Leu Gln Arg Ser Met Tyr Arg Thr Asn Thr
625                 630                 635                 640
Ser Met Pro Ala Val Cys Asn Ser Cys Phe Lys Glu Tyr Cys Trp Asn
                645                 650                 655
Gly Thr Val Asp Ser Lys Thr Pro Arg Thr Tyr Glu Pro Thr Leu Leu
            660                 665                 670
Leu Gly Ser Thr Ser Thr Asn Ala Ala Tyr Thr Gln Gly Val Thr Trp
        675                 680                 685
Leu Val Gly Ile Leu Ala Val Gly Val Ala Met Gly Met Thr Ala
    690                 695                 700
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<210> 34182
<211> 239
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (19)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34182
Pro Leu Glu Leu Ala Gly Phe Tyr Ala Ala Gln Leu Pro Gly Glu Arg
1 5 10 15
Arg Leu Xaa Ala Leu Ile Gly Arg Gly Phe Leu Gly Asp Ser Glu Arg
20 25 30
Gly His Thr Asp Pro Arg Leu Trp Arg Trp Leu Phe Ile Ile Glu Ala
35 40 45
Ser Ile Thr Val Gly Ile Ser Leu Phe Ser Ala Ile Ser Leu Pro Asn
50 55 60
Tyr Pro Ala Thr Thr Ser Trp Leu Glu Glu Thr Asn Gln Ala Tyr Ala
65 70 75 80
Gln Trp Arg Leu Ile Thr Asp Ala Gly Glu Ala Asp Asp Thr Asn Ala
85 90 95
Val Arg Ile Lys Asp Ala Leu Val Met Val Ser Arg Asp Arg Arg Ile
100 105 110
Tyr Leu Phe Ile Leu Leu Gln His Cys Ser Leu Leu Ser Gln Thr Phe
115 120 125
Lys Tyr Phe Phe Pro Thr Ile Val Lys Thr Leu Gly Tyr Gly Ser Ile
130 135 140
Glu Thr Leu Leu Ile Thr Ala Pro Val Trp Val Ala Thr Phe Leu Val
145 150 155 160
Ser Leu Leu Val Thr Trp Thr Ser Gly Arg Thr Asn Asp Arg Ser Trp
165 170 175
His Ile Val Gly Leu Met Ser Val Ser Ala Val Gly Cys Ile Ile Cys
180 185 190
Thr Ala Thr Thr Asn Ile Gly Ala Arg Phe Phe Ala Met Phe Leu Tyr
195 200 205
Ala Ala Ser Pro Ser Asp Pro Leu Arg Glu Ile Leu Thr Pro Val Gly
210 215 220
Cys Pro Trp Ala Leu Cys Gln Pro Thr Lys Ser Ser Ser Pro Gly
225 230 235

<210> 34183
<211> 60
<212> PRT
<213> A.fumigatus

<400> 34183
Thr Thr Ser Arg Pro Leu Arg Thr Ser Asn Pro Gly Ile Met Gly Thr
1 5 10 15
Ser Gly Ser Phe Pro Arg Leu Ser Trp Lys Gly Pro Arg Pro Asn Thr
20 25 30
Cys Ser Ser Tyr Pro Pro Pro Thr Thr Gly Arg Ile Cys Ser Lys Arg
35 40 45
Ser Thr Gly Arg Ala Thr Arg Ala Ser Thr Pro Arg
50 55 60

<210> 34184
<211> 82
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (80)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34184
Val Ser Gly Met Tyr Arg Cys Ile Ser Glu Asn Ile Tyr Val Leu Met
1 5 10 15
Ile Arg Thr Asn Cys Leu Val Ser Pro Lys Leu Phe Arg Thr Pro Ile
20 25 30
Ser Thr Glu Cys Ile Gln Asn Trp Val Tyr Asn Tyr Leu Ser Lys Arg
35 40 45
Gly Leu Ala Ala Gly Gly Ser Leu Gly Leu Arg Cys Ser Glu His Val
50 55 60
Thr Leu Arg Ser Ser Pro Arg Gly Trp Lys Gly Gln Ser Ser Lys Xaa
65 70 75 80
Asn Arg

<210> 34185
<211> 275
<212> PRT
<213> A.fumigatus

<400> 34185
Ala Gly Asn Leu Pro Ala Arg Val Phe Pro Lys Gly Ala Phe Lys Val
1 5 10 15
Gly Ile Pro Gln Thr Pro Gly Pro Arg Pro Trp Gly Asn Glu Pro Gly
20 25 30
Leu Arg Ser Gln Gly Ala Glu Pro Thr Pro Glu Pro Glu Val Asp Gln
35 40 45
Val Glu Pro Pro Ser Val Glu Lys Gln Lys Ala Val Ala Pro Pro Pro
50 55 60
Gly Leu Thr Thr Ser Tyr Lys Val Asp Lys Glu Asp Thr Thr Ser Ser
65 70 75 80
Ala Asp Ser Ala Ser Thr Ile Arg Pro Gln Thr Gly Arg Ala Ala Ser
85 90 95
Ser Ser Gly Ile Ile Thr Ala Glu Glu His Val Ala Lys Gly Ile Glu
100 105 110
Cys His Glu Lys Gly Ser Leu Lys Glu Ser Thr Tyr His Leu Arg Ile
115 120 125
Ala Ala Lys Gln Asn His Pro Thr Gly Met Leu Leu Tyr Ala Leu Ala
130 135 140
Cys Arg His Gly Trp Gly Met Arg Pro Asn Gln Arg Glu Gly Val Gln
145 150 155 160
Trp Leu Arg Lys Ala Val Asp Cys Val Gly Leu Glu Leu Met Asp Asp
165 170 175
Ser Asn Gly Thr Ile Pro Gln Arg Ala Lys Glu Met Gln Lys Ala Tyr
180 185 190
Arg Ala Gln Phe Ala Leu Ser Ile Tyr Glu Leu Gly Val Ser His Leu
195 200 205
Asn Gly Trp Gly Ile Glu Gln Asp Lys Ser Leu Ala Leu Arg Cys Phe
210 215 220
Glu Ile Ala Gly Gln Trp Gly Asp Ala Asp Ala Leu Ala Glu Ala Gly
225 230 235 240
Phe Cys Tyr Ala Glu Gly Ile Gly Cys Lys Lys Asp Met Lys Lys Ala

```
                245                 250                 255
Ala Lys Phe Tyr Arg Gln Ala Glu Ala Lys Gly Ile Ser Met Val Gly
            260                 265                 270
Asn Ser Trp
        275

<210> 34186
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34186
Cys Leu Ser Leu Cys Ser Leu Leu Ser Phe Cys Leu Ser Leu Leu Phe
1               5                   10                  15
Leu Val Pro Phe Leu Ser Phe Phe Phe Pro Pro Thr Ser Ser Thr Ile
            20                  25                  30
Ser Ser Ile Leu Leu Phe Ile Ile Glu Val Arg Ala Val Phe Leu Ser
        35                  40                  45
Ala Ala Ser Val Asp Ser Gly Ala Gly Ala Ala Arg Ser Ala Asn Asp
    50                  55                  60
His Leu Ala Ala Leu
65

<210> 34187
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34187
Tyr Thr Leu Val Ser Arg Thr Ala Ile Ser Leu His Trp Arg Ser Glu
1               5                   10                  15
Gly Gln Ile Ala Lys Leu Pro Pro Ser Ser Gly Asn Pro Arg Ala Pro
            20                  25                  30
Lys Asn Leu Ile Ala Asn Asp Val Leu Leu His Leu Pro Leu Asn Ser
        35                  40                  45
Ser Leu His Lys Leu Leu Thr His Tyr Cys His Ile Asn Ile Glu
    50                  55                  60

<210> 34188
<211> 78
<212> PRT
<213> A.fumigatus

<400> 34188
Leu Met Ser Ala Leu Ile Thr Arg Asp Ile Glu Met Asp Met Ala Ser
1               5                   10                  15
Phe Phe Asn Pro Phe Ser Phe Gly Tyr His Phe Lys Tyr Tyr Gln Lys
            20                  25                  30
Ile Asn Phe Phe Val Ala Gly Leu Leu Arg Ala Met Gln Leu Gly Asp
        35                  40                  45
Asn Pro Gly Arg Ser Val Lys Glu Pro Glu Lys Thr Gln Pro Phe Leu
    50                  55                  60
Val Gly Ser Thr Gly Gly Pro Ser Asn Lys Gly Ser Gly Gly
65                  70                  75

<210> 34189
```

<211> 63
<212> PRT
<213> A.fumigatus

<400> 34189
Asp Ile Val Glu Val Ala Met His Ile Ser Thr Gln Gln Tyr Ala Val
1 5 10 15
Leu Asn Gln Val Lys Gly Arg Gly Leu Arg Ser Cys Ser Asn Gln Val
20 25 30
Ala Glu Ile Ser Ile Glu Glu Cys Phe Leu Leu Tyr Glu Asn Asp Met
35 40 45
Cys Phe Leu Glu Arg Ser Pro Ser Ala Phe Ala Asp Thr Thr Ala
50 55 60

<210> 34190
<211> 110
<212> PRT
<213> A.fumigatus

<400> 34190
Arg Ser Glu Ser Asn Leu Ser Trp Phe Ser Glu Ile Leu Gln Leu Leu
1 5 10 15
Thr Pro Thr Leu Phe Ser Pro Glu Val Glu Phe Cys Gly Tyr Thr Ile
20 25 30
Pro His Pro Ser Glu Ala Lys Met Asn Leu Arg Ile Gln Thr Tyr Gly
35 40 45
Met Tyr Phe Cys His Thr Leu Ala Arg Phe Asp Gly Ala Asp Arg Asn
50 55 60
Ile Ala Asp Ser Thr Thr Ala Val Glu Ala Leu Glu Lys Gly Leu Glu
65 70 75 80
Ala Leu Met Asp Leu Cys Asp Val Val Thr Asp Lys Phe Thr Ser Ala
85 90 95
Arg Asp Ala Phe Asn Ala Ala Gln Ala Asp Lys Met Thr Ser
100 105 110

<210> 34191
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34191
Tyr Tyr His Arg Ser Gly Pro Leu Arg Leu Arg Ile Arg Arg Asn Leu
1 5 10 15
Ala Gly Val Thr Gly Gly Glu Lys Ala Val Lys Gln Leu Leu Gly Pro
20 25 30
Thr Ile Arg Ala Leu Glu Thr Ala Leu Ala Lys Tyr Asn Met Ala Tyr
35 40 45
Thr Glu Glu Ile Gln Arg Leu Gln Ser Leu Glu Asn Arg
50 55 60

<210> 34192
<211> 178
<212> PRT
<213> A.fumigatus

<400> 34192

```
Asn Lys Ile Gly Glu Thr Met Leu Thr Ser Gly Leu Thr Asn Ala Pro
1               5                  10                  15
Ile Thr Lys Leu Leu Leu Ile Tyr Thr Ile Ala Ser Ser Ile Ala Leu
            20                  25                  30
Ser Ile Leu Asp Ile Lys His Leu Ala Ser Ile His Val Ser Pro His
        35                  40                  45
Leu Trp Pro Tyr Ala Gln Phe Trp Arg Leu Ala Thr Trp Gln Leu Ala
    50                  55                  60
Gly Phe Thr Asn Ser Thr Glu Gly Leu Phe Ala Ala Met Leu Ala Tyr
65                  70                  75                  80
His Leu Arg Val Val Glu Arg Ala Trp Gly Lys Arg Lys Phe Ala Val
                85                  90                  95
Arg Pro Ser Pro Ser Thr Phe Ser Leu Leu Ser Ser Met Ser Arg Phe
            100                 105                 110
Ala Arg Asn Thr Asp Glu Lys Gly Lys Asp Ile Tyr His Leu His Ala
        115                 120                 125
Thr Ile Tyr Leu Pro Pro Pro Ala Ala Pro Pro Arg Pro Pro Pro Ser
    130                 135                 140
Ile Asp Pro Leu Gln Thr Glu Leu Ser Pro Leu Arg Thr Asp Arg His
145                 150                 155                 160
Ala Val Cys Ile Ala Gly Ala Val Ser Cys Gly Asp Pro Ala Tyr Val
                165                 170                 175
Ser Val
```

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<210> 34193
<211> 212
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34193

```
Pro Ser Ala Ala Phe Thr Xaa Leu Ser Val Gly Val Thr Gln Thr Ala
1               5                  10                  15
Asn Asp Glu Leu Asp Arg Gln Leu Leu Arg Ile Asp Gly Ile Phe Pro
            20                  25                  30
Phe Ile Ala Gly Glu Ile Ser Glu Glu Ala Arg Leu Gly Ser Leu Thr
        35                  40                  45
His Trp Ala Tyr Ser Asn Arg Asn Ala Thr Lys Thr Ala Thr Asn Glu
    50                  55                  60
Arg Pro Arg Arg Glu Val Ala Ser Asn Lys Gln Asp Leu Asn His Ala
65                  70                  75                  80
Leu Glu Asn Glu Ala Gly Ser Arg Thr Asp Ala Arg Arg Asp Ala Ala
                85                  90                  95
Arg Lys Gln Arg Arg Thr His Ala Asp Ser Asp Phe Asp Asp Ala Arg
            100                 105                 110
Ala Ser Gly Ser Arg Lys Gly Gln Ala Ser Lys Pro Arg Ser Gly Ala
        115                 120                 125
Gly Ala Ala Thr Gly Asp Leu Ser Ala Val Gly His Gly Ala Gln Thr
    130                 135                 140
Ser Gly Ala Ser Gly Ala Ser Gly Ala Thr Lys Arg Arg Lys Val Glu
145                 150                 155                 160
```

```
Arg Pro Pro Ala Ala Asp Ala Gly Ala Ala Met Glu Arg Ser Ala Ser
                165                 170                 175
Gly Ala Gly Asn Ala Ser Gly Arg Gly Ala Ser Lys Asp Thr Thr Ala
            180                 185                 190
Ser Asp Ala Thr Lys Lys Arg Ser Arg Ala Pro Asn Thr Asn Ala Ala
        195                 200                 205
Ala Arg Lys Arg
    210
```

<210> 34194
<211> 337
<212> PRT
<213> A.fumigatus

<400> 34194

```
Pro Thr Gly Arg Asn Asn Thr Gly Thr Ser Ala Ala Asn Ser Pro Val
1               5                   10                  15
Leu Ala Pro Thr Pro Leu Ala Gly Ala Ser Gly Ala Val Arg Ser Ala
            20                  25                  30
Ala Ser Pro Gly Pro Gly Ala Ala Ala Arg Pro Gln Ser Ser Arg Ala
        35                  40                  45
Gln Gln Ser Ser Gly Gln Pro Thr Asn Gly Arg Gln Arg Pro Ser Ser
    50                  55                  60
Ser Ala Ser Asn Arg Leu Thr Ser Asn Ser Met Ser Pro Leu His Phe
65                  70                  75                  80
Leu Phe Val Phe Leu Leu Leu Thr Leu Ile Leu Ile Gln Ala Lys Ser
                85                  90                  95
Leu Ile Pro Arg Leu Tyr Leu Lys Lys Leu Arg Lys Arg Ile Trp Leu
            100                 105                 110
Gln Leu His Leu Thr Gln Asn Cys Asn Ala Lys Pro Arg Glu Glu Asn
        115                 120                 125
Ser Gly Thr Ala Thr Ala Lys Ala Val Gly Pro Val Ser Met Lys Arg
    130                 135                 140
Glu Asp Thr Glu Thr Arg Pro Ala Glu Ser Val Glu Ser Arg Glu Thr
145                 150                 155                 160
Pro Val Pro Gln Ala Ser Asn Ala Ala Pro Lys Gly Arg Ser Ser Lys
                165                 170                 175
Thr Ser Thr Pro Val Leu Ser Thr Leu Ser Glu Pro Asn Ser Gln Arg
            180                 185                 190
Thr Arg Pro Thr Arg Asn Thr Asp Ser Ala Pro Ala Lys Arg Ser His
        195                 200                 205
Lys Lys Ser Gly Ser Val Ala Val Ser Gln Gln Arg Ala Val Ser Glu
    210                 215                 220
Glu Glu Asp Ser Leu His Glu Gly Asp Asp Glu Asp Glu Asp Gly Glu
225                 230                 235                 240
Pro Arg Tyr Cys Tyr Cys Asn Glu Ile Ser Phe Gly Glu Met Val Ala
                245                 250                 255
Cys Asp Asn Asp Ala Cys Pro Arg Glu Trp Phe His Leu Ser Cys Val
            260                 265                 270
Gly Leu Thr Lys Pro Pro Gly Lys Asn Gly Lys Phe His Trp Ser Asn
        275                 280                 285
Glu Ser Asp His Ala Asp Arg Ala Gln Ser Asn Gly Thr Ala Met Asn
    290                 295                 300
Ala Arg Arg Ile Cys Glu Glu Ile Gly Thr Arg Gly Asn Gln Ser Glu
305                 310                 315                 320
Leu Gly Val Ser Tyr Ala Gln Ala Gln Phe Cys Trp Leu Gly Trp Ser
```

325 330 335

Leu

<210> 34195
<211> 345
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (297)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34195

```
Arg Ser Leu Thr Asn Thr Thr Ile Met Thr Ile Lys Asn Leu Arg Leu
1               5                  10                  15
Gly Leu Ala Ile Gly His Gly Thr Gly Arg Glu Leu Ile Ala Val Phe
            20                  25                  30
Lys Lys Val Ile His Ala Leu Ala Ser Lys His Ser Leu His Val Asp
        35                  40                  45
Phe Ile Glu Ser Ser Arg Ile Tyr His Ser Tyr His Thr Leu Thr Val
    50                  55                  60
Ser Gly Glu Glu Lys Asp Leu Ile Lys His Ile Ala Asp Glu Thr Thr
65                  70                  75                  80
Gln Asp Ala Asp Glu Tyr Arg Thr Phe Cys Glu Thr Ala Ala Ala Asn
                85                  90                  95
Gly Ile Ala Ala Ile Phe Arg Thr Ala Ile His Ala Gln Ser Leu Tyr
            100                 105                 110
Leu Val Arg Asp Gln Leu Lys Ala Val Lys Ile Glu His Phe Ser Leu
        115                 120                 125
Gly Asp Ser Asn Ala Leu Leu Phe Ile Arg Asp Glu Ala Gln Gly Phe
    130                 135                 140
Tyr Ala Gly Val Asn Glu Tyr Asp Asn Gly Asn His Ser Ile Thr Arg
145                 150                 155                 160
Ser Ser Pro Phe Ser Arg Ser Thr Phe Asp Gln Ile Leu Ala Tyr Ala
                165                 170                 175
Leu Glu Arg Ala Ala Glu Glu Trp Gly Val Glu Asn Val Pro Glu Ser
            180                 185                 190
Val Thr Leu Val Tyr Lys Phe His Leu Phe Asp Gly Val Phe Gln Ala
        195                 200                 205
Trp Ala Pro His Trp Arg Ser Arg Phe Gly Ile Asp Val Asp Phe Ile
    210                 215                 220
Gln Pro Asp Thr Met Asn Arg Asn Leu Met Ala Trp Gly Ile Gln Gly
225                 230                 235                 240
Arg Arg Ile Ile Ile Ala Gly Asn Glu Tyr Ala Asp Ile Ile Gln Pro
                245                 250                 255
Val Phe Leu Lys Trp Phe Gly Asn Ser Thr Ile Glu Thr Met Cys Ala
            260                 265                 270
Glu Asn Val Tyr Leu Ser Pro Asn Leu His Arg Leu Ser Glu Tyr Gln
        275                 280                 285
Thr Cys Met Gly Arg Gly Arg His Xaa Arg Pro Arg Ala Arg Gln Ser
    290                 295                 300
Val Cys Asp His Pro Cys Arg Gly Cys His Pro Arg Thr Ala Trp Arg
305                 310                 315                 320
Met Leu Arg Arg Trp Ile Pro Ala Pro Asn Gly Lys Gly Asp Ser Lys
```

```
                325                 330                 335
Ser Pro Pro Glu Glu Thr Asp His Thr
            340                 345

<210> 34196
<211> 300
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (20)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34196
Val Arg Thr Cys Ile Ala Ser Ala Ser Thr Arg Arg Ala Trp Val Ala
1               5                  10                  15
Asp Ala Ile Xaa Gly Gln Gly Leu Val Asn Pro Phe Ala Thr Ile Arg
            20                  25                  30
Ala Ala Ala Ala Ile Leu Glu Arg His Gly Gly Cys Ser Gly Ala Gly
        35                  40                  45
Phe Arg His Gln Thr Glu Lys Ala Ile Gln Ser Leu Leu Arg Arg Arg
    50                  55                  60
Leu Thr Thr Pro Asp Gln Gly Gly Ser Cys Ser Thr Asp Ala Val Val
65                  70                  75                  80
Glu His Phe Leu Arg Ala Ile Thr Asp Leu Thr Asp Ala Thr Thr Pro
                85                  90                  95
Asp Val His Ser Asp Thr Ala Glu Ala Gly Leu Ile Ser Asn Ala Trp
            100                 105                 110
Ile Gly Lys Lys Ser Ala Val Val Ile Val Asp Tyr Gln Asn Asp Phe
        115                 120                 125
Ile Ala Ser Thr Pro Thr Pro Ala Val Ser Glu Leu Ser Arg Thr Ile
    130                 135                 140
Pro Arg Leu Ile Arg Cys Ala Arg Lys Glu Gly Arg Glu Val Ile Phe
145                 150                 155                 160
Val Arg Phe Leu Gly Asn Thr Ser Phe Gln Gly Pro Ser Trp Gln His
                165                 170                 175
Arg Asp Ala Leu Leu Gly Lys Ser Glu Lys Cys Val Glu Gly Thr Trp
            180                 185                 190
Gly Ala Glu Leu Gly Pro Gly Ile Thr Pro Ala Pro Gly Glu Arg Ile
        195                 200                 205
Phe Asp Lys Lys Ala Leu Phe Asp Pro Phe Leu Val Pro Glu Phe Ala
    210                 215                 220
Glu Tyr Ile Ala Gln Gln Gly Leu Glu His Leu Val Leu Ala Gly Leu
225                 230                 235                 240
Tyr Ser Asp Val Cys Ile Asp Ala Thr Ala Arg Thr Ala Phe Gln Lys
                245                 250                 255
Gly Leu Trp Val Thr Val Val Glu Asp Cys Thr Ala Ala Leu His Ala
            260                 265                 270
Asn Gln Val Asp His Leu Arg Phe Met Glu Lys Val Tyr Gly Ala Arg
        275                 280                 285
Val Gly Thr Val Ala Ile Leu Phe Gly Val Lys Ala
    290                 295                 300

<210> 34197
<211> 221
```

<212> PRT
<213> A.fumigatus

<400> 34197
Val Leu Ser Pro Gln Leu Asn Lys Asp Lys Tyr Gln His His Cys Pro
1 5 10 15
Lys Met Ile Asp Ser Ser Thr Ala Gly Ile Glu Glu Leu His Ala Leu
20 25 30
Arg Pro Lys Thr Ile His Gln Pro Leu His Asn Ala Ile Pro Pro Glu
35 40 45
Leu Val Pro Arg Phe Asp Pro Val Tyr Val Glu Tyr Tyr Asn Lys Tyr
50 55 60
Asn Ala Gly Arg Leu His Thr His Glu Val Pro Ile Glu Asp Phe Arg
65 70 75 80
Arg Asn Pro Ala Lys Tyr Thr Ile Ala Tyr Gly Arg Ala Ala Gly Pro
85 90 95
Asp Val Phe Arg Ile Thr Glu Gln Lys Cys Pro Val Lys Asp Gly Glu
100 105 110
Ile Thr Val Arg Ile Phe Glu Pro Ala Pro Val Ser Asp Asp Gln Gly
115 120 125
Asn Pro Lys Lys Arg Ala Ala Tyr Val Asn Phe His Gly Gly Gly Trp
130 135 140
Val Phe Gly Asp Leu Ser Val Asp His Asp Phe Cys Lys Arg Leu Val
145 150 155 160
His Gly Leu Asp Gly His Leu Val Ala Phe Asp Val Asn Tyr Arg Leu
165 170 175
Ala Pro Glu Tyr Lys Tyr Pro Ile Pro Val Glu Asp Cys Trp Ala Ala
180 185 190
Phe Asn Trp Val Ser Asp Leu Val Ile Asn Ser Phe Thr Val Gln Leu
195 200 205
Ser Lys Ser Glu Thr Lys Gly Leu Thr Val Gly Ser Asp
210 215 220

<210> 34198
<211> 114
<212> PRT
<213> A.fumigatus

<400> 34198
Gln Ser Val Gln Ile Arg Leu Lys Lys Ala Asp Glu Phe Asn Ile Asp
1 5 10 15
Pro Asp Arg Met Ala Ile Gly Gly Val Ser Ala Gly Gly Gln Leu Ser
20 25 30
Ala Val Leu Ala His Leu Cys Arg Asp Gly Asn Ile Pro Leu Arg Leu
35 40 45
Gln Leu Leu Thr Val Pro Ala Cys Asp Leu His Ser Val Phe Thr Ser
50 55 60
Asp Gly Gln Phe Asp Arg Glu Asn Cys Pro Tyr Glu Ser Tyr Arg Glu
65 70 75 80
Met Glu Phe Thr Pro Ala Leu Pro Ala Ala Arg Met Ala Tyr Phe His
85 90 95
Arg His Phe Leu Gly Asn Pro Arg Pro Pro Arg Ser Glu Glu Val Gly
100 105 110
Ile Arg

<210> 34199
<211> 85
<212> PRT
<213> A.fumigatus

<400> 34199
Asp Trp Lys Ile Ser Pro Met Leu Ala Pro Asn Phe Glu Asn Leu Ala
1 5 10 15
Pro Ala Leu Val His Thr Ala Glu Met Asp Pro Leu Arg Asp Glu Gly
20 25 30
Glu Val Tyr Ala Ala Lys Leu Lys Asp Ala Gly Val Arg Val Glu Leu
35 40 45
Ile Arg Ala Val Gly Ala Pro His Ile Phe Pro Leu Leu Asp Gly Ile
50 55 60
Leu Glu Ser Gly Arg Val Tyr Asn Glu Lys Val Ile Ala Thr Leu Arg
65 70 75 80
Lys Glu Leu Leu Val
85

<210> 34200
<211> 129
<212> PRT
<213> A.fumigatus

<400> 34200
Ser Glu Asp Thr Val Tyr Leu Gln Asp Ser Lys Ile Cys Tyr Gly Thr
1 5 10 15
Ser Glu Cys Ser Phe Ile His Asp Ala Ser Val Ile Pro Phe Pro Gly
20 25 30
Gln Leu Lys Lys Lys Asp His Ser Leu Ser Asp Ser Asn Val Tyr His
35 40 45
Thr Leu Pro Thr Lys Ile Pro Glu Ser Asn Gly Phe Cys Thr Asp Cys
50 55 60
Pro Ala Val Leu Cys Leu Trp Asn Thr Gly Pro Gly Val Phe Gly Arg
65 70 75 80
Glu Ala Arg Lys Thr Gly Trp Asp Ser Ser Val Gly Glu Thr Lys Gly
85 90 95
Gln Lys Ser Gly Trp Thr Glu Thr Gly Arg Ser Ser Val Leu Phe Val
100 105 110
Ser Phe Tyr Ser Ser Ser Ser Ser Ala Arg Ala Leu Cys Phe Leu Phe
115 120 125
Phe

<210> 34201
<211> 221
<212> PRT
<213> A.fumigatus

<400> 34201
His Thr His Cys Ala Val Pro Ser Gly Pro Val Val Lys Met Phe Leu
1 5 10 15
Arg Ser Phe Val Pro Phe Ser Arg Ala Cys Ala Ser Leu Val Cys Ser
20 25 30
Arg Pro Gly Trp Gln Ser Ser Pro Leu Thr Asp Gln Asn Arg Ser Leu
35 40 45

```
Asp Arg Met Thr Arg Ile Ala Ala Gly Thr Glu Asn Val Asp Tyr Asp
    50                  55                  60
Ser Trp Val Pro Ser Lys Ile His Leu Asn Ile Pro Leu Met Trp Asn
65                  70                  75                  80
Ile Leu Gln Phe Thr Cys Ser Asp Asp Ser Tyr Pro Ala Val Pro Ser
                85                  90                  95
Gly Ser Leu Leu His Ser Ser Leu Ser Ala Ser Ala Thr Arg Asn Asp
            100                 105                 110
Ala Glu Glu Ser Ser Thr Leu Glu Ile Ile Val Thr Thr Ser Pro Glu
        115                 120                 125
Val Thr Val Asn Thr Ala Asp Gly Gly Gln Gly Val Pro Met Pro Leu
    130                 135                 140
Tyr Arg Ala Pro Asn Ser Ser Lys Asp Ser Asn Thr Ser Pro Ala Thr
145                 150                 155                 160
Ala Pro Arg Ser Met Pro Pro Pro Asp Ala Val Val Ala Pro Ile Asp
                165                 170                 175
Ser Leu Met Leu Asn Thr Pro Trp Leu Trp Ala Asp Pro Ala Pro Phe
            180                 185                 190
Gly Asp Val Asp Asp Leu Asp Tyr Ser Thr Ser Ala Pro Ala Ile Gly
        195                 200                 205
Asp Ile Glu Gly Ser Ala Trp Trp Asn Leu Gly Asn Leu
    210                 215                 220
```

<210> 34202
<211> 237
<212> PRT
<213> A.fumigatus

<400> 34202

```
Gly Ala Glu Ala Glu Ala Trp Val Cys Val Cys Val Gly His Arg Gly
1               5                   10                  15
Ala Ala Arg Glu Ser Ser Arg Met Arg Glu Asp Val Ser Ala Ser Glu
            20                  25                  30
Arg Gly Asn Arg Ala Arg Gly Val Ala Tyr Pro Gln Arg Arg Ala Gly
        35                  40                  45
Ala Arg Ser Pro Ser His Ala Ala Ala His Arg Thr His Thr Thr Arg
    50                  55                  60
Arg Arg Ala Leu Leu Arg Asp Asp Ala Gly His Arg Asp Pro Lys Asp
65                  70                  75                  80
Arg Lys Ser Arg His Arg Arg Arg His Leu Arg Arg Arg His Arg His
                85                  90                  95
Gly Tyr Arg Ser Leu Leu Arg Arg Val Leu Gly Arg Gly Gly Arg Arg
            100                 105                 110
His Gly Arg Arg Val His Pro Pro Pro Ala Pro Arg Ala Pro Val Arg
        115                 120                 125
Gln Asn His Pro Arg Pro Ser Ala Gly Gly Pro Arg Asp Gln Pro Pro
    130                 135                 140
Pro Gln Trp Pro Gln Arg His Val Pro His Pro Pro Pro Pro Gly Pro
145                 150                 155                 160
Arg Pro Leu Leu Pro Arg Ala Arg Arg Arg Leu Arg His Trp Leu Leu
                165                 170                 175
Trp Pro Pro Pro Asp Ala Arg Arg Gly Gly Leu Pro Arg Pro His Pro
            180                 185                 190
Glu Pro Arg Arg Arg Glu Asp His Ala Val Gln Ala Glu Gly Ser Thr
        195                 200                 205
Ala Arg Ile Ile Ser Pro Pro Pro Leu Gly Ala Tyr His Tyr Ile Lys
```

```
    210                 215                 220
Leu Pro Pro Pro Leu Gly Pro Asn Thr Leu Ser Pro Pro
225                 230                 235

<210> 34203
<211> 323
<212> PRT
<213> A.fumigatus

<400> 34203
Pro Arg Glu Ser Arg Ala Ser Leu Val Leu Ser Ala Asn Met Ala Pro
1               5                  10                  15
Ser Pro His Ile Val Ile Ile Gly Ala Gly Ile Val Gly Ala Asn Leu
            20                  25                  30
Ala Asp Glu Leu Val Ser Arg Gly Trp Ser Asn Ile Thr Val Val Glu
        35                  40                  45
Gln Gly Pro Leu Gln Met Pro Gly Gly Ser Thr Ser His Ala Pro Gly
    50                  55                  60
Leu Val Phe Gln Thr Asn Pro Ser Lys Thr Met Thr Arg Phe Ala Gln
65                  70                  75                  80
Tyr Thr Val Glu Lys Leu Arg Ser Leu Glu Lys Asp Gly Gln Asn Cys
                85                  90                  95
Phe Asn Gln Val Gly Gly Leu Glu Ile Ala Thr Thr Pro Glu Arg Leu
            100                 105                 110
Glu Glu Leu Lys Arg Lys His Gly Tyr Ala Ser Ala Trp Gly Ile Glu
        115                 120                 125
Ala Arg Leu Val Ser Pro Ala Glu Cys Val Lys Met Tyr Pro Leu Leu
    130                 135                 140
Asn Glu Glu Ile Val Leu Gly Gly Leu His Ile Pro Ser Asp Gly Leu
145                 150                 155                 160
Ala Leu Ala Ala Arg Ala Thr Gln Leu Leu Ile Glu Arg Thr Arg His
                165                 170                 175
Ala Gly Val Arg Tyr Leu Glu Met Thr Pro Val Thr Gly Ile Gln Lys
            180                 185                 190
Thr Gly Asn Arg Val Thr Gly Val Val Thr Ser Ala Gly Val Ile Gly
        195                 200                 205
Thr Asp Ile Val Val Ser Cys Ala Gly Phe Trp Gly Val Glu Val Gly
    210                 215                 220
Ala Met Ala Gly Val Ser Ile Pro Leu Leu Pro Leu Ala His Gln Tyr
225                 230                 235                 240
Ala Lys Thr Thr Pro Val Pro Ala Leu Ala Gly Arg Glu Ile Asn His
                245                 250                 255
Arg Pro Asn Gly Leu Asn Ala Thr Phe Pro Ile Leu Arg His Gln Asp
            260                 265                 270
His Asp Leu Tyr Tyr Arg Glu His Gly Asp Ala Tyr Gly Ile Gly Tyr
        275                 280                 285
Tyr Gly His Arg Pro Met Pro Val Glu Ala Ala Ser Leu Gly Arg Thr
    290                 295                 300
Pro Ser His Val Asp Glu Lys Thr Met Pro Ser Arg Leu Lys Gly Pro
305                 310                 315                 320
Pro Pro Glu

<210> 34204
<211> 456
<212> PRT
```

<213> A.fumigatus

<400> 34204

```
Ser Ile Met Gln His Ser Lys Gly Pro Glu Phe Pro Glu Leu Ala Arg
1               5                  10                  15
Thr Leu Ser Arg Ser Arg Ser Thr Ser Met Ser Ser Asp Ser Gln Leu
            20                  25                  30
Ser Arg Ile His Leu Leu Ser Pro Pro Pro Val Asn Pro Pro Pro Ser
        35                  40                  45
Phe Ile Ala Ser Ser Ala Ala Ala Gln Ile Ile Thr Thr Asp Gln Glu
    50                  55                  60
Phe Asn Thr Ala Asp Phe Val Thr Ser Glu Glu Asp Asn Gly Ala Asn
65                  70                  75                  80
Ala Ser Ala Leu Val Thr Pro Glu Ala Leu Ser Ala Leu Asn Gly Phe
                85                  90                  95
Leu Asp His Leu Leu Tyr Asn Ile Leu Ala Thr Ala Lys Ser Thr Gln
            100                 105                 110
Leu Ala Cys Ile Arg Pro Ala Ile Ala Asp Val Leu Lys Pro Arg Leu
        115                 120                 125
Ala Lys Glu Val Val Ser Ala Ala Asp Asp Glu Leu His Glu Tyr Met
    130                 135                 140
Gly Gly Glu Glu Asp Glu Gln Ser Glu Phe Arg Gly Gly Gln Thr Ser
145                 150                 155                 160
Ala Asn Asp Phe Asp Leu Val Arg Ser Trp Lys Leu Thr Arg Leu Arg
                165                 170                 175
Cys Met Val Tyr Thr Arg Leu Gly Asp Met Glu Glu Asp Asp Glu Asp
            180                 185                 190
Glu Tyr Ile Ala Gln Asp Arg Leu Ile Asp Ser Asp Asp Gly Ile Pro
        195                 200                 205
Pro Arg Phe Asp Ser His Val Gly Asn Ile Thr Pro Ala Ala Ala Ile
    210                 215                 220
Phe Leu Thr Ser Ile Ile Glu His Ile Gly Glu Gln Ala Leu Ile Ile
225                 230                 235                 240
Ala Gly Glu Thr Ala Arg Ser Arg Leu Ser Leu Lys Leu Ser Asp Asn
                245                 250                 255
His Asp Glu Val Thr Glu Ser Gly Ala Glu Arg Gly Arg Met Asp Arg
            260                 265                 270
Leu Val Val Glu Glu Leu Asp Met Glu Lys Leu Ala Leu Asn Pro Thr
        275                 280                 285
Leu Gly Arg Leu Trp Arg Thr Trp Arg Arg Arg Val Arg Thr Gly Ser
    290                 295                 300
Leu Ser Arg Thr Val Ser Arg Glu Ser Phe Gln Arg Arg Arg Leu Thr
305                 310                 315                 320
Ala Pro Ser Ala Gly Ser Arg Lys Ser Ser Ile Val Thr Val Asp Glu
                325                 330                 335
Cys Pro Pro Cys Leu Arg Val Ser Pro Asp Val Glu His Ser Lys Glu
            340                 345                 350
Leu Asp Pro Ala Ser Val Ala Leu Pro Met Ser Glu His Asp Val Glu
        355                 360                 365
Glu Ile Glu Ile Pro Gly Tyr Val Ala Glu Asp Gly Ser Glu Val His
    370                 375                 380
Glu Ile His Glu Ile Arg Thr Met Gln Ala Val Val Ala His Lys Val
385                 390                 395                 400
Arg Pro His Ser Leu Met Val Leu Thr Leu Ala Ser Pro Lys Ser Pro
                405                 410                 415
Ser Thr Gly Asn Ser Pro Val Thr Pro Leu Ser Ala Gln Gly Pro Arg
```

```
            420                 425                 430
Val Val Arg His Ala Arg Ser Arg Ser Leu Pro Ser Ser Pro Tyr Pro
        435                 440                 445
Glu Asp Asp Thr Pro Asn Glu Arg
    450                 455
```

<210> 34205
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34205

```
Tyr His Thr Phe Xaa Ser Leu Leu Glu Lys Lys Leu Leu Phe Ala Val
1               5                   10                  15
Leu Phe Ala Tyr Pro Ser Cys Val Arg Asn His Lys Asn Thr Lys Pro
            20                  25                  30
Pro Asn Lys Gln Ala Val His Lys Ala Thr Phe Ser Val Tyr Lys Ala
        35                  40                  45
Gly Glu Ile Leu Ile Leu Ser Gly Ser Ser Arg Met Ile
    50                  55                  60
```

<210> 34206
<211> 248
<212> PRT
<213> A.fumigatus

<400> 34206

```
Arg Leu Ala Gln Ala Ile Asp Glu Ile Cys Glu Ala Thr Ala Ser Gln
1               5                   10                  15
Asn Ser Arg Leu Trp Ile Asp Ala Glu Gln Gln Val Phe Gln Pro Ala
            20                  25                  30
Ile Asp Ala Trp Thr Ile Asp Leu Met Arg Arg Phe Asn Arg Asn Gly
        35                  40                  45
Gln Ile Val Val Tyr Asn Thr Ile Gln Ala Tyr Leu Lys Ser Thr Ser
    50                  55                  60
Glu Asn Val His Arg His Leu Cys Leu Ala Gln Lys Gln Gly Trp Thr
65                  70                  75                  80
Leu Gly Ile Lys Leu Val Arg Gly Ala Tyr Ile Ala His Asp Ile Arg
                85                  90                  95
Ser Arg Ile His Asp Thr Lys Ala Asp Thr Asp Asn Ser Tyr Asp His
            100                 105                 110
Ile Val Glu Ser Leu Leu Ser Arg Lys Phe Pro Leu Lys Val Ala Ala
        115                 120                 125
Asp Asn Ala Ala Ala Phe Pro Asp Val Arg Leu Phe Val Ala Ser His
    130                 135                 140
Asn Ala Glu Ser Val Arg Lys Ala Ser Ala Leu Tyr Arg Gln Arg Ile
145                 150                 155                 160
Asn Asn Gly Gln Pro Thr Ile Pro Leu Glu Ile Gly Gln Leu Gln Gly
                165                 170                 175
Met Ala Asp Glu Val Ser Cys Glu Leu Leu Ala Gly Asn Ser Thr Gly
            180                 185                 190
```

```
Gln Ser Glu Met Pro Thr Pro Gly Val Phe Lys Cys Leu Ala Trp Gly
        195                 200                 205
Thr Thr Glu Glu Cys Leu His Phe Leu Leu Arg Arg Ala Ile Glu Asn
    210                 215                 220
Lys Ser Ala Leu Glu Arg Thr Lys Asp Thr Ala Val Ala Met Arg Arg
225                 230                 235                 240
Glu Ala Trp Arg Arg Leu Trp Trp
                245
```

<210> 34207
<211> 146
<212> PRT
<213> A.fumigatus

<400> 34207

```
Arg Gly Arg Arg Ser Ile Arg Ala Ser Asn Gly Tyr Gly Ile Gln Glu
1               5                   10                  15
Arg Leu Pro Thr Asp Thr Thr Asn Ala Leu Asp Leu Leu Ser Ser Ile
            20                  25                  30
Cys Gly Ser Arg Met Leu Gln Pro Ser Val Phe Gln Asn Ser Trp Asp
        35                  40                  45
Asn Val His Asp Cys Thr Lys Gly Val Asp Asp Thr Thr Thr Leu Met
    50                  55                  60
Gln Gly Phe Arg Ile Ala Arg Arg Leu His Asn Gln Arg His Thr Ala
65                  70                  75                  80
Thr Thr Leu Cys Arg Glu His Leu Val Glu Ser Arg Trp Gly Arg Arg
                85                  90                  95
Cys Leu Gly Pro Ala Thr Ala Val Pro His Val Gly Val Gly Pro Pro
            100                 105                 110
Asp Val Leu Gln Arg Ile Ile Ile Val Leu Leu Gln Met Cys Cys Asp
        115                 120                 125
Thr Thr Ala Ala Glu Arg Arg Ser Leu Val Thr Gly Ala Leu Gly Thr
    130                 135                 140
Ile Ile
145
```

<210> 34208
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34208

```
Thr Ser Ile Ala Arg Ala Asp Phe Ala Arg Ser Ser Leu Asp Ile Ile
1               5                   10                  15
Ser Gln Ser Met Ser Pro Gly Pro Val Thr Thr Ser Trp Gly Thr Met
            20                  25                  30
Ser Gly Ala Thr Lys Pro Ser Ser Phe Ser Leu Ser Ser Arg Leu Ser
        35                  40                  45
Leu Asn Ala Ala Gly Pro Ser Leu Tyr Ile Pro Arg Tyr Leu Ser Thr
    50                  55                  60
```

<210> 34209
<211> 130
<212> PRT
<213> A.fumigatus

<400> 34209
Arg Leu Ser Leu Phe Arg Gly Gly Leu Ser Ser Ile Ser Phe Gln Val
1 5 10 15
Val Gly Ala Gly Val Pro Thr Ser Ser Met Leu Met Thr Gly Thr Asp
20 25 30
His His Leu Thr Gly Leu Gly Gln Leu Pro Glu Tyr Ile Ala Leu Ser
35 40 45
Gly Ala His Gln Gly Ala Pro Gly His Glu Gly Tyr Leu Asn Glu Arg
50 55 60
Val Val Ala Leu Pro Glu Leu Leu Arg Asp Gly Gly Tyr Tyr Thr Leu
65 70 75 80
Met Ser Gly Lys Trp His Leu Gly Leu Lys Arg Glu Tyr Ser Pro His
85 90 95
Ala Arg Gly Phe Ala Lys Ser Tyr Ala Met Leu Ser Gly Ala Ala Asn
100 105 110
His Tyr Gly Lys Ser Val Gln Val Val Tyr Leu His Ser Gly Ser Glu
115 120 125
Gly Cys
130

<210> 34210
<211> 497
<212> PRT
<213> A.fumigatus

<400> 34210
Ser Gly Ser Thr Arg Arg Met Pro Gly Gly Leu Arg Ser Arg Thr Leu
1 5 10 15
Cys Phe Pro Val Arg Arg Ile Ile Met Val Ser Leu Cys Lys Leu Phe
20 25 30
Ile Phe Ile Leu Asp Leu Lys Val Ala Asn Glu Thr Gln Gly Tyr Glu
35 40 45
Pro Leu Tyr Asp Asp Ala Val Thr Asp Val His Pro Phe Phe Gln Thr
50 55 60
Thr Val Thr Ala Leu His Met Glu Asp Ala Glu Tyr Ser Thr Lys Leu
65 70 75 80
Pro Glu Asp Phe Tyr Ser Ser Gln Thr Tyr Ala Ser Lys Val Ile Glu
85 90 95
Phe Leu Ser Glu Arg Pro Lys Ser Glu Asn Gly Lys Pro Phe Phe Ala
100 105 110
Tyr Leu Pro Phe Thr Ala Pro His Trp Pro Leu Gln Ala Pro Lys Ser
115 120 125
Tyr Val Asp Lys Tyr Arg Gly Met Tyr Asn Glu Gly Pro Ala Ala Leu
130 135 140
Arg Leu Lys Arg Leu Glu Arg Leu Lys Glu Leu Gly Leu Val Ala Pro
145 150 155 160
Asp Ile Val Pro His Asp Val Val Thr Gly Pro Gly Asp Ile Asp Trp
165 170 175
Glu Met Met Ser Asn Glu Glu Arg Ala Lys Ser Ala Arg Ala Met Glu
180 185 190
Val Tyr Ala Ala Met Val Glu Val Met Asp Glu Asn Ile Gly Arg Val
195 200 205
Leu Asp Tyr Leu Arg Gln Ser Gly Glu Tyr Asp Asp Thr Ile Ile Cys
210 215 220
Phe Met Ser Asp Asn Gly Ala Glu Gly Ala Ser Tyr Glu Ala Ser Pro
225 230 235 240

```
Leu Gly Gly Ser Gly Ile Thr Ala His Leu Glu Lys Tyr Tyr Asp Asn
                245                 250                 255
Ser Leu Glu Asn Ile Gly Arg Pro Asn Ser Tyr Val Trp Tyr Gly Ser
            260                 265                 270
Arg Trp Ala Gln Ala Ala Thr Ala Pro Ser Arg Leu Tyr Lys Met Phe
        275                 280                 285
Ser Thr Glu Gly Gly Cys Arg Val Pro Leu Val Val Lys Pro Ala Gly
    290                 295                 300
Asn Pro Glu Ala Leu His Glu Gly Gly Arg Val Ile Asp Ala Phe Cys
305                 310                 315                 320
Thr Val Met Asp Ile Val Pro Thr Ile Leu Glu Tyr Ala Gly Leu Gln
                325                 330                 335
His Pro Gly Thr Thr Tyr Arg Gly Gln Lys Ile Glu Arg Val Arg Gly
            340                 345                 350
Val Ser Trp Lys Pro Phe Leu Asp Ala Ile Thr Val Ala Ser Thr Asp
        355                 360                 365
Thr Ser Pro Ala Pro Ser Ser Ile His Gly Glu Glu His Val Thr Gly
    370                 375                 380
Trp Glu Ile Ala Gly Ser Gly Ala Leu Arg Lys Gly Arg Tyr Lys Ile
385                 390                 395                 400
Thr Tyr Val Pro Leu Pro Arg Gly Pro Gln Arg Trp Glu Leu Phe Asp
                405                 410                 415
Ile Val Glu Asp Pro Gly Glu Thr Arg Asp Leu Ser Lys Glu Lys Pro
            420                 425                 430
Glu Ile Phe Asn Glu Leu Leu Arg Leu Trp Ala Ile Tyr Ala Glu Glu
        435                 440                 445
Val Gly Val Val Gly Leu Ala Gly Gln Ile Ser Ala Asn Asn Gln Val
    450                 455                 460
Val Glu Gly Val Lys Asp Glu Phe Glu Asp Thr Gly Arg Trp Ile Arg
465                 470                 475                 480
Phe Ile Gly Lys Asp Asn Val Pro Pro Glu Ile Gln Ala Arg Leu Pro
                485                 490                 495
Lys
```

<210> 34211
<211> 63
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24),(35),(41)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34211

```
Asn Arg Ser Gln Asn Ala Phe Gly Asp Pro Leu Gly Cys Val Ile Arg
1               5                   10                  15
Ser Leu Thr Asp Tyr Val Tyr Xaa Ile Gly Lys Val Ile Lys Pro Leu
            20                  25                  30
Thr Ala Xaa Thr Thr Glu His Glu Xaa Ser Ile Leu Pro Pro Asn Ile
        35                  40                  45
Trp Asn Ile Gln Val Ser Thr Arg Gly Ile Pro Ile Asn Phe Val
    50                  55                  60
```

<210> 34212

<211> 86
<212> PRT
<213> A.fumigatus

<400> 34212
Ser Lys Glu Ala Arg Met Gln Met Ala Ile Ser Ala Tyr Lys Asn Gln
1 5 10 15
Lys Ile Lys Ser Lys Ser Lys Ala Ala Glu Ile Phe Gly Val Pro Lys
20 25 30
Ser Thr Leu Cys Lys Arg Leu Ser Gly Val Lys Leu Cys Ile Glu Thr
35 40 45
Arg Ala Asn Ser His Arg Met Ile Val Met Glu Glu Lys Ser Leu Ile
50 55 60
Lys His Leu Leu Asp Ala Asp Lys Arg Gly Phe Leu Ile Gln Pro Glu
65 70 75 80
Phe Leu Arg Gly Ile Ala
85

<210> 34213
<211> 84
<212> PRT
<213> A.fumigatus

<400> 34213
Ala Ser Gly Ser Arg Asn Arg Ala Asp His Gln Thr Arg Phe Asp Phe
1 5 10 15
Tyr Phe Lys Ser Cys Ser Ala Gln Pro Ala Thr Met Pro Pro Lys Ala
20 25 30
Cys Ile Asn Ser Lys Asn Ser Val Glu Gln Glu Gly Arg Val Leu Leu
35 40 45
Ala Val Ser Ala Leu Lys Asn Lys Glu Ile Leu Asn Ile Arg Glu Ala
50 55 60
Ala Arg Val Tyr Asn Val Pro Tyr Thr Thr Leu Gln Arg Arg Leu Lys
65 70 75 80
Gly His Thr Phe

<210> 34214
<211> 343
<212> PRT
<213> A.fumigatus

<400> 34214
Gln Arg Glu Arg Val Gln Pro Lys Met Gly Arg Leu Asp Ile Asp Tyr
1 5 10 15
Gln Lys Leu Tyr Glu Ala Phe Phe Arg Phe Gln Thr Lys Pro Glu Leu
20 25 30
Thr Arg Tyr Gly Glu Val Tyr Tyr Glu Gly Lys Glu Tyr Glu Thr Asn
35 40 45
Leu Arg His Leu Arg Pro Gly Glu Leu Ser Ala Glu Leu Lys Glu Ala
50 55 60
Leu Asn Met Pro Pro Gly Ala Pro Pro Pro Trp Leu Ile Asn Gln Gln
65 70 75 80
Arg Tyr Gly Pro Pro Pro Ser Tyr Pro Ala Leu Lys Ile Pro Gly Leu
85 90 95
Asn Ala Pro Pro Pro Pro Gly Ala Met Trp Gly Tyr His Pro Gly Gly

```
            100                 105                 110
Tyr Gly Lys Pro Pro Val Asp Glu His Asn Arg Pro Leu Tyr Gly Gly
        115                 120                 125
Asp Ile Phe Gly Val Leu Gln Pro Gln Gln Thr Val Gln Gln Gly Glu
    130                 135                 140
Pro Val Glu Arg Asp Leu Trp Gly Glu Leu Gln Glu Ser Glu Pro Ser
145                 150                 155                 160
Asp Asp Glu Ser Glu Glu Asn Glu Asp Glu Pro Glu Asp Asp Val Asp
                165                 170                 175
Thr Glu Thr Gly Val Gln Thr Pro Ser Gly Leu Glu Thr Pro Gly Gly
            180                 185                 190
Ile Val Ser Ser Val Pro Ser Glu Phe Ile Gly Ala Glu Asn Val Thr
        195                 200                 205
Gly Glu Phe Asp Val Arg Lys Ser Tyr Arg Gly Thr Gln Thr Glu Glu
    210                 215                 220
His Val Gly Arg Arg Ser Ala Phe Gln Ile Ile Pro Glu Lys Gln Ala
225                 230                 235                 240
His Val Gln Gly Phe Phe Gly Ala Asp Arg Val Tyr Asp Leu Lys Ala
                245                 250                 255
Pro Pro Glu Gly Leu Pro Val Leu Gly Ala Glu Asp Pro Asn Arg Lys
            260                 265                 270
Arg Lys Lys Pro Gly Asp Val Asp Val Ser Val Asp Pro Asp Ala Leu
        275                 280                 285
Gln Ala Ser Asp Gly Met Ser Lys Glu Asn Leu Arg Ser Leu Tyr Glu
    290                 295                 300
Ser His Lys His Gln Glu Thr Asn Pro Asn Trp Asp Phe Gln Glu Asp
305                 310                 315                 320
Leu Ser Asp Met Ile Ala Tyr Glu Ser Arg Lys Arg Leu Lys Lys Glu
                325                 330                 335
Glu Asp Arg Arg Thr Lys Gln
            340
```

<210> 34215
<211> 91
<212> PRT
<213> A.fumigatus

```
<400> 34215
Gly Ser Thr Glu Ser Tyr Cys Lys Ala Ser Leu Ile Lys Val Pro Asp
1               5                   10                  15
Ile Ile Phe Met Tyr Thr Ile Leu Leu Asp Ser Phe Ala Tyr Ser Phe
            20                  25                  30
Lys Pro Leu Phe Asn Asn Ile Trp Ile Leu Leu Leu Cys Thr Leu Ile
        35                  40                  45
Arg Tyr Val Leu Phe Ile Ser Tyr Thr Gln Leu Trp Met Thr Phe Asn
    50                  55                  60
Lys Leu Ile Tyr Leu Val Asn Thr Lys Gly Ser Ser Arg Ile Met Ser
65                  70                  75                  80
Thr Arg Ser Gln Gln Asn Leu Cys Tyr Ser Thr
                85                  90
```

<210> 34216
<211> 132
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (93),(132)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34216
Arg Arg Leu His Asn Trp Pro Leu Ile Ser Gln Thr Ala Gln Glu Ala
1 5 10 15
Val Ala Met Leu Asn Thr Pro Glu Ile Val Leu Asp Gln Phe Cys Val
20 25 30
Ser Leu Arg Asn Gly Phe Leu Pro Asp Thr Leu Pro Leu Gln Lys Leu
35 40 45
Asn Asp Pro Tyr Tyr Ser Pro Trp Glu Glu Val Val Ala Asp Leu Pro
50 55 60
Ala Leu Leu Thr Ala Gly Asn Leu Arg Gln Ala Val Asp Ser Leu Pro
65 70 75 80
Ile Leu Ser Thr Ser Lys Leu Gln Lys Glu Ser Glu Xaa Arg Arg Ala
85 90 95
Tyr Val Val Leu Ala Phe Ile Ile Asn Ala Tyr Ile Trp Gly Ser Glu
100 105 110
Gln Pro Lys Asp Val Cys Val Phe Leu Ser Leu Tyr Asp Cys Ser Phe
115 120 125
Leu Met Ala Xaa
130

<210> 34217
<211> 212
<212> PRT
<213> A.fumigatus

<400> 34217
Val Leu Pro Pro Ala Val Ser Cys Pro Ile Leu Glu Val Ser Lys His
1 5 10 15
Leu Glu Leu Pro Pro Cys Ala Thr Tyr Ala Ala Leu Asn Leu Trp Asn
20 25 30
Phe Lys Val Ser Ser Pro Asp Ile Asp Leu Thr Asn Pro Asp Asn Leu
35 40 45
Ser Ile Ile Thr Thr Phe Thr Gly Thr Lys Asp Glu Glu Trp Phe Phe
50 55 60
Met Val Ser Val Ala Ile Glu Ala Lys Gly Ala Asp Leu Ile Thr Leu
65 70 75 80
Met Leu His Ala Ile Tyr Ala Ala Asn Leu Ala Asp Asp Gln Arg Val
85 90 95
Thr Ser Leu Leu Tyr Gln Leu Ser Asp Gly Leu Lys Glu Leu Gly Glu
100 105 110
Ile Leu Glu Arg Met Tyr Glu Lys Cys Asn Pro His Val Phe Phe Tyr
115 120 125
Gln Leu Arg Pro Tyr Leu Ala Gly Ser Lys Asn Met Ala Ser Ala Gly
130 135 140
Leu Pro Gln Gly Val Phe Tyr Asp Gln Gly Gly Tyr Gly Glu Trp His
145 150 155 160
Gln Tyr Ser Gly Gly Ser Asn Ala Gln Ser Ser Leu Ile Gln Ala Phe
165 170 175
Asp Ile Phe Leu Gly Val Glu His Ser Ala Thr Gly Glu Ala Lys Leu
180 185 190
Ser Asn Thr Ser Gln Tyr Lys Pro Lys Ile Gly Tyr Ile Gln Val Arg

```
        195                 200                 205
Ile Tyr Ser His
    210

<210> 34218
<211> 126
<212> PRT
<213> A.fumigatus

<400> 34218
Asp Met Arg Asn Tyr Met Pro Gly Pro His Arg Arg Phe Leu Glu Met
1               5                  10                  15
Met Ile Arg Ile Ser Asn Val Arg Gln Phe Ala Met Asn Tyr Asn Ala
            20                  25                  30
Asp Thr Glu Val Arg Asn Ala Tyr Asn Thr Ala Val Met Ala Val Gly
        35                  40                  45
Ala Phe Arg Asp Lys His Ile Gln Met Val Ser Arg Tyr Ile Ile Thr
    50                  55                  60
Pro Ser Arg Thr Lys Pro Thr Arg Met Ser Ser Ala Gln Val Asn Leu
65                  70                  75                  80
Ala Thr Val Thr Ala Ala His Gln Val Thr Arg Ser Lys Asp Thr Pro
                85                  90                  95
Ala Glu Tyr Ser Gly Thr Gly Gly Thr Asp Leu Ile Pro Phe Leu Lys
            100                 105                 110
Gln Thr Arg Asp Thr Thr Lys Ala Ala Ala Lys Tyr Thr Asp
        115                 120                 125

<210> 34219
<211> 80
<212> PRT
<213> A.fumigatus

<400> 34219
Val Ser Asp Ser Leu Ser Gln Ser Asn Ser Phe Cys Cys Asp Leu Lys
1               5                  10                  15
Ser Thr Gly Ala Thr Ser Ser Ser Ile Met Ser Thr Asn Gly Thr Leu
            20                  25                  30
Ser Lys Pro Glu Phe Pro Ala Asn Ala Ala Ser Lys Glu Tyr Ala Ala
        35                  40                  45
Ser Leu Asp Ala Ala Asp Pro Phe Ala Gly Phe Arg Glu Lys Phe Ile
    50                  55                  60
Ile Pro Ser Lys Ala Asn Ile Ala Ser Thr Lys Leu Ala Lys Pro Gly
65                  70                  75                  80

<210> 34220
<211> 156
<212> PRT
<213> A.fumigatus

<400> 34220
Val Leu Val Phe Arg Ala Ala Asp Leu Thr Leu Phe Ser Ser Asn Val
1               5                  10                  15
Arg Thr Glu Phe Lys Pro Ile Pro Gly Ala Gly Gly Tyr Gln Ile Ser
            20                  25                  30
Asn Pro Ser Ala Ile Asp Leu Ala Cys Leu Cys Ala Ala Leu Ser Val
        35                  40                  45
```

```
Phe Asp Glu Thr Ser Ile Ala Glu Leu Arg Lys Lys Ser Val Leu Met
    50                  55                  60
Thr Ala Tyr Leu Glu Tyr Leu Leu Leu Lys Asp Thr Thr Glu Glu Ser
65                  70                  75                  80
Arg Gln Phe Gln Ile Ile Thr Pro Ser Asp Pro Ala Ala Arg Gly Ala
                85                  90                  95
Gln Leu Ser Leu Leu Leu Lys Pro Gly Leu Leu His Lys Val Ala His
            100                 105                 110
Arg Leu Gln Glu Ala Gly Ile Ile Cys Asp Lys Arg Glu Pro Gly Val
        115                 120                 125
Val Arg Val Ala Pro Val Pro Leu Tyr Asn Thr Phe Thr Glu Ile Trp
    130                 135                 140
Met Phe Val Gln Gln Leu Lys Ala Ala Leu Glu Gly
145                 150                 155

<210> 34221
<211> 175
<212> PRT
<213> A.fumigatus

<400> 34221
Ile Arg Asn Thr Arg Met Gly Tyr Ala Asn Leu His Gln Tyr Ala Ile
1               5                   10                  15
Glu Ser His Leu Ala Trp His His Leu Asp Pro Lys Glu Thr Met Val
            20                  25                  30
Leu Ile Gly Pro Asp Glu Gly Thr Tyr Glu Ile Pro Thr Glu Lys Ile
        35                  40                  45
Leu Ser Tyr Ile Asp Gln His Ala Asp Glu Ala Ala Leu Ile Leu Leu
    50                  55                  60
Pro Gly Ile Gln Tyr Tyr Thr Gly Gln Leu Phe Asp Ile Pro Lys Ile
65                  70                  75                  80
Thr Glu Tyr Ala His Ser Arg Gly Leu Ile Val Gly Trp Asp Leu Ala
                85                  90                  95
His Ala Tyr Ala Asn Val Pro Leu Lys Leu His Asp Trp Asp Val Asp
            100                 105                 110
Phe Ala Ala Trp Cys Thr Tyr Lys Tyr Gly Asn Ala Gly Pro Gly Ala
        115                 120                 125
Met Ala Gly Leu Phe Val His Glu Lys His Gly Gln Val Asp Tyr Ser
    130                 135                 140
Glu Gly Glu Asp Ala Pro Lys Phe Arg His Arg Leu Thr Gly Trp Tyr
145                 150                 155                 160
Gly Gly Asp Lys Ser Val Arg Phe Lys Met Asp Asn Ser Glu Phe
                165                 170                 175

<210> 34222
<211> 152
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34222
Pro Phe Ile Val Ala Asp Glu Ala Phe Ser Gly Leu Ser Ser Glu Pro
```

```
1               5                   10                  15
Cys Ile Tyr Phe Cys Gly Asn Ser Leu Gly Ile Xaa Pro Lys Ala Thr
            20                  25                  30
Gln Lys Tyr Leu Glu Ala Gln Leu Asp Thr Trp Ser Ser Ile Gly Val
        35                  40                  45
Cys Gly His Phe Thr Lys Ile Glu Lys Ser Pro Leu Lys Glu Trp Gln
    50                  55                  60
Asn Leu Gly Glu Gln Ala Cys Gln Ser Met Ser Lys Ile Val Gly Gly
65                  70                  75                  80
Gly Ala Gln Lys Asn Pro Asn Asn Gly Tyr Ile Asn Asp Glu Ser Ala
                85                  90                  95
Leu Val Ala Arg Lys Leu Phe Leu Asn Pro Thr Ala Thr Lys Arg Lys
            100                 105                 110
Ile Leu Met Asp Trp Lys Ala Phe Pro Ser Asp His Val Ser Asp Lys
        115                 120                 125
Phe Ala Ile Pro Ala Trp Val Met Leu Thr Cys Thr Ser Met Pro Ser
    130                 135                 140
Asn His Ile Leu Pro Gly Ile Ile
145                 150
```

<210> 34223
<211> 210
<212> PRT
<213> A.fumigatus

<400> 34223

```
Leu Thr Asp Ser Gly Gln Leu His Leu Ala Thr Cys Asn Gly Leu Thr
1               5                   10                  15
Pro His Ile Ser Leu Met Ser Tyr Thr Tyr Leu Pro Ser Thr Pro Phe
            20                  25                  30
Asp Pro Tyr Pro Thr Ile Ile Met Thr Thr Asn Pro Ser Ser Arg Lys
        35                  40                  45
Thr Asn His Leu Met Thr Asn Pro Arg Val Ser Leu Leu Val His Asp
    50                  55                  60
Trp Val Ser His Arg Pro Pro Thr Arg Ala Pro Asn Pro Ser Gly Gln
65                  70                  75                  80
Arg Asp Gly Ser Pro Pro Pro Val Ala Thr Arg Ser Ser Leu Ala Ser
                85                  90                  95
Leu Leu Leu Asn Leu Asn Thr Ser Ala Leu Ser Ser Ile Ser Thr Thr
            100                 105                 110
Ile Thr Gly Thr Ala Arg Phe Leu Glu Pro Gly Ser Glu Glu Glu Ala
        115                 120                 125
Trp Cys Lys Glu Arg His Leu Glu Asn Asn Thr Phe Glu Glu Glu Leu
    130                 135                 140
Gly Met Phe Gly Gln Gln Gln Gln Ala Ala Gly Gln Arg Arg Pro Ser
145                 150                 155                 160
Leu Ser Ile Asp Asn Asp Val Arg Val Val Thr Val Arg Val Arg Glu
                165                 170                 175
Gly Arg Ile Ala Asp Trp Lys Gly Gly Val Arg Asp Trp Lys Leu Val
            180                 185                 190
Ser Glu Ser Glu Ser Gln Ala Asp Glu Pro Leu Val Asn Gly Thr Met
        195                 200                 205
Thr Pro
    210
```

<210> 34224

<211> 382
<212> PRT
<213> A.fumigatus

<400> 34224
Ser Ser His Asp Leu Thr Ser Gln Glu Ile Ser Leu Ile Lys Thr Glu
1 5 10 15
Ala Ser His Arg Gln Arg Asp Ser Leu Asn Leu His Asn Thr Leu Ala
20 25 30
Asp Pro Ile Ser Leu Ala Thr Asp Ser Ile Ser Val Pro Thr Ile Thr
35 40 45
His Asp Val Phe Ile Gln Thr Gln Leu His Leu Ser Ser Thr Ser Ser
50 55 60
Gln Gly Gln Glu Gln Thr Thr Thr Ile Arg Pro Thr Met Lys Leu Ala
65 70 75 80
His Leu His Phe Pro Asp Ile Thr Ser Phe Thr Arg Val Ala His Leu
85 90 95
Gln Gln Ile Leu Thr Asn Arg Leu Leu Ala Tyr Lys Arg Leu Ser Ser
100 105 110
Pro Ala Thr Ala Asn Thr Gly Ala Ile Gln Pro Ser Gly Val Asn Ser
115 120 125
Pro Pro Pro Asp Pro Thr Ile Ile Thr Phe Thr Pro Asn Pro Val Tyr
130 135 140
Thr Thr Gly Arg Arg Asp Leu Pro Pro Ser Asn Thr Ala Pro Phe Ser
145 150 155 160
Pro Ser Ala Pro Leu Ser Leu Pro Pro Ser Leu Glu Pro Ile Arg Ser
165 170 175
Ile Leu Thr Ala Pro Pro Asn Gly Ser Pro Arg Ala Glu Tyr His Pro
180 185 190
Thr Leu Arg Gly Gly Gln Thr Thr Tyr His Gly Pro Gly Gln Met Val
195 200 205
Ala Tyr Thr Ile Leu Asp Leu Arg Arg Leu Gly Leu Thr Pro Arg Cys
210 215 220
His Ile Arg Leu Leu Glu Asn Ser Val Ile Asp Val Leu Arg Gly Tyr
225 230 235 240
Gly Ile Gln Gly Phe Val Thr Glu Asp Pro Gly Val Trp Val Arg Pro
245 250 255
Arg Pro Ala Thr Asn Thr Val Ala Ala Met Ala Val Ser Ala Gly Gly
260 265 270
Asp Gly Asp Ala Asp Gly Val Leu Pro Lys Lys Ile Thr Ala Val Gly
275 280 285
Val His Leu Arg Arg Asn Ile Ser Ser Tyr Gly Ile Gly Phe Asn Val
290 295 300
Thr Glu Glu Pro Met Trp Tyr Phe Arg Gln Ile Val Pro Cys Gly Leu
305 310 315 320
Glu Gly Arg Glu Ala Thr Ser Leu Glu Gly Glu Gly Val Pro Gly Val
325 330 335
Ser Thr Gly Glu Val Ala Asp Lys Phe Val Asp Ala Phe Val Gln Arg
340 345 350
Val Asn Ala Asp Phe Ala Cys Gly Gly Arg Ala Thr Gly Glu Lys Ile
355 360 365
Glu Gly Val Tyr Asn Val Arg Glu Glu Asp Leu Leu Gln Gln
370 375 380

<210> 34225
<211> 60

<212> PRT
<213> A.fumigatus

<400> 34225
Arg Pro Ser Thr Asn Phe Ser Ser Leu Tyr Met Leu Phe Asp Thr Tyr
1 5 10 15
Tyr Pro Ile Pro Asn Asp Phe Trp Val Arg Ala Tyr Gln Arg Tyr Thr
20 25 30
Arg Val Arg Ile Val Glu His Leu Ile Phe Ser Pro Cys Leu Leu Asp
35 40 45
Phe Phe Ser Phe Tyr Asp Trp Tyr Leu Ile Leu Glu
50 55 60

<210> 34226
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34226
Ile Ala Ile Ser Ser Ala Ser Phe Leu Gln Glu His Ser Val Leu Ser
1 5 10 15
Ala His Arg Asn Asn Glu Ser Thr Arg Gln Ala Thr Ser Ala Ser Ala
20 25 30
Ser Phe Ser Met Ser Ile Leu Ser Val Ser Arg Asn Gly Val Ala Ser
35 40 45
Val Val Val Ala Gly His Pro Phe Asn Gly His Cys Ser Thr Pro Pro
50 55 60

<210> 34227
<211> 650
<212> PRT
<213> A.fumigatus

<400> 34227
Gln Tyr Leu Gln Gln Ala Phe Cys Arg Ser Ile Arg Ser Cys Arg Leu
1 5 10 15
Thr Val Thr Met Asn Arg Leu Gly Arg Leu Pro Leu Pro Leu Pro Pro
20 25 30
Ser Val Cys Leu Phe Cys Arg Phe Arg Ala Thr Ala Ser Leu Pro Ser
35 40 45
Ser Leu Gln Ala Thr Arg Ser Met Ala Thr Ala Arg Leu Arg Arg Arg
50 55 60
Val Ala Arg Met Thr Leu Ser Pro Asp Val Ala Lys Pro Ser Val Val
65 70 75 80
Lys Lys Thr Arg Gly Asp Lys Glu Arg Phe Gly Pro Phe Ala Gly Met
85 90 95
Asn Gln Thr Glu Ala Arg Ile Arg Glu Thr Pro Arg Ala Arg Ser Arg
100 105 110
Ala Ala Gln Lys Arg Ser Gly Glu Pro Glu Glu Asp Ser Gln Lys Glu
115 120 125
Ser Pro Leu Tyr Lys Ala Leu Lys Met Gln Thr Ala Leu Thr Pro Ile
130 135 140
Pro Tyr Gly Arg Arg Ala Ala Ile Lys Ala Lys Ile Ala Asp Ile Thr
145 150 155 160
Ser Phe Asp Gln Phe Gln Leu Leu Pro Val Val Arg Asn Ser Ile Ser
165 170 175

```
Ser Gln Ala Leu Pro Gly Leu Val Asp Val Thr Pro Thr Pro Ile Gln
            180                 185                 190
Arg Leu Ala Ile Pro Arg Leu Leu Glu Glu Pro Lys Thr Glu Lys Lys
        195                 200                 205
Pro Thr Lys Ala Asp Asp Asp Glu Pro Arg Tyr Asp Gln Tyr Leu Leu
    210                 215                 220
Ala Ala Glu Thr Gly Ser Gly Lys Thr Leu Ala Tyr Leu Leu Pro Val
225                 230                 235                 240
Val Asp Ala Val Lys Arg Glu Glu Ala Arg Asp Lys Glu Leu Glu Lys
                245                 250                 255
Lys Glu Gln Glu Glu Lys Ala Arg Glu Arg Glu Glu Arg Leu Lys Asn
            260                 265                 270
Arg Ala Phe Asp Ile Glu Pro Glu Ile Pro Pro Leu Ser Asn Ala Gly
        275                 280                 285
Arg Pro Arg Ala Ile Ile Leu Val Pro Thr Ser Glu Leu Val Ala Gln
    290                 295                 300
Val Gly Val Lys Val Lys Ala Leu Ser His Thr Val Lys Tyr Arg Ser
305                 310                 315                 320
Gly Met Ile Ser Ser Asn Phe Thr Pro Arg Arg Ile Lys Asn Thr Leu
                325                 330                 335
Phe His Pro Asp Gly Ile Asp Ile Leu Val Ala Thr Pro His Leu Leu
            340                 345                 350
Ala Ser Ile Ala Lys Thr Glu Pro Tyr Val Leu Ser Arg Val Ser His
        355                 360                 365
Leu Val Leu Asp Glu Ala Asp Ser Leu Leu Asp Arg Ser Phe Ala Pro
    370                 375                 380
Thr Thr Thr Glu Ile Ile Ser Lys Ala Ala Pro Ser Leu Arg Lys Leu
385                 390                 395                 400
Ile Leu Cys Ser Ala Thr Ile Pro Arg Ser Leu Asp Asn Leu Leu Arg
                405                 410                 415
Lys Arg Tyr Pro Asp Ile Lys Arg Leu Thr Thr Pro Asn Leu His Ala
            420                 425                 430
Ile Pro Arg Arg Val Gln Leu Gly Val Val Asp Ile Glu Lys Asp Pro
        435                 440                 445
Tyr Arg Gly Asn Arg Ser Leu Ala Cys Ala Asp Val Ile Trp Ser Ile
    450                 455                 460
Gly Lys Ala Gly Asp Ala Glu Ser Glu Gly Pro Tyr Ala Ser Tyr Val
465                 470                 475                 480
Ala Pro Lys Thr Lys Lys Ile Leu Val Phe Val Asn Glu Arg Glu Glu
                485                 490                 495
Ala Asp Glu Val Ala Gln Phe Leu Arg Ser Lys Gly Ile Asp Ala Gln
            500                 505                 510
Ser Leu Ser Arg Asp Ser Asp Ala Arg Lys Gln Glu Glu Ile Leu Ala
        515                 520                 525
Glu Phe Thr Glu Ala Pro Pro Pro Pro Ser Pro Asp Glu Ile Leu Leu
    530                 535                 540
Ala Gln Lys Lys Arg Arg Tyr Glu Asp Ala Ile Pro Phe Glu Met Pro
545                 550                 555                 560
Glu Lys Ala Asn Gln Gly Ser Ser Arg Arg Leu Ala Asn Thr Lys Val
                565                 570                 575
Leu Val Thr Thr Asp Leu Ala Ser Arg Gly Ile Asp Thr Leu Ala Val
            580                 585                 590
Lys Thr Val Ile Leu Tyr His Val Pro His Thr Thr Ile Asp Phe Ile
        595                 600                 605
His Arg Leu Gly Arg Leu Gly Arg Met Gly Lys Arg Gly Arg Gly Val
    610                 615                 620
```

```
Val Leu Val Gly Lys Lys Asp Arg Lys Asp Val Val Lys Glu Val Arg
625                 630                 635                 640
Glu Gly Met Phe Arg Gly Gln Ala Leu Ile
                645                 650

<210> 34228
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34228
Thr Thr Thr Pro Arg Leu Thr Val Tyr Leu Tyr Cys Gln Thr Gly Thr
1               5                   10                  15
Arg Ser Pro Thr Asp Ser Gln Lys Ser His Leu Ser Phe Lys Asn Asp
            20                  25                  30
Thr Cys Ala Val Ala Asn Pro Ser Gly Ala Ile Thr Gln Ser Ser Pro
        35                  40                  45
Val Leu Leu Glu Glu Pro Gly His Pro Phe Phe Glu Arg Ile Pro Gln
    50                  55                  60
Leu
65

<210> 34229
<211> 315
<212> PRT
<213> A.fumigatus

<400> 34229
Ser Val Pro Gln Tyr Asp Pro Ala Ser Val Tyr Val Pro Gln Arg Pro
1               5                   10                  15
Leu Ala Thr Asn Arg Ser Pro Gln Lys Gln Pro Gln Ser Asn Ser Ser
            20                  25                  30
Pro Gln Gln Pro Gln Asn Arg Asn Asp Arg Gln Pro Gly Pro Arg Pro
        35                  40                  45
Pro Ser Pro Ser Lys Asp Gln Val Ser Pro Ala Lys Ser Ser Leu Ser
    50                  55                  60
Arg Ala Ser Arg Phe Gly Val Lys Gly Thr Gly Phe Asp Pro Glu Ser
65                  70                  75                  80
Glu Ile Trp Ser Asp Leu Asp Ser Val Gly Asn Arg Tyr Pro Lys Ser
                85                  90                  95
Val Thr Phe Asp Ala Ala Pro Pro Gln Val Asn Glu Tyr Glu Met Thr
            100                 105                 110
Thr Pro Asp Pro Ser Ser Ile Ala Ser Glu Ser Arg Asp Gly Ser Tyr
        115                 120                 125
Asp Ser Glu Glu Asp Glu Gly Asp Val Ser Phe Asp Arg Glu Ser Ser
    130                 135                 140
Leu Asp Arg Asp Asp Ser Phe Asp Ala Ser Leu Glu Asp Leu Glu Lys
145                 150                 155                 160
Thr Pro Val Val Leu Pro Asp Asp Trp Arg Tyr Met Ser Pro Ser Cys
                165                 170                 175
Ala Asn Asp Glu Leu Val Lys Glu Asp Asp Pro Phe Thr Glu Asp Asp
            180                 185                 190
Glu Ser His Ser Pro Gly Pro Thr Thr Pro Ser Gln Gln Lys Leu Pro
        195                 200                 205
Leu Gln His Ser Arg Val Glu Ser Leu Asp Ser Asn Gly Glu Arg Arg
    210                 215                 220
```

```
Pro Leu Pro Pro Leu Pro Gly Ala Ser Arg Gln Pro Val Asn Pro His
225                 230                 235                 240
Ser Ser Ser Pro Gly Arg Leu Ala Ala Ala Phe Glu Leu Gly Ser Gly
                245                 250                 255
Gly Lys Arg Val Ile His Ser Pro Pro Ala Pro Ala Ser Cys Thr Lys
            260                 265                 270
Ser Asp Ile Ser Glu Leu Ser Arg Ala Ser Met Ser Leu Glu Asp Arg
        275                 280                 285
Leu Arg Leu Met Met Ile Arg Lys Asp Glu Arg Ala Lys Gln Glu His
    290                 295                 300
Glu Asn Gly Leu His His Arg Ala Ser Thr Ala
305                 310                 315
```

<210> 34230
<211> 273
<212> PRT
<213> A.fumigatus

<400> 34230

```
Arg Ala Ser Gly Asn His Ser Ala Leu Leu Pro Ala Leu Pro Ile Ala
1               5                   10                  15
Val Thr Val Ser Ser Tyr Asp Ser Ser Arg Arg Leu Phe His Pro Pro
            20                  25                  30
Ser Leu Leu Ser Ser Leu Arg Glu Arg Ile Leu Ile Arg Arg Ile Ser
        35                  40                  45
Thr Arg Arg Val Val Arg Pro Arg Arg Ser Tyr Thr Met Pro Ala Leu
    50                  55                  60
Ile Asn Ser Ala Glu Pro Val Ala Pro Val Leu Arg Val Arg Glu Leu
65                  70                  75                  80
Glu Asp Asp Glu Glu Tyr Val Met Thr Ala Phe Glu Arg His Ala Ser
                85                  90                  95
His Cys Ser Gln Cys Ala Asp Pro Phe Arg Val His Gln Glu Gly Arg
            100                 105                 110
Ser Leu Cys Asp Arg Gly His Gln Tyr Ala Leu Asp Val Ala Glu Tyr
        115                 120                 125
Phe Tyr Ser Glu Asn Gly Lys Ala Lys Ser Val Ile Asp Arg Glu Leu
    130                 135                 140
Ser Gln Pro Thr Leu Val Lys Ile Pro Arg Asp Cys Val Ala Val Arg
145                 150                 155                 160
Gly Leu Leu Leu Ala Ile Glu Asp Gly Met Arg Leu Gln Arg Lys Glu
                165                 170                 175
Gln Glu Lys Pro Gln Ser Gln Asn Gln Ala Arg Val Gln Val Val Thr
            180                 185                 190
Pro Val Ile Ser Tyr Asp Arg Thr Phe Pro Ile Ala Pro Arg Gln Ala
        195                 200                 205
Ala Thr Gln Gln Pro Ala Ala Cys Asn Glu Ile Ile Glu Arg Glu Pro
    210                 215                 220
Arg Thr Leu Lys Arg Arg Arg Val Ile Ile Tyr Gln Ser Pro Arg Arg
225                 230                 235                 240
Ser Ser Arg Gly Ser Leu Tyr Asp Ser Asp Ala Ala Asp Arg Ala Glu
                245                 250                 255
Arg Ser Lys Glu Ser Pro Ser Arg Ile Tyr Arg Pro Thr Gly Tyr His
            260                 265                 270
Arg
```

<210> 34231
<211> 77
<212> PRT
<213> A.fumigatus

<400> 34231
Pro Pro Val Thr Thr Phe Arg Pro Ile Thr Arg Pro Glu Ile Asn Gln
1 5 10 15
Gln Ala Glu Ile Val Ala Asp Ser Val Ala Ala Asp Ala Leu Phe Leu
20 25 30
Ser Arg Ile Asn Asn Gln Arg Leu Lys Ala Leu Pro Ala Cys Thr Ser
35 40 45
His Ser Arg Leu Ala Ser His Ser Val Leu Trp Lys Pro Glu Glu Ser
50 55 60
Ser Pro Gly Lys His Gln Thr Leu Arg Val Glu Trp Glu
65 70 75

<210> 34232
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34232
Gly Ile Ser Ala Gly Ile Trp Leu Pro Ala Pro Gln Thr Ser Phe Trp
1 5 10 15
Leu Val Ala Asp Gly Leu Ile Thr Gly Tyr Asn Lys Ile Met Val Leu
20 25 30
Tyr Met Cys Met Cys Ser Val Arg His Ser Cys Ser Gln Pro Ser Gly
35 40 45
Val Lys Lys Leu Val Tyr Met His Leu Gly Gly Ser Tyr Cys His Ala
50 55 60
Leu Gln Ala Asn Ala
65

<210> 34233
<211> 198
<212> PRT
<213> A.fumigatus

<400> 34233
Thr Pro Ser Pro Thr Pro Leu Trp His Pro Ser Ala Pro Ser Ser Leu
1 5 10 15
Leu Val Ser His Val Gly Asp Thr Arg Ile Leu Leu Cys Tyr Thr Ala
20 25 30
Thr Gly Ala Ala Ile Pro Leu Thr Ser Asn His His Pro Ser Ser Pro
35 40 45
Ile Glu Ala Asn Arg Leu Arg Arg Tyr Ala Ala Thr Phe Val Thr Asp
50 55 60
Ser Phe Gly Glu Glu Arg Met Ser Gly Leu Ala Asn Thr Arg Ala Phe
65 70 75 80
Gly Asp Val Gln Ser Lys Arg Ile Gly Val Ser Ala Glu Pro Glu Ile
85 90 95
Arg Arg Ile Glu Met Gly Pro Ala Glu Tyr Ser Phe Leu Val Leu Met
100 105 110
Thr Asp Gly Ile Ser Gly Thr Leu Thr Asp Gln Glu Val Val Asp Ile
115 120 125

```
Ile Lys Glu Ala Lys Thr Pro Asp Glu Gly Ala Arg Asn Val Val Asn
    130                 135                 140
Phe Ala Thr Glu Val Thr Lys Glu Gly Asp Asn Ala Thr Cys Leu Val
145                 150                 155                 160
Val Arg Leu Gly Gly Trp Glu Arg Arg Leu Glu Gly Gly Leu Gly Ser
                165                 170                 175
Leu Gly Thr Lys Glu Ser Arg Glu Trp Arg Arg Gln Glu Ala Thr Asp
            180                 185                 190
Pro Arg Ser Ser Arg Arg
        195
```

<210> 34234
<211> 115
<212> PRT
<213> A.fumigatus

<400> 34234

```
Gln Ser Leu Gln Thr Val Leu Phe Ile Cys Cys Ala Leu Asn Glu Leu
1               5                   10                  15
Phe Phe Ile Gly Leu Tyr Leu Leu Ser Phe Ser Ser Pro Ile Leu Ser
            20                  25                  30
Pro Ser Leu Leu Gln Ala Gln Asp Pro Ser Ala Pro Pro Ala Leu Ala
        35                  40                  45
Ser Pro Trp Ser Ala Gly Ala Leu Glu Leu Ala Arg Ala Asn Lys Ile
    50                  55                  60
Asp Ser Phe Trp Pro Trp Val Ile Thr Gly Ile Ser Ala Pro Val Met
65                  70                  75                  80
Ala Leu Lys Gln Phe Ile Asn Val Val Gln Leu Val Lys Ala Ser Lys
                85                  90                  95
Trp Leu Ala Glu Gly Asp Arg Ala Arg Arg Lys Ala Glu Arg Glu Gly
            100                 105                 110
Lys Thr Leu
        115
```

<210> 34235
<211> 287
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (57)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34235

```
Lys Phe Lys Gly Pro Asp Gln Lys Phe Pro Arg Ser Gly Phe Val Pro
1               5                   10                  15
His Thr Gly Ala Ile Ser His Pro Pro Thr Ser Phe Gln Ala Val Val
            20                  25                  30
Asp Arg Glu Thr Thr Val Val Gly Ile Pro Leu Arg Ser Ala Lys His
        35                  40                  45
His Phe Gly Ala Ala Thr Ser Arg Xaa Thr Arg Val Ser Asn Glu Asp
    50                  55                  60
Thr His Gln Ala Gly Val Leu Asp Ile Pro Ala Phe Ala Lys Arg Pro
65                  70                  75                  80
Pro Ala Ser Val Thr Ile Lys Arg Thr Thr Ala Pro Leu Glu Asn Arg
```

```
                85                  90                  95
Gly Ala Asp Ser Ala Ser Gly Asp Pro Gln Val Phe Tyr Phe Gly Val
            100                 105                 110
Phe Asp Gly His Gly Gly Ser Glu Cys Ser Thr Phe Leu Lys Asp Thr
        115                 120                 125
Leu His Glu Tyr Ile Gln Asp Thr Ala Ala Glu Ser Glu Phe Gln Ser
    130                 135                 140
Ser Leu Ser Lys Asp Arg Glu Gly His Phe Ser Lys Asn Glu Ser Glu
145                 150                 155                 160
Ile Cys Arg Gly Asp Leu Pro Ile Ile Gln Arg Gly Asn His Lys Arg
                165                 170                 175
Met Ala Glu Met Glu Lys Thr Leu Val Gln Asn Trp Arg Arg Leu Val
            180                 185                 190
Gly Gly Tyr Phe Lys Arg Phe Val Pro Ala His Phe Ser Tyr Arg Gly
        195                 200                 205
Asn Ser Ala Gln Gly Asn Gly Ser Ala Thr Gly Asn Gly Asp Asp His
    210                 215                 220
Thr Gly Gly Val Thr Ile Glu Glu Ile Leu Glu Tyr Ala Phe Leu Arg
225                 230                 235                 240
Ala Asp Leu Asp Phe Val Ser Ala Gln Ala Ala Lys Glu Asp Asp Glu
                245                 250                 255
Leu Ala Thr Ala His Lys Pro Gln Tyr Gln Asp Asp Ile Leu Tyr Gly
            260                 265                 270
Pro Lys His Thr Gln Gln Thr Glu Ala Trp Arg Leu Pro Thr Ile
        275                 280                 285

<210> 34236
<211> 146
<212> PRT
<213> A.fumigatus

<400> 34236
Asp Ala Asp Arg Trp Cys Asn Gly Ala Gly Tyr Ser Arg Val Phe Leu
1               5                   10                  15
Thr Ile Ala Ser Leu Tyr Tyr Met Pro Leu His Pro Arg Thr Cys Ser
            20                  25                  30
Leu Leu Tyr Ser Ile Ser Cys Leu Leu Asp Ala Leu Asp Gly Tyr Ala
        35                  40                  45
Ala Arg Tyr Tyr Asn Gln Ser Thr Thr Phe Gly Ala Val Leu Asp Met
    50                  55                  60
Val Thr Asp Arg Cys Thr Thr Ala Cys Leu Leu Val Phe Leu Ser Ser
65                  70                  75                  80
Ala Trp Pro Arg Trp Ala Ile Leu Phe Gln Ser Leu Ile Ser Leu Asp
                85                  90                  95
Leu Ala Ser His Tyr Met His Met Tyr Ala Thr Leu Ser Met Gly Gly
            100                 105                 110
Ala Ser Gln Ser His Lys Asn Val Glu Ala Thr Arg Ser Trp Ile Leu
        115                 120                 125
Tyr Gln Tyr Tyr His Ser Lys Val Ser Ala Met Gln Cys Leu Gln Lys
    130                 135                 140
Glu Ser
145

<210> 34237
<211> 207
<212> PRT
```

<213> A.fumigatus

<400> 34237

```
Thr Val Arg Gln Pro Arg Leu Tyr Ser Met Thr Arg Lys Thr Thr Asn
1               5                  10                  15
Tyr Thr Ser Val Gly Asn Arg Gly Pro Asn Lys Ala Thr Asn Ala Ala
            20                  25                  30
Gly Ser Ala Ser Ala Val Lys Ala Ala Ile Ala Ala Ile Thr Ala Asn
        35                  40                  45
Pro Ser Ser Asn Thr Thr Thr Thr Thr Ser Ser Ser Asn Asn Arg Trp
    50                  55                  60
Thr Ser Asp Val Gln Glu Ile Leu Ser Met Asn Leu Glu Leu Trp Arg
65                  70                  75                  80
Asn Ser Leu Pro Glu Ile Met Lys Trp Lys Asp Ala Asp Pro Pro Ser
                85                  90                  95
Asn Asp Ile Asn Val Ala Arg Met Arg Ala Lys Tyr Tyr Gly Ala Arg
            100                 105                 110
Tyr Ile Ile His Arg Pro Leu Leu Tyr Gln Ala Leu His Phe Ala Gly
        115                 120                 125
Leu Pro Tyr Pro Asn Pro Thr Ser Ala Leu Val Gly Ser Pro Ala Gly
    130                 135                 140
Ser Val Leu Pro Ser Thr Lys Ser Glu Gln Val Ser Ser Leu Leu Pro
145                 150                 155                 160
His Ser Gln Gln Ala Ser Ser Met Ala His Leu Ser Ser Asn Ile Gly
                165                 170                 175
Val Pro Val His Thr Ala Ser Thr Tyr Val Gln Gly Ser Ser Thr Gly
            180                 185                 190
Ser Leu His His Gly Ala Gly Arg Thr Arg Ala Asp Gln Met Gly
        195                 200                 205
```

<210> 34238
<211> 123
<212> PRT
<213> A.fumigatus

<400> 34238

```
Phe Ala Trp Ser Gln Ser His Pro Asp Arg Val Ala Ser Ala Asp Phe
1               5                  10                  15
Ser Ser Tyr Lys Gln Ser Ser Ala Leu Phe His Thr Pro Phe Gly Thr
            20                  25                  30
Pro Ser Ser Gly Ser Ser Ser Ala Ser Ser Thr Asp Gly Pro Arg Val
        35                  40                  45
Ser Ser Ser Asp Tyr Ile Ser Leu Ser Arg Pro Gln Gln Gln Trp Gln
    50                  55                  60
Ser Ser Phe Ser Ser Ser Ser Val Phe Asp Asn Asp Leu Ala Tyr Phe
65                  70                  75                  80
Pro His Ala Cys Ser Pro Ala Ser Asn Leu Trp Tyr Thr Ser Glu Gln
                85                  90                  95
Gly Thr Ser Arg Ser Ala Gly Asn Asp Ser Pro Phe Pro Arg Arg Met
            100                 105                 110
Lys Lys Ala Ala Leu Asn Thr Lys Glu Leu Asp
        115                 120
```

<210> 34239
<211> 91
<212> PRT

<213> A.fumigatus

<400> 34239
Leu Tyr Ile Leu Pro Gln Tyr Lys Lys Ala Cys Asp Arg Cys Arg Ala
1 5 10 15
Arg Lys Ala Lys Cys Asp Glu Gly Arg Pro Ser Cys Gly His Cys Lys
20 25 30
Glu Asn Asn Leu Ile Cys Val Tyr Lys Glu Val Leu Pro His Lys Cys
35 40 45
Val Thr Cys Leu Thr Ser Val Leu Gln Leu Val Ser Cys Arg Ile Leu
50 55 60
Thr Leu Lys Leu Asp Arg Lys Arg Pro Pro Ser Arg Ser Trp Thr Arg
65 70 75 80
Tyr Asn Val Trp Lys Ile Ser Ser Thr Ser Val
85 90

<210> 34240
<211> 138
<212> PRT
<213> A.fumigatus

<400> 34240
Asn Lys Asp Pro Tyr Val Ala Val Leu Val Asp Gly Asp Gly Ala Ile
1 5 10 15
Phe Asn Lys Glu Leu Leu Leu Asp Pro Arg Gln Gly Ala Ser Glu Ala
20 25 30
Ala Leu Arg Leu Thr Gln Ala Val Arg Asn Tyr Leu Lys Asp Thr Pro
35 40 45
Leu Gly Ser Glu Asp Val Pro Ile Val Val Arg Ile Phe Ala Asn Leu
50 55 60
Thr Gly Leu Ala Lys Ser Leu Val Thr Tyr Asn Asp Ile Asp His Glu
65 70 75 80
Asp Lys Met Arg Glu Phe Ala Glu Asn Phe Thr Asn Ser Arg Ala Glu
85 90 95
Phe Asp Phe Val Asn Val Gly Arg Gly Lys Glu Asn Ala Asp Ser Lys
100 105 110
Met Arg Ser Lys Phe Pro Thr Gly Gly Gln Phe Gln Leu Ala Asp Leu
115 120 125
Ile Ser Arg Arg Asp Val Gln Ser Phe Leu
130 135

<210> 34241
<211> 90
<212> PRT
<213> A.fumigatus

<400> 34241
His Gln Ser Leu Gly Tyr Asp Tyr Asn Thr Ala His Lys Gln Leu Phe
1 5 10 15
Ala Val Pro Val Ile Ile Leu Arg Pro Ser Asn Gly Gly Lys Lys Trp
20 25 30
Lys Phe Phe Arg Cys Ala Ala Asp Asp Met Gln Ser Val Trp Ser Leu
35 40 45
Val His Gly Gly Ala Met Ile Asp Thr Ala Leu Phe Ser Lys Asp Cys
50 55 60
Ile Lys Gly Pro Val His Gln Ser His Arg Ile Phe Tyr Val Thr Thr

65 70 75 80
Arg Glu Gln Glu Ser Pro Gly Ser Arg Cys
85 90

<210> 34242
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34242
Phe Leu Ala Glu Met Phe Asn His Phe Tyr Lys Asn Phe Gln Cys Lys
1 5 10 15
Lys Ile Phe Phe Ala Gly Cys His Asp Asn Gly Tyr Leu His Asp Leu
20 25 30
Arg Asp Tyr Ala Gly Glu Ser Gly Pro Thr Ser Ala Ser Val Leu Phe
35 40 45
Arg Arg Thr Thr Pro Ala Gln Val Arg Ala Leu Pro Pro Asp Gly Leu
50 55 60
Phe
65

<210> 34243
<211> 261
<212> PRT
<213> A.fumigatus

<400> 34243
Val Leu Trp Tyr Leu Thr Gln Pro Ala Val Asn Arg Leu Val Gln Leu
1 5 10 15
Ala Glu Phe Tyr Gln Leu Gly Gly Phe Glu Tyr Trp Gly Arg Met His
20 25 30
Gln Ser Asp Leu Tyr Gly Ser Asp Ser Asp Ser Ser Glu Ser Ser Glu
35 40 45
Tyr Pro Ser Asn Leu Thr Arg Ala Glu Ala Val Arg Gln Tyr Pro Glu
50 55 60
Ser Ala His Gln Ala Leu Ala Ala Thr Leu Gly Leu Val Tyr Tyr Lys
65 70 75 80
Ile Arg Asn Glu Val Gly Glu Gly Pro Asn Thr His Ile Pro Arg Pro
85 90 95
Pro Lys Arg Glu Arg Gln Gln Glu Asp Leu Ala Ser Val Ser Ser Gly
100 105 110
Ser Lys Gln Lys Pro Val Lys Met Pro Arg Arg Pro Asn Asn Val Ser
115 120 125
Pro Thr Thr Leu His Arg Leu Ile Thr Gly Pro Ser Leu Glu Ser Lys
130 135 140
Ser Leu Ile Ser Glu Glu Ser Asp Lys Leu Gly Trp Asn Val His Ser
145 150 155 160
Asp Val Ser Asp Asp Ala Met Ser Lys Leu Arg Gly Ile Val Ser Glu
165 170 175
Glu Val Gly Thr Leu Leu Arg Ala Leu Glu Gln Gly Arg Leu Lys Leu
180 185 190
Lys Pro Ser Arg Ser Glu Arg Leu Asn Met Ser Pro Thr Glu Ser Lys
195 200 205
Gly Gly Ser Phe Gln Asp Lys Val Pro Glu Ser Ala Gln Glu Asp Glu
210 215 220
Val Arg Thr Val Ala Asn Thr Val Ala Thr Glu Leu Val Ser Pro Ser

225 230 235 240
Ser Thr Arg Asn Glu Glu His Asp Leu Pro Asp Thr Ala Ser Asp Ala
245 250 255
Thr Thr Pro Leu Thr
260

<210> 34244
<211> 123
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34244
Arg Xaa Ile Glu Thr His Phe Leu Pro Pro Arg Val Lys Thr Asp Leu
1 5 10 15
Glu Gln Leu Gln Thr Asp Val Cys Gly Cys Arg Ile Glu Ile Ser Lys
20 25 30
Leu His Ala Ala Ile Ser Gln Leu Arg Thr Asp Leu Ile Thr Leu Gln
35 40 45
His Glu Thr Ser Arg His Leu Asn Ala Val Phe Asn Arg Phe Thr Leu
50 55 60
Ile Glu Ala Arg Met Lys His Ser Glu Arg Val Arg Phe Asn Ser Leu
65 70 75 80
Ala His Thr Thr His Ala Pro Ile Thr Pro Val Pro Val Ile Glu Glu
85 90 95
Asp Gly Ser Leu Gln Trp Pro Glu Tyr Phe Pro Arg Thr Val Trp Arg
100 105 110
Phe Trp Cys Leu Lys Lys Arg Ser Arg Ser Glu
115 120

<210> 34245
<211> 281
<212> PRT
<213> A.fumigatus

<400> 34245
Cys Pro Pro Ser Thr His His Glu Ile Leu Asp Val Leu Met Ser Leu
1 5 10 15
Leu Ser Ser Val Ser Ile Arg Met Ala Ser Arg Met Thr Cys Ala Ser
20 25 30
Arg Leu Met Arg Pro Asn Pro Ile Val Ser Arg Gly His Arg Arg Leu
35 40 45
Pro Ala Thr Leu Leu Gln Pro Ser Cys Arg Phe Val His Pro Gly Glu
50 55 60
Phe Lys Pro Phe Val Pro Pro Ser Pro Ser Ser Leu Gly Lys Pro Ile
65 70 75 80
Pro Ala Lys Thr Tyr Thr Arg Thr Arg Ile Trp Leu Arg Arg Leu Ala
85 90 95
Tyr Leu Ser Ile Ala Thr Gly Val Val Tyr Ala Ile Asp Thr Gln Val
100 105 110
Tyr Ala Ser Ser Leu Thr Arg Thr Ala Arg Thr Phe Ser Leu Gly Leu
115 120 125

```
Leu Val Ala Leu Asp Tyr Lys Ile Asn Phe Arg Pro Asn Pro Pro Phe
    130                 135                 140
Ala Glu Ser Ile Thr Ala Leu His Ala Arg Asn Ala Glu Arg Leu Phe
145                 150                 155                 160
Asp Leu Leu Arg His Asn Gly Gly Leu Tyr Leu Lys Ile Gly Gln Ala
                165                 170                 175
Ile Ala Met Gln Ser Ala Ile Leu Pro Pro Glu Phe Gln Lys Met Phe
            180                 185                 190
Ala Arg Met Phe Asp Asp Ala Arg Gln Asn Asp Trp Lys Asp Val Glu
        195                 200                 205
Lys Val Ile Arg Glu Asp Phe Gly Lys Ser Ala Glu Glu Val Phe Gly
    210                 215                 220
Val Ala Phe Thr Gly Asp Pro Thr Lys Gly Val Leu Glu Arg Lys Ala
225                 230                 235                 240
Arg Ala Ser Ala Ser Val Ala Gln Val His Trp Ala Arg Leu Ala Asp
                245                 250                 255
Gly Arg Glu Val Ala Ile Lys Val Gln Lys Arg Glu Ile Ala Gln Gln
            260                 265                 270
Ile Lys Trp Asp Leu Trp Ala Phe Lys
        275                 280
```

<210> 34246
<211> 166
<212> PRT
<213> A.fumigatus

```
<400> 34246
Met Asp Ala Asn Glu Thr Arg Val Val Thr Trp Val Tyr Ser Arg Ala
1               5                   10                  15
Phe Asp Ile Pro Phe Tyr Ser Leu Val Pro Tyr Ile Ser Glu Arg Leu
            20                  25                  30
Phe Leu Glu Thr Asp Phe Glu Asn Glu Ala Thr Asn Ser Glu Thr Met
        35                  40                  45
Ala Lys Leu Val Ala Gly Glu Ser Arg Leu Arg Gly Arg Val Tyr Ile
    50                  55                  60
Pro Lys Ile Tyr Arg Glu Leu Ser Ser Lys Arg Val Met Thr Ala Glu
65                  70                  75                  80
Trp Ile Glu Gly Val Arg Leu Trp Asp Arg Glu Ser Ile Thr Arg Pro
                85                  90                  95
Trp Leu Gly Gly Trp Trp Glu Gly Ser Pro Gly Cys Gln Gly Thr Pro
            100                 105                 110
Leu Asp Ala Pro Lys Ala Glu Asp Pro Val Thr Arg Val Ala Arg Asn
        115                 120                 125
Pro Asn Leu Ala Lys Ile Lys Pro Glu Arg Asn His Trp Arg Gly Trp
    130                 135                 140
Asn Gly Lys Gly Gly Leu Gly Leu Ser Leu Lys Asp Val Met Thr Thr
145                 150                 155                 160
Met Val Asp Leu Phe Ser
                165
```

<210> 34247
<211> 106
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (67)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34247
Asn Cys Gly Glu Ile Arg Ser Asn Asp Gln Ser Pro Ile Phe Gly Ser
1 5 10 15
Arg Leu Lys Gln Asp Ser Thr Asn Met Thr Thr Val Thr Gly Lys Ser
20 25 30
Ile Thr Pro Ser Leu Ile Phe Leu Ser Asp Ile Leu Gln Ser Ile Gln
35 40 45
Pro Asp Ser Ser Thr Thr Val Asp Glu Pro Thr Tyr Asn Ala Leu Pro
50 55 60
Pro Pro Xaa Arg Thr Ser Pro Pro Ala Gln Arg Ile Arg Arg Asn Arg
65 70 75 80
Glu Thr Arg Pro Asp Met Leu Gln Ser Arg Arg Arg Ala Arg Gln Pro
85 90 95
Thr Arg Arg Ser Val Arg Glu Ile Ser Ala
100 105

<210> 34248
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34248
Thr Lys Arg Gln Glu Gly Cys Ser Lys Val Ala Gly Lys Arg Arg Trp
1 5 10 15
Pro Arg Asp Thr Met Gly Phe Gly Arg Ile Lys Arg Glu Ala His Val
20 25 30
Ile Arg Asp Ala Ile Arg Met Asp Thr Glu Asp Asn Asn Asp Ile Lys
35 40 45
Thr Ser Ser Ile Ser Trp Cys Val Asp Gly Gly His Gln Arg Gly Phe
50 55 60

<210> 34249
<211> 150
<212> PRT
<213> A.fumigatus

<400> 34249
Arg Val Phe Asp Leu Leu Ser Thr Ser Arg Leu Cys Phe Thr Val Pro
1 5 10 15
Ile Pro Trp Met Lys Phe Asn Phe Gln Ser Gly Phe Leu Arg Ser Ala
20 25 30
Arg Gln Ala Ile Val Asp Pro Ile Val Val Val Pro Val Arg Arg Thr
35 40 45
Leu Pro Ser Ala Ala Ala Val Ser Pro Thr Thr Leu Thr Leu Ser Ser
50 55 60
Ser Asp Pro Thr Ile Pro His Tyr Arg His Ser Ser Ser Leu Thr Leu
65 70 75 80
Arg Tyr Ser Arg Pro Val Asp Thr Met Pro Lys Asp Asn Lys Asn Ser
85 90 95
Phe Asn Leu Lys Thr Pro Lys Gly Thr Lys Asp Trp Ser Gly Ser Asp
100 105 110
Val Leu Leu Arg Asp Arg Ile Phe Ser Thr Ile Ala Asp Val Phe Lys

```
        115                 120                 125
Arg His Gly Gly Thr Ala Leu Asp Thr Pro Val Phe Glu Leu Arg Glu
    130                 135                 140
Ile Leu Ala Gly Lys Tyr
145                 150
```

<210> 34250
<211> 62
<212> PRT
<213> A.fumigatus

<400> 34250
```
Ser Ser Ile Tyr Gly Asn Tyr Gly Val Val Ser Asn Leu Arg Lys His
1               5                   10                  15
Val Pro Arg Leu Cys Asn Ser Thr Leu Cys Asp Ala Ser Val Trp Ile
            20                  25                  30
Phe Leu Phe His Asp Ser Gln Asp Leu Pro Arg Ser Pro Gly Gly Glu
        35                  40                  45
Gly Phe Lys Ala His Tyr Ala Phe Lys Lys Val His His Glu
    50                  55                  60
```

<210> 34251
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34251
```
Gly Lys Ser Arg Val Asn Leu Ser Leu Gln Thr Leu Ser Val Arg Ser
1               5                   10                  15
Arg Leu Thr Ser Gly Val Tyr Asp Thr Thr Leu Arg His Gly Ser Met
            20                  25                  30
Lys Glu Leu Ile Gln Tyr Lys Ile Glu Gly Glu Ala Leu Asp Thr Gln
        35                  40                  45
Gln Ala Gly Lys Arg Leu Gly Phe Met Lys Pro Ser Gln
    50                  55                  60
```

<210> 34252
<211> 402
<212> PRT
<213> A.fumigatus

<400> 34252
```
Tyr Gln Val Pro Thr Lys Gly Thr Thr His Pro Val Lys Glu Leu Leu
1               5                   10                  15
Tyr Thr Ile Glu Asp Ser Asp Pro Ser Leu Val Ile Leu His Pro Ala
            20                  25                  30
Phe Asp Lys Val Arg Glu Pro Leu Arg Glu Ser Val Ala Lys Asp Val
        35                  40                  45
Pro Phe Met Asn Phe Gln Ser Phe His Ala Lys Lys Asp Leu Ser Ser
    50                  55                  60
Lys Ser Leu Pro Thr Phe Ser Pro Val Ser Phe Leu Asp Arg Arg Ala
65                  70                  75                  80
Leu Met Ile Tyr Thr Ser Gly Thr Thr Ser Lys Pro Lys Gly Cys Val
                85                  90                  95
Thr Thr His Lys Asn Ile Thr Phe Gln Ala Arg Cys Leu Ile Glu Ala
            100                 105                 110
```

```
Trp Lys Tyr Ser Pro Ser Asp His Leu Ile His Val Leu Pro Leu His
        115                 120                 125
His Val His Gly Ile Ile Asn Gly Leu Thr Ser Ser Phe Leu Ser Gly
    130                 135                 140
Ala Thr Val Glu Met His Pro Lys Phe Asp Pro Gln Val Ile Trp Asn
145                 150                 155                 160
Arg Trp Gln Asp Gln Asp Ser Ser Thr Met Phe Met Ala Val Pro Thr
                165                 170                 175
Ile Tyr Ser Arg Leu Ile Asp Tyr Phe Glu Ala Asn Ile Arg Gly Thr
            180                 185                 190
Asp Lys Glu Ala Ala Ala Arg Ser Gly Ala Lys Ser Leu Arg Leu Val
        195                 200                 205
Val Ser Gly Ser Ala Ala Leu Pro Thr Pro Ile Lys Thr Lys Phe Ala
    210                 215                 220
Ala Ile Thr Gly Gln Ile Leu Leu Glu Arg Tyr Gly Met Thr Glu Ile
225                 230                 235                 240
Gly Met Ala Leu Ser Cys Gly Leu Asp Val Asp Lys Arg Ile Asp Gly
                245                 250                 255
Ser Val Gly Trp Pro Leu Pro Gly Val Gln Val Arg Leu Val Asp Lys
            260                 265                 270
Glu Thr Gly Ala Ile Ile Glu Thr Ala Asn Glu Asp Gly Met Ile Glu
        275                 280                 285
Ile Lys Gly Glu Asn Val Phe Leu Glu Tyr Trp Arg Gln Pro Asp Ala
    290                 295                 300
Thr Ala Arg Glu Phe Thr Ala Asp Gly Trp Phe Lys Thr Gly Asp Val
305                 310                 315                 320
Ala Arg Arg Asp Gly Ser Gly Ala Tyr Phe Ile Gln Gly Arg Ala Ser
                325                 330                 335
Val Asp Leu Ile Lys Ser Gly Gly Tyr Lys Ile Ser Ala Leu Glu Val
            340                 345                 350
Glu Arg Lys Met Leu Gly Leu Asp Thr Ile Glu Glu Val Ala Val Val
        355                 360                 365
Gly Leu Ala Asp Glu Glu Trp Gly Gln Arg Val Ala Ala Val Val Lys
    370                 375                 380
Gln Arg Pro Gly Val Arg Gln Tyr Ala Cys Leu Glu His Ile Ser Arg
385                 390                 395                 400
Lys Thr
```

<210> 34253
<211> 214
<212> PRT
<213> A.fumigatus

```
<400> 34253
Asp Ala Pro Glu Ile Arg Pro Ala Ser His Met Glu Pro Val Ala Gly
1               5                   10                  15
Ser Gly Leu Leu His Asp Val His Gly Arg Ser Asp Asp Leu Leu Ser
            20                  25                  30
Ile Asp Arg Leu Leu Arg Gly Gln His Thr Arg Tyr Arg Gln Gly Ser
        35                  40                  45
Arg Arg Pro Lys Trp Arg Gln Val Leu Glu Ala Arg Arg Lys Arg Phe
    50                  55                  60
Arg Gly Ala Pro Tyr Pro Tyr Gln Asp Gln Val Arg Arg Asn His Arg
65                  70                  75                  80
Pro Asp Pro Phe Gly Ala Leu Arg His Asp Arg Asp Arg His Gly Ala
```

```
                85                  90                  95
Gln Leu Trp Ala Gly Arg Arg Gln Ala His Arg Arg Gln Arg Arg Leu
            100                 105                 110
Ala Ser Ala Trp Arg Thr Gly Ser Ala Arg Arg Gln Gly Asn Gly Arg
        115                 120                 125
Asn His Arg Asn Ser Glu Arg Gly Arg His Asp Arg Asp Gln Arg Gly
    130                 135                 140
Glu Cys Leu Pro Arg Ile Leu Ala Thr Ala Arg Arg Asp Ser Gln Gly
145                 150                 155                 160
Val His Cys Arg Arg Met Val Gln Asp Gly Gly Arg Cys Thr Ala Arg
                165                 170                 175
Trp Phe Arg Arg Ile Leu Tyr Pro Arg Pro Gly Val Gly Arg Pro Asp
            180                 185                 190
Gln Val Arg Trp Val Gln Asp Leu Gly Pro Arg Gly Gly Thr Glu Asp
        195                 200                 205
Ala Gly Leu Gly Tyr His
    210
```

<210> 34254
<211> 326
<212> PRT
<213> A.fumigatus

<400> 34254

```
Phe Ile Leu Gly Gly Gly His Ile Ala Glu Thr Leu Gly Arg Ser Leu
1               5                   10                  15
Asn Thr Gly Thr Ser Thr Leu Thr Lys Gly Ser Asn Leu Arg Glu Leu
            20                  25                  30
Glu Leu Met His Lys Tyr Ser Thr Glu Thr Tyr Met Ser Leu Ser Asn
        35                  40                  45
Arg Pro Ser Asp Tyr His Val Trp Gln Val Val Ile Pro Arg Lys Ala
    50                  55                  60
Leu Glu His Asp Phe Leu Leu Asn Gly Val Leu Ala Val Ala Ala Leu
65                  70                  75                  80
His Val Ala Ser Thr Leu Lys Pro Pro Asp Ala Leu Thr Tyr Ile Asp
                85                  90                  95
Thr Ala Leu Glu Tyr His Asn Arg Ala Phe Ala Pro Tyr Arg Gln Ala
            100                 105                 110
Ile Asp Asn Leu Thr Pro Met Asn Cys Asp Ala Val Phe Ala His Ser
        115                 120                 125
Val Leu Thr Thr Val Ile Gly Ile Ala Leu Pro Arg Leu Thr Ala Glu
    130                 135                 140
Arg Asn Glu Ser Ser Gly Ile Thr Glu Asn Ile Val Val Val Phe Glu
145                 150                 155                 160
Leu Leu Gln Gly Val Ser Lys Ile Phe Lys Ile Ser Arg Pro Trp Leu
                165                 170                 175
Thr Met Gln Leu Phe Thr Ser Gln Asn Asp Trp Asp Lys Val Thr Arg
            180                 185                 190
Ser Lys Leu Asp Ser Glu Thr Glu Arg Ala Leu Asn Arg Leu Ala Val
        195                 200                 205
Leu Asn Asp Asp Ile Val Ala Thr Val Asp Pro Glu Gln Tyr Leu Ile
    210                 215                 220
Val Lys Asp Ala Ile Cys Arg Leu His Glu Cys Phe Thr Gly Tyr Ala
225                 230                 235                 240
Thr Asn Gly Glu Ala Ala Ser Val Leu Arg Trp Leu Ala Val Ala Ser
                245                 250                 255
```

```
Lys Glu Phe Ala His Ala Leu Arg Cys Arg Lys Pro Phe Pro Leu Met
            260                 265                 270
Val Leu Met Tyr Trp Gly Val Leu Leu Gly Glu Leu Asp Gly Lys Trp
        275                 280                 285
Trp Trp Ala Lys Asn Ser Gly Thr Ala Leu Val Ser Glu Leu Leu Ala
    290                 295                 300
Val Leu Gln Pro Gly Asp Ile Arg Trp Glu Glu Ala Arg Leu Trp Pro
305                 310                 315                 320
Lys His Lys Met Gly Leu
                325
```

<210> 34255
<211> 436
<212> PRT
<213> A.fumigatus

<400> 34255

```
Trp Pro His Asn Thr Thr Thr Gln Asp Ser Ala Asp Asp Asn Cys Phe
1               5                   10                  15
Arg Arg His Leu Cys Lys Leu Ser Lys Glu Ser Met Ser Asp Thr Ile
            20                  25                  30
Ala Asp Glu Ile Leu Arg Asn Gly Tyr Ala Lys Thr Phe Thr Arg His
        35                  40                  45
Ser Val Phe Leu Thr Gly Ser Thr Gly Ser Leu Gly Gly Cys Leu Leu
    50                  55                  60
Tyr Lys Leu Ala Leu Gln Leu Pro Thr Gln Lys Ile Phe Val Leu Ile
65                  70                  75                  80
Arg Gly Ser Ala Glu Ser Ala Ile Glu Lys Trp Arg Arg Leu Met Pro
                85                  90                  95
Lys Gln Thr Gln Ala Ile Leu Asn Thr Gly Lys Val His Phe Val Val
            100                 105                 110
Gly Asp Ile Lys Lys Thr Asp Phe Gly Ile Glu Glu Ala Glu Leu Ser
        115                 120                 125
Arg Leu Arg Glu Glu Val Thr Leu Val Ile His Thr Ala Ala Thr Ile
    130                 135                 140
Thr Leu Asp Ala Gly Ile Val Glu Ser Ile Glu Asn Asn Cys Leu Pro
145                 150                 155                 160
Ser Leu Glu Leu Ala Lys Ile Val Ser Arg Phe Arg Arg Leu Lys Leu
                165                 170                 175
Phe Leu Gln Ile Ser Thr Ala Tyr Val Ser Ser Phe Leu Pro Asp Gly
            180                 185                 190
Tyr Val Gly Glu Arg Val Tyr Ser Ile Ser Asp Ala Asp Pro Glu Asp
        195                 200                 205
Glu Leu Ala Ala Ile Leu Ser Thr Gly Asn Ser Leu Asp Thr Ala Arg
    210                 215                 220
Phe Ser Ser Ser Tyr Thr His Ala Lys Tyr Leu Met Glu Arg Leu Leu
225                 230                 235                 240
Leu Lys Arg Tyr Pro Leu Leu Pro Leu Leu Leu Val Arg Pro Thr Ile
                245                 250                 255
Phe Gly Ala Ala Met Arg Asp Pro Tyr Pro Leu Tyr Gly Pro Ile Asn
            260                 265                 270
Ser Thr Pro Met Asn Lys Phe Ala Ser Leu Phe Phe Ala Asp Arg Gly
        275                 280                 285
Gly Thr His Ile Trp His Ala Thr Glu Gly Tyr Glu Thr Gly Ala Asn
    290                 295                 300
Ile Val Asp Glu Ile Pro Val Asp Phe Val Ala Asn Gly Cys Leu Leu
```

305 310 315 320
His Ala Ala Ser Arg Thr Gln Gly Ile Val His Leu Gly Ala Gln Leu
325 330 335
Tyr Val Pro Phe Thr Phe Asp Asp Phe Leu Arg Leu Ala Glu Ala Ser
340 345 350
Ala Pro Pro Ser Ile Gln Lys Glu Leu Pro Ser Leu Ile Phe Thr Gln
355 360 365
Asp Arg Asn Ala Pro Gln Ser Leu Leu Ala Asp Leu Val Lys Val Ser
370 375 380
Thr Arg Asn Trp Val Phe Asp Cys Gly Arg Ser Tyr Trp Leu Lys Gln
385 390 395 400
Met Ala Gly Pro Leu Ser Leu Ala Ala Cys Lys His Asp Val Asp Ala
405 410 415
Leu Asn Ser Ala Arg Ile Lys Glu Ile Tyr Glu Asn Thr Val Lys Lys
420 425 430
Leu Ala Lys Leu
435

<210> 34256
<211> 128
<212> PRT
<213> A.fumigatus

<400> 34256
Leu Leu Ile Ala Arg Gln Arg Pro Ala Ser Lys Leu Pro Gly Thr Ser
1 5 10 15
Tyr Asp Phe Thr Trp Leu Ala Phe Asn Phe Lys Thr Val Gly Ser Leu
20 25 30
Ser Leu Asp Gln Gln Ser Ser Leu His Ile Tyr Leu Cys Arg Leu Asn
35 40 45
Leu Ser Ile Asn Ser Ser Ala Val Pro Glu Gln Ala Ser Ser Ala Leu
50 55 60
Val Lys Asn Thr Tyr Cys Asn Gly Ile Cys Pro Ala Phe Leu Arg Ser
65 70 75 80
Arg Lys Phe Leu Val Ala Glu Asn Leu His Tyr Arg Asp Thr Gln Ile
85 90 95
Glu Ala Cys Ser Phe Ala Asn Arg Pro Gly Cys Cys Ser Ala Glu Glu
100 105 110
Val Met Ala Gly Ile Tyr Ile Ser Asn Thr Leu Ser Gly Asp Ser Gly
115 120 125

<210> 34257
<211> 118
<212> PRT
<213> A.fumigatus

<400> 34257
Met Ile Leu Ala Asp Ser Gln Ser Leu Asp Val Pro Thr Gln Leu Pro
1 5 10 15
Pro Ser Cys Thr Leu Gly Pro Met Met Glu Arg Glu Asp Thr Arg Asp
20 25 30
Val Leu Val Met Lys Lys Gly Leu Pro Asn Met Ser Phe Ser Glu Met
35 40 45
Pro Ala Gly Ser Val Val Gly Thr Ser Ser Ile Arg Arg Thr Ala Gln
50 55 60
Leu Ala Arg Arg Tyr Pro His Leu Lys Val Gln Asp Val Arg Gly Asn

65 70 75 80
Ile Gly Thr Arg Leu Ala Lys Leu Asp Ala Glu Asp Ser Pro Phe Thr
85 90 95
Cys Ile Val Leu Ala Ala Ala Gly Leu Leu Arg Leu Gly Met Glu Asp
100 105 110
Arg Ile Ser Pro Val Ser
115

<210> 34258
<211> 131
<212> PRT
<213> A.fumigatus

<400> 34258
Thr Cys Arg Ser Thr Pro Val Gln Ser Arg Asn Lys Pro Arg Pro Pro
1 5 10 15
Leu Leu Arg Thr Pro Thr Ala Met Ala Ser Ala Pro Pro Ser Ser Glu
20 25 30
Ala Ala Asn Ser Ser Ser Arg Arg Thr Phe Thr Ile Gly Thr Arg Lys
35 40 45
Ser Lys Leu Ala Leu Leu Gln Thr Asp Leu Val Val Ala Ala Leu Lys
50 55 60
Lys Ser Trp Pro Glu Tyr Thr Phe Gln Ile His Ser Gln Glu Thr Ala
65 70 75 80
Gly Asp Lys Asn Thr Val Ile Ala Leu Arg Glu Phe Thr Thr Lys Asn
85 90 95
Leu Trp Thr Gln Glu Leu Glu Glu Leu Leu Met Ala Gly Asp Val Asp
100 105 110
Leu Ile Val His Ser Leu Lys Gly Lys Phe Ile Thr Pro Ala Ser Tyr
115 120 125
Arg Tyr Lys
130

<210> 34259
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34259
Val Trp Arg Thr Ala Tyr Pro Gln Tyr Leu Asp Ser Lys Asn Gly Gly
1 5 10 15
Met Leu Tyr Ala Leu Ala Lys Gly Ala Leu Gly Val Glu Ile Arg Lys
20 25 30
Asp Asp Lys Val Ser Ala Gly Tyr Ala Gln Leu Tyr Arg Ala Ser Glu
35 40 45
Asn Asp Phe Gly Leu Leu Arg Arg Ala Lys Leu Pro Ala Asn Ser
50 55 60

<210> 34260
<211> 162
<212> PRT
<213> A.fumigatus

<400> 34260
Pro Ile Tyr Leu His Cys Leu Gly Cys Cys Trp Ser Val Glu Ala Arg
1 5 10 15

```
Tyr Gly Gly Pro His Ile Pro Ser Ile Leu Thr Leu Arg Met Ala Gly
            20                  25                  30
Cys Ser Thr Arg Trp Pro Arg Glu His Leu Ala Leu Arg Ser Ala Arg
        35                  40                  45
Met Ile Arg Phe Leu Arg Asp Met Leu Asn Ser Ile Gly His Gln Lys
    50                  55                  60
Thr Thr Leu Ala Cys Phe Ala Glu Arg Ser Phe Leu Arg Thr Leu Glu
65                  70                  75                  80
Gly Gly Cys Ser Ala Leu Leu Gly Val Glu Thr Glu Trp Val Gln Asp
                85                  90                  95
Ser Asp Arg Ser Ser Lys Leu Arg Met Arg Ala Ile Val Val Ser Val
            100                 105                 110
Asp Gly Arg Glu Ser Ala Glu Val Glu Val Asp Gly Ser Val Asp Thr
        115                 120                 125
Ala Glu Ser Ala Glu Glu Phe Gly Val Thr Val Ala Lys Ala Leu Val
    130                 135                 140
Glu Lys Gly Ala Gly Glu Ile Leu Ala Glu Ile Gln Arg Lys Lys Leu
145                 150                 155                 160
Thr Pro
```

<210> 34261
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34261

```
Ile Thr Arg Thr Ser Ala Ser Gly Ser Ala Tyr Arg Phe Ile Ala Ser
1               5                   10                  15
Pro Val Thr Asp Tyr Val Tyr Gly Val Leu Glu His Leu Arg Asp Phe
            20                  25                  30
Lys Thr Asp Arg Leu Ala Pro Tyr Ser Pro Phe Val Leu Ile Asp Trp
        35                  40                  45
Leu Gln Ala Asn Ala Leu Ser Ser Cys Ser Tyr Thr Ile Ser Ser Val
    50                  55                  60
```

<210> 34262
<211> 115
<212> PRT
<213> A.fumigatus

<400> 34262

```
Ser Ile Ala Arg Gly Asp Glu Gln Gly Arg Met Cys Asn Gly Gln Gly
1               5                   10                  15
Met Thr Gly His Lys Ser Ser Ser Ile Phe Gly Ala Asn Ala Arg Leu
            20                  25                  30
Lys Ser Pro Ala Lys Asn Ile Leu Val Glu Asn Ile Tyr Cys Asn Leu
        35                  40                  45
Ser Gly Gly Cys Ala Met Gly Ser Leu Gly Ala Asp Thr Asp Ile Ser
    50                  55                  60
Asp Ile Thr Tyr Lys Asn Ile Tyr Thr Trp Asn Ser Asn Gln Met Met
65                  70                  75                  80
Met Ile Lys Ser Asn Gly Gly Ser Gly Thr Val Ser Asn Val Val Phe
                85                  90                  95
Glu Asn Phe Ile Gly Lys Gln Gln Ala Leu Pro Leu Ser Phe Ser Ile
            100                 105                 110
```

Gln Ala Gly
115

<210> 34263
<211> 214
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2),(3),(30)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34263
Ala Xaa Xaa Ala Ala Ser Leu Ser Gly Ser Val Gly Pro Leu Thr Ser
1 5 10 15
Ala Ser Ala Lys Ala Ala Lys Lys Thr Cys Asn Val Leu Xaa Tyr Gly
20 25 30
Ala Lys Ala Asp Lys Lys Thr Asp Leu Gly Pro Leu Leu Ala Ala Ala
35 40 45
Phe Ala Ala Cys Lys Ser Gly Gly Leu Val Tyr Ile Pro Ala Gly Asp
50 55 60
Tyr Ala Met Ser Thr Trp Val Lys Leu Ala Asn Gly Lys Ala Trp Ala
65 70 75 80
Leu Gln Ile Asp Gly Val Ile Tyr Arg Thr Gly Thr Asp Gly Gly Asn
85 90 95
Met Ile Met Ile Glu His Thr Ser Asp Phe Glu Leu Tyr Ser Ser Thr
100 105 110
Ser Ser Gly Ala Met Gln Gly Leu Gly Tyr Glu Phe His Ala Ser Asn
115 120 125
Asn Trp Ser Gly Pro Arg Leu Leu Arg Leu Trp Asp Val Ser Asp Phe
130 135 140
Ser Val His Asp Leu Ile Leu Val Asp Ser Pro Ser Phe His Phe Ser
145 150 155 160
Ile Asp Thr Cys Ser Asn Gly Glu Val Tyr Asn Met Ala Ile Arg Gly
165 170 175
Gly Asn His Gly Gly Leu Asp Gly Val Asp Val Trp Ser Thr Asn Ile
180 185 190
Trp Ile His Asp Val Arg Ile Gly Phe Arg Ser Gly Ile Arg Ser Gly
195 200 205
Tyr Phe Gly Ser Gln Ser
210

<210> 34264
<211> 251
<212> PRT
<213> A.fumigatus

<400> 34264
Ala Ala Ser Thr Ser Leu Val Ile Gln His Thr Gly Arg Leu Thr Glu
1 5 10 15
Gly Val Lys Thr Ala Ile Gly His Gly Asn Ala Tyr Ser Leu Asp Ile
20 25 30
Asp Ser Phe Trp Ser Ser Met Ser Ala Val Ser Gly Asp Gly Val Thr
35 40 45
Leu Asn Asn Ile Thr Ile Lys Asn Trp Lys Gly Thr Glu Ala Asn Gly

```
    50                  55                  60
Ala Gln Arg Gly Pro Ile Lys Ile Ile Cys Pro Asp Lys Val Pro Cys
65                  70                  75                  80
Tyr Asn Ile Leu Ile Glu Asp Phe Ala Met Trp Thr Glu Thr Gly Ser
                85                  90                  95
Lys Gln Trp Tyr Ser Cys Gln Ser Ala Tyr Gly Ser Gly Phe Cys Leu
            100                 105                 110
Lys Ser Gly Ser His His Thr Ser Tyr Ala Val Thr Thr Thr Thr Val
        115                 120                 125
Ser Ser Ala Pro Ser Gly Tyr Ser Ala Ala Lys Met Ala Ser Asp Leu
    130                 135                 140
Ser Thr Asp Phe Gly Ser Thr Lys Ser Ile Pro Ile Pro Thr Ile Pro
145                 150                 155                 160
Thr Ser Phe Tyr Pro Gly Ala Thr Pro Tyr Ser Ala Leu Met Ser Lys
                165                 170                 175
Gln Ser Thr Lys Ala Ala Lys Ala Arg Ala Val Asp Met Ser Val Glu
            180                 185                 190
Thr Pro Ala Ala Ala Ser Arg Ser Glu Gln Val Val Gln Gly Ala Pro
        195                 200                 205
Gln Glu Thr Gly Gln Ser Ala Pro Glu Ser Ala Gly Pro Val Pro Ser
    210                 215                 220
Gly Asn Pro Gly Pro Val Pro Thr Gly Gly Ser Arg Pro Ser Arg His
225                 230                 235                 240
Arg His Gly His His His Phe Gly Ser Ala Ile
                245                 250
```

<210> 34265
<211> 550
<212> PRT
<213> A.fumigatus

<400> 34265

```
His Phe Arg Trp Glu Asp Arg Ser His Arg Phe Asn Pro Arg Ser Leu
1               5                   10                  15
Thr Arg Asp Asn Leu Pro Glu Pro Leu Gln Pro Leu Ala Asp Met Phe
            20                  25                  30
Pro His Ile Trp Pro Val Lys Ala Pro Gly Asp Ser Lys Tyr Asn Lys
        35                  40                  45
Val His Ser Pro Leu Gln Ala Ile Leu Leu Ser Ser Leu Pro Lys Asn
    50                  55                  60
Lys Glu Ser Gly Gly Lys Gly Pro Lys Pro Pro Lys Val Asp Lys Ser
65                  70                  75                  80
Tyr Val Pro Lys Arg Thr Pro Ile Thr Ala Phe Ile Ser Ser Val Asp
                85                  90                  95
Asn Leu Arg Glu Asn Asp Tyr Val Leu His Pro Ala Leu Leu Ser Thr
            100                 105                 110
Glu Lys Glu Lys Leu Ala Leu Ala Glu Asn Arg Lys Arg Ala Gly Gln
        115                 120                 125
Ser Thr Glu Asp Gly Trp Val Asp Thr His Val Ser Ser Trp Glu Ala
    130                 135                 140
Gly Gln Val Pro Glu His Glu Ile Gln Gln Gly Ser Val Thr Ala Gly
145                 150                 155                 160
Arg Asp Ile Leu Ala Leu Asp Cys Glu Met Cys Ile Thr Glu Gly Gly
                165                 170                 175
Lys Ser Glu Leu Thr Arg Ile Ser Leu Val Arg Trp Asp Gly Glu Val
            180                 185                 190
```

```
Val Leu Asp Glu Leu Val Lys Pro Gln Leu Pro Ile Ile Asp Tyr Leu
        195                 200                 205
Thr Arg Phe Ser Gly Ile Thr Lys Glu Lys Leu Asp Ser Val Thr Thr
    210                 215                 220
Thr Leu Ala Asp Ile Gln Gln Lys Leu Leu Asn Ile Leu Thr Pro Arg
225                 230                 235                 240
Thr Val Leu Val Gly His Ser Leu Asn Ser Asp Leu Asn Ala Leu Lys
                245                 250                 255
Leu Thr His Pro Phe Ile Val Asp Thr Ala Ile Ile Tyr Pro His Pro
            260                 265                 270
Arg Gly Pro Pro Leu Lys Cys Ser Leu Lys Trp Leu Thr Gln Lys Tyr
        275                 280                 285
Leu Gly Lys Glu Ile Gln Lys Gly Gln Thr Gly His Asp Ser Val Glu
    290                 295                 300
Asp Ala Arg Ala Val Leu Glu Leu Val Lys Gln Lys Cys Glu Lys Gly
305                 310                 315                 320
Glu Arg Trp Gly Thr Ser Asp Ala Ser Asn Glu Ser Ile Phe Arg Arg
                325                 330                 335
Leu Gly Arg Ser Pro Arg Pro Gly Lys Ala Thr Thr Ser Gly Glu Gly
            340                 345                 350
Arg Thr Gly Ala Val Val Asp Trp Gly Asn Pro Glu Arg Gly Phe Gly
        355                 360                 365
Ser Gln Ala Thr Val Ala Ile Gly Cys Gln Asn Asp Glu Glu Val Val
    370                 375                 380
Gln Gly Val Ser Ala Val Val Lys Gly Asp Pro Ser Asn Pro Ser Ile
385                 390                 395                 400
Pro Gly Gly Gly Val Asp Phe Thr Trp Ala Arg Met Arg Glu Leu Glu
                405                 410                 415
Val Leu Arg Gly Trp Cys Asn Arg Leu Pro Asp Pro Asn Asn Ala Asn
            420                 425                 430
Glu Ser Thr Thr Leu Val Pro Pro Pro Glu Glu Thr Thr Pro Thr Gly
        435                 440                 445
Ser Gly Thr Val Glu Pro Ala Ala Ala Ala Arg Asn Ser Leu Ala Asp
    450                 455                 460
Thr Val Ala Arg Thr Val Ala Asn Ile Gln Arg Ile Tyr Glu Ser Leu
465                 470                 475                 480
Pro Pro Cys Thr Leu Phe Ile Val Tyr Thr Gly Thr Gly Asp Pro Arg
                485                 490                 495
Glu Val Ser Arg Leu Gln Ser Met His Lys Thr Phe Arg Glu Glu Phe
            500                 505                 510
Asn Ser Arg Lys Pro Trp Asp Glu Leu Thr Val Lys Trp Thr Asp Ala
        515                 520                 525
Glu Glu Gln Ala Leu Lys Lys Ala Cys Glu Arg Ala Arg Glu Gly Cys
    530                 535                 540
Gly Phe Met Cys Val Lys
545                 550
```

<210> 34266
<211> 447
<212> PRT
<213> A.fumigatus

<400> 34266

```
Gly His Val Gln Val Arg Pro Ser Asn Trp Ala Tyr Ser Pro Asn Ile
1               5                   10                  15
Phe Trp Lys Leu Pro Lys Val Ser Phe Arg Glu Ile Val Thr Met Arg
```

```
            20                  25                  30
Thr Val Glu Pro Leu Phe Lys Asp Gly Ser Leu Glu Arg Phe Leu Cys
        35                  40                  45
Pro Thr Pro Lys Glu Ser Thr Ser Arg Ala Leu Val Ser Thr Gly Pro
    50                  55                  60
His Lys Val Asp Gly Ser Thr Met Ser Met Glu Gln Gln Ile Gln His
65                  70                  75                  80
Gln Gly Val Ser Ile Asp Tyr Ile Ser Asn Ser Val Asn Asn Leu His
                85                  90                  95
Asp Thr Met Ser Glu Leu Lys His Ser Phe Thr Ser Leu Arg Ile Glu
            100                 105                 110
Leu Asn Gly Pro Gly Arg Leu Pro Pro Asp Asn Ser Gly Thr His Gly
        115                 120                 125
Ser Asp Phe Asp Met Ile Arg Thr Val Leu Lys Glu Leu Lys Ser Lys
    130                 135                 140
Ala Glu Glu Ile Glu Thr Leu Lys Leu Glu Ile Gln Ala Leu Gln Leu
145                 150                 155                 160
Lys Asn Arg Tyr Met Glu Glu Gln Ala Thr Arg His Pro Ala Ala Thr
                165                 170                 175
Phe Gly Thr Glu Thr Thr Val Met Pro Glu Val Arg Ser Pro Gly Leu
            180                 185                 190
Leu Gln Ala Gly Arg Lys Arg Pro Trp Pro Asp Ser Phe Pro Ser Gly
        195                 200                 205
Arg Thr Glu Pro Ile Ala Asp Ser Phe Asp Glu Glu Asp Gly Thr Phe
    210                 215                 220
Gly Asp Phe Ser Leu Ala Asp Met His Ala Gln Ser Val Lys Ile Pro
225                 230                 235                 240
Leu Lys Asp Pro Glu Pro Gly His Ala Ile Ala Asp Ser Thr His His
                245                 250                 255
Gln Ile Pro Pro Glu Ser Pro Arg Leu Arg Ile Glu Val Thr Arg Ser
            260                 265                 270
Arg Gln His Thr Pro His Phe Asp Asn Met Val Glu Asp Thr Glu Gly
        275                 280                 285
Thr Asn Leu Asp Thr Gln Gln Pro Ala Val Val Lys Arg Pro Arg Ile
    290                 295                 300
Phe Asp Ser Ala Asp Arg Thr Ser Gly Gly Asn Thr Glu Lys Arg Arg
305                 310                 315                 320
Pro Gly Arg Pro Arg Lys Ser Leu Ser Gln Cys Ala Lys Pro Asp Phe
                325                 330                 335
Ser Gln Thr Pro Lys Pro Thr Pro Leu Ser Glu Gln Asn Gly Asn Val
            340                 345                 350
Gly Thr Cys Ile Pro Asn Glu Gln Ile Pro Ser Asn Thr Ser Pro Ser
        355                 360                 365
Glu Pro Val Asp Val Leu Gln Arg Ser Ser Thr Arg Ser Arg Thr Leu
    370                 375                 380
Arg Ser Gln Ser Arg Pro Pro Ser Arg Arg Gln Ser Gly Asn Ala Val
385                 390                 395                 400
Ser Gln Ser Thr Asp Gly Asp Gln Asn Ala Phe Arg Lys Lys Ser Ala
                405                 410                 415
Asn Asp Tyr Gly Gly Ile Ile Pro Thr Leu Lys Gln Arg Arg Gln Ala
            420                 425                 430
Phe Asn His Gly Asn Leu Arg Leu Thr Pro Arg Arg Arg Pro Pro
        435                 440                 445
```

<210> 34267
<211> 61

<212> PRT
<213> A.fumigatus

<400> 34267
Pro Pro Phe Pro Ser Ser Thr His Val Asp Ile Thr Thr Arg Ile Val
1 5 10 15
Ser Trp Lys Val Thr Ile Met Tyr Ala Gln Arg Pro Leu Ser Tyr Ala
20 25 30
Pro Thr Pro Tyr Ser Tyr Thr Pro Asn Pro Ala Leu Ser Ala Thr Ile
35 40 45
Asn Leu Asp Glu Val Leu Pro Phe Gly Ser Pro Val Asn
50 55 60

<210> 34268
<211> 90
<212> PRT
<213> A.fumigatus

<400> 34268
Leu Arg Ser Tyr Gln Glu Val Lys Leu Ala Ser Ser Ser Ala Glu Arg
1 5 10 15
Asp Leu His Glu Ser Leu Ala Glu Ile Tyr Ser Ile Ile Val Thr Leu
20 25 30
Asp Gly Leu Glu Lys Ala Tyr Ile Lys Asp Val Val Thr Glu Ala Glu
35 40 45
Tyr Thr Glu Thr Cys Thr Arg Leu Leu Lys Gln Tyr Lys Ser Ser Leu
50 55 60
Gly Asp Glu Thr Val Ala Ala Glu Phe Val Asp Leu Glu Thr Phe Lys
65 70 75 80
Arg Thr Trp Gly Val Ser Thr Leu Ser Val
85 90

<210> 34269
<211> 139
<212> PRT
<213> A.fumigatus

<400> 34269
Leu Phe Trp Gln Leu Glu Cys Pro Arg Ala Thr Glu Arg Leu Arg Ile
1 5 10 15
Gly Leu Pro Ala Thr Val Glu Gln Ala Ser His Gly Thr Pro Ser Gly
20 25 30
Asn Ala Gly Pro Thr Thr Gly Gly Pro Val Gly Gly Ala Ser Gly Ser
35 40 45
Leu Ile Leu Thr Ala Thr Glu Asn Phe Ile Thr Phe Leu Asp Ala Leu
50 55 60
Lys Leu Asn Met Val Ser Lys Asp Ala Leu His Pro Leu Leu Ser Glu
65 70 75 80
Val Ile Gln Ser Val Asn Lys Val Thr Asp Arg Asp Phe Glu Asn Arg
85 90 95
Gly Lys Ile Ile Gln Trp Leu Ile Thr Leu Asn Gln Met Arg Ala Thr
100 105 110
Asp Glu Leu Thr Glu Glu His Ala Pro Glu Leu Ala Phe Asp Ile Glu
115 120 125
Gln Ala Tyr Gln Gly Phe Lys Ser Thr Leu Gly
130 135

<210> 34270
<211> 230
<212> PRT
<213> A.fumigatus

<400> 34270
Arg Ser Leu Arg Ile Leu Thr Pro Gly Leu Leu Asn Val Ala Met Pro
1 5 10 15
Ala Met Ser Arg Ser Phe Thr Ile Pro Thr Ser Ser Asp Glu Glu Leu
20 25 30
Thr Leu Thr Leu His Glu Pro Ser Leu Thr Ala Asp Asn Leu Gly Met
35 40 45
Lys Thr Trp Val Ser Ser Tyr Leu Leu Ser Arg Arg Leu His Thr Leu
50 55 60
Leu Asp Val Ala Pro Ala Leu Val Pro Ser Ser Ser Thr Thr Pro Lys
65 70 75 80
Ser Asp Arg Thr Leu Arg Ala Leu Glu Leu Gly Ala Gly Thr Gly Leu
85 90 95
Val Gly Leu Ser Phe Ala Ala Leu Arg Gly Ser Ser Ala Thr Ile His
100 105 110
Leu Thr Asp Leu Pro Asp Ile Val Pro Asn Leu Ala His Asn Val Ser
115 120 125
Leu Asn Val Glu Leu Leu Thr Arg Thr Asp Ala Ala Val Thr Thr Gly
130 135 140
Val Leu Asp Trp Ser Val Ala Pro Ser Pro Pro Pro Arg Glu Glu Gln
145 150 155 160
Tyr Asp Leu Ile Leu Ala Ala Asp Pro Leu Tyr Ser Pro Lys His Pro
165 170 175
Lys Trp Leu Val Asp Thr Ile Gly His Trp Leu Arg Arg Gly Leu Asp
180 185 190
Ala Arg Val Val Val Glu Met Pro Leu Arg Asp Ala Tyr Leu Pro Gln
195 200 205
Val Gln Glu Phe Arg Gln Arg Met Gln Gln Leu Ser Ser Arg Pro Gly
210 215 220
Ala Gly Arg Ile Arg Ala
225 230

<210> 34271
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34271
Glu Ser Cys His Thr Leu Leu Gln Ser Leu Tyr Phe Asp Val Thr Thr
1 5 10 15
Met Pro Ile Trp Val Ala Phe Trp Val Asp Trp Thr Thr Arg Phe Glu
20 25 30
Gln Gln Met Ala Ser His Ser Val Ala Ser Thr Ser Gly Leu Ser Ser
35 40 45
Ser Ser Leu Val Ser Trp Ile Leu Tyr Val Ser Leu Arg Gln Asn Asn
50 55 60
Glu Ala Met Met Thr Pro Ser Ile Asn Leu
65 70

<210> 34272

<211> 260
<212> PRT
<213> A.fumigatus

<400> 34272
Thr His Ile Gly Trp Lys Asp Ile Arg Cys Asn Phe Glu Tyr Arg Ser
1 5 10 15
Ala Gly Trp Ile Ser Asp Arg Leu Asn His Trp Leu Gly Arg Lys Ala
20 25 30
Val Ile Ala Ile Ala Ala Val Phe Ser Leu Val Ala Pro Ile Ala Cys
35 40 45
Gly Val Thr Gln Asn Trp His Gln Leu Leu Gly Cys Arg Ile Leu Leu
50 55 60
Gly Ile Gly Met Gly Leu Lys Glu Val Thr Val Pro Val Phe Ser Ala
65 70 75 80
Glu Thr Val Pro Thr Ser Ile Arg Gly Gly Leu Val Met Ser Trp Gln
85 90 95
Val Cys Arg Cys Ser Leu Phe Pro Trp Leu Ile Leu Glu Phe Gly Ser
100 105 110
Ser Ser Gly Leu Thr Thr Asp Asn Gly Tyr Pro Gly Thr Ala Phe Gly
115 120 125
Ile Phe Leu Gly Thr Cys Ala Asn Leu Ala Val Val Asn Thr Gly Lys
130 135 140
Ile Ala Trp Arg Leu Gln Leu Gly Ser Ala Phe Ile Pro Ala Val Pro
145 150 155 160
Leu Leu Leu Gly Ile Trp Phe Cys Pro Glu Ser Pro Arg Trp Leu Leu
165 170 175
Ser Lys Glu Asn Pro Arg Lys Ala Tyr Glu Ser Leu Leu Arg Leu Arg
180 185 190
Asn Ser Pro Leu Gln Ala Ala Arg Asp Leu Tyr Tyr Ile His Ala Gln
195 200 205
Ile Lys Met Glu Lys Arg Leu Leu Arg Glu Ser Glu Phe Thr Arg Gly
210 215 220
Gly Asn Thr Leu Ala Arg Phe Leu Glu Leu Phe Thr Val Pro Arg Val
225 230 235 240
Arg Arg Ala Thr Gln Ala Ser Gly Ile Val Met Ile Ala Gln Gln Met
245 250 255
Cys Gly Ser Thr
260

<210> 34273
<211> 270
<212> PRT
<213> A.fumigatus

<400> 34273
Leu Arg Ser Lys Cys Val Glu Val Arg Glu Ser Ser Pro Asn Leu Val
1 5 10 15
Thr Asn Tyr Gly His Arg Ser Tyr Cys Lys Thr Val Asn Ile Ile Ala
20 25 30
Phe Tyr Ser Ser Thr Ile Phe Glu Gln Ala Gly Ala Thr Asn Ile Gln
35 40 45
Ala Leu Leu Ala Ser Phe Gly Phe Gly Leu Val Asn Phe Leu Phe Ala
50 55 60
Trp Pro Ala Val Trp Thr Ile Asp Thr Phe Gly Arg Arg Trp Leu Leu
65 70 75 80

```
Leu Ala Thr Phe Pro Asn Met Cys Trp Thr Leu Leu Ala Ala Gly Phe
                85                  90                  95
Cys Phe Trp Ile Pro Ala Ser Ser Ser Ala His Leu Gly Leu Ile Ala
            100                 105                 110
Leu Phe Ile Tyr Leu Phe Asn Ile Phe Tyr Ser Pro Gly Glu Gly Pro
        115                 120                 125
Val Pro Phe Thr Tyr Ser Ala Glu Val Phe Pro Leu Thr His Arg Glu
    130                 135                 140
Val Gly Met Ala Trp Ala Val Ala Thr Asn Asn Phe Trp Ala Ala Val
145                 150                 155                 160
Leu Ser Leu Thr Phe Pro Tyr Met Leu Arg Asp Phe Lys Pro Gln Gly
                165                 170                 175
Ala Phe Gly Phe Tyr Ala Gly Leu Asn Ile Ile Ala Leu Leu Leu Ile
            180                 185                 190
Phe Phe Phe Leu Pro Glu Thr Lys Gln Arg Ser Leu Glu Glu Leu Asp
        195                 200                 205
Arg Val Phe Ser Ile Ser Thr Arg Ala His Ala Lys Tyr Gln Val Thr
    210                 215                 220
Glu Val Leu Pro Trp Trp Ile Arg Arg Tyr Leu Leu Gly Arg Lys Asp
225                 230                 235                 240
Asp Val Val Arg Asp Ile Tyr Arg His Leu Ser Pro Asp Pro Val Leu
                245                 250                 255
Ile Ala Glu Lys Pro Lys Lys Glu Glu His Leu Glu Ser Val
            260                 265                 270
```

<210> 34274
<211> 83
<212> PRT
<213> A.fumigatus

```
<400> 34274
Thr Gly Arg Ser Gly Arg Asp Gly Arg Tyr Tyr Ser Arg Glu Ser Arg
1               5                   10                  15
Asn Arg Ile Arg Pro Pro Ala Gly Ser Ser Thr Tyr Trp Gly Arg Trp
            20                  25                  30
Arg Ala Arg Ala Asn Asp Gly Gln Thr Cys Arg Trp Ser Arg Arg Arg
        35                  40                  45
Ala Arg Arg Arg Gly Ser Ser Pro Ser Gln Ser Arg Arg Thr Gln Ala
    50                  55                  60
Gly Pro Gly Cys Ser Trp Arg Arg Leu Ala Gln Arg Trp Trp Thr Ser
65                  70                  75                  80
Arg Thr Arg
```

<210> 34275
<211> 216
<212> PRT
<213> A.fumigatus

```
<400> 34275
Pro Cys Glu Arg Arg Glu Thr Arg Ala Gly Glu Pro Gly Met Met Cys
1               5                   10                  15
His Gly Phe Lys Gly Gly Thr Gly Ser Ala Ser Arg Val Ile Asp Gly
            20                  25                  30
Val Ala Phe Gly Ala Glu Thr Asn Tyr Ile Val Ala Gly Leu Val Gln
        35                  40                  45
```

```
Ala Asn Tyr Gly Ala Lys Arg Asp Met Arg Phe Gly Gly Ala Pro Val
    50                  55                  60
Gly Leu Leu Met Glu Gln Glu Asp Gly Ala Val Ala Thr Ala Ala Ala
65                  70                  75                  80
Asn Glu Asp Asp Ala Arg Lys Ala Lys Asp Gly Ser Ile Ile Val Val
                85                  90                  95
Ile Ala Thr Asp Ala Pro Leu His Pro Thr Gln Leu Gln Arg Leu Ala
            100                 105                 110
Lys Arg Ala Thr Val Gly Leu Ser Arg Val Gly Gly Trp Gly Ser Asn
        115                 120                 125
Ser Ser Gly Asp Ile Phe Ile Ala Phe Ser Thr Ala Glu Arg Ile Pro
    130                 135                 140
Arg Ala Pro Asp Phe Ser Trp Lys Pro Thr Val Glu Gln Gln Val Ser
145                 150                 155                 160
Val Val Gln Asp Val Thr Ile Asn Ala Leu Phe Glu Gly Ala Ala Asp
                165                 170                 175
Ala Thr Glu Glu Ala Ile Tyr Asn Ala Leu Val Gly Ala Glu Asp Met
            180                 185                 190
Glu Gly Pro Arg Gly Lys Ile Val Lys Ala Leu Asp His Ala Arg Leu
        195                 200                 205
Lys Ser Ile Met Glu Arg Tyr Leu
    210                 215
```

<210> 34276
<211> 171
<212> PRT
<213> A.fumigatus

<400> 34276

```
Leu Ala Ile Ala Ser Phe Ser Asn Leu Val Glu Leu Leu Ser Arg Leu
1               5                   10                  15
Tyr Glu Ser Val Ile Ser Pro Ala Pro Phe Arg Thr Lys Glu His Ala
            20                  25                  30
Gly Ala Gln Leu Val Phe Cys Val Ser Tyr Asn Ala Phe Ser Ser Ala
        35                  40                  45
Met Ala His Thr Leu Glu Phe Ala Ser Ala Cys Arg Ser Gly Glu Phe
    50                  55                  60
Pro Ile Asp Cys Ile Glu Ile Trp Lys Thr Ser Thr Met Glu Pro Ile
65                  70                  75                  80
Arg Thr Glu Pro Glu Glu Gly Phe Ala Ser Asn Trp Arg Phe Ile Thr
                85                  90                  95
Cys Glu Asn His Trp Thr Ile Val Phe Lys Tyr Gly Gly Arg Gln Ala
            100                 105                 110
Ile Ala Thr Lys Tyr Arg Gly Tyr Asp Leu Lys Trp Arg His Asp Asp
        115                 120                 125
Leu Ala Glu Pro Ser Val Val Leu Lys Phe Glu Pro Arg Pro Ser Cys
    130                 135                 140
Pro Ser Met Ser Asp Val Ala Trp Lys Ile Cys Ala Val Glu Asn Pro
145                 150                 155                 160
Asn Thr Lys Ala Phe Asp Cys Ser Gln Phe Val
                165                 170
```

<210> 34277
<211> 86
<212> PRT
<213> A.fumigatus

<400> 34277
Asn Met Tyr Ala Pro His Trp Gly Glu Gly Ile Arg Ala Asn Tyr Met
1 5 10 15
Ser Met Pro Gln Thr Lys His Glu Ala Asp Pro His Pro Pro Thr Tyr
20 25 30
Cys Glu Pro Asn Ala Arg Arg Leu Asp Thr Val Ser Asn Gly Thr Glu
35 40 45
Gln Leu Val Ser Asp Met Gln Gly Asp Lys Ser Asn Val Ile Ala Leu
50 55 60
Asp Cys Ser Ala Glu Ala Ala Gln Arg Asp Ala Arg Arg Cys Ser Ile
65 70 75 80
Asn Ser Ser Thr Gly Pro
85

<210> 34278
<211> 429
<212> PRT
<213> A.fumigatus

<400> 34278
Asp Phe Met Asp Leu Phe Ser Thr Leu Met Val Ser Leu Lys Leu Asp
1 5 10 15
Ser His Arg Val Arg Phe Thr Lys Tyr Asp His Thr Phe Thr Ser Glu
20 25 30
Glu Ala Ile Asn Asn Leu Gly Ser Leu Lys Phe Ser Gln Ser Asn Arg
35 40 45
Met Pro Asp Pro Lys Asp Pro Ser Arg Ile Val Thr Thr Thr Thr Thr
50 55 60
Thr Thr Phe Ser Met Ala Lys Glu Met Ala Arg Ser Val Cys Gln Arg
65 70 75 80
Phe Val Asp Ala Arg Phe Ile Glu Pro Val Asp Gly Lys Ala Leu Pro
85 90 95
Ile Phe Pro Leu Lys Gly Ala Leu Phe Gln Leu Thr Pro Lys Gly Ile
100 105 110
Asn Ile Leu Gln Arg Phe Cys Gln Arg Asn Gly Ile Thr Ala Arg His
115 120 125
Val Ile Asp Val Leu Glu Ser Pro Arg Asn Thr Met Gln Leu Val Asn
130 135 140
Leu Glu Arg Asp Thr Glu Thr Asp Lys Leu Ser His Asp Arg Ala Thr
145 150 155 160
Ile Glu Val Ile Phe Arg Arg Phe Ala Gly Gln Asp Gly Pro Asn Val
165 170 175
Lys Ser Ser Ile Ser Thr Ser Asp Ser Asp Ser Leu Ser Asp Tyr Ser
180 185 190
Asn Gly Leu Val Gly Val Lys Met Ala Lys Glu Arg Lys Ile Asn Asp
195 200 205
Lys Ile Tyr Met Asn Thr Phe Thr Gly Lys Ala Ala Val Asp Trp Leu
210 215 220
Met Asp Cys Ser Thr Thr Ile Glu Arg Arg Glu Thr Val Leu Ile Ala
225 230 235 240
Glu Leu Phe Val Lys Tyr Gly Leu Ile Thr Met Leu Gln Glu Asp Lys
245 250 255
Gly Tyr Pro Gln Pro Asp Ala Ser Ile Val Val Phe Gln Pro Ser Lys
260 265 270
Tyr Ala Ile Tyr Gly Ile Thr Glu Arg Gly Gln Arg Val Cys Gly Trp

```
        275                 280                 285
Ile Ala Arg Asp Lys Ser Arg Glu Thr Phe Tyr Asp Asn Arg Gly Met
    290                 295                 300
Pro Lys Asp Ser Asn Asn Ala Arg Leu Asn His Ile Leu Gln Asp Pro
305                 310                 315                 320
Ala Leu Arg Leu Leu Phe Arg Glu Phe Leu Arg Phe Ser Leu Cys Glu
                325                 330                 335
Glu Asn Leu Ser Phe Tyr Leu Asp Val Ser Glu Phe Thr Ala Ala Tyr
            340                 345                 350
His Lys Ser Glu Lys Met Gly Ala Phe Lys Lys Ala Asp Ala Val Arg
        355                 360                 365
Glu Thr Leu Ala Ala Ala Tyr Gly Lys Pro Leu Phe Ile Gly Asp Ser
    370                 375                 380
Asp Trp Leu Tyr Ser Phe Cys Ser Leu Ser Ser Arg Ser Leu Gln Cys
385                 390                 395                 400
Phe Pro Cys Pro Arg Phe Ser Val Arg Ala Gln Tyr Arg Ser Arg Pro
                405                 410                 415
Ala Lys Gln Leu Ser Glu Pro Tyr Asp Lys Gly Cys Arg
            420                 425
```

<210> 34279
<211> 124
<212> PRT
<213> A.fumigatus

<400> 34279

```
Thr Ala Ile Ala Asp Phe Pro Gly Arg Gly Glu Asp Leu Glu Thr Ser
1               5                   10                  15
Glu Val Glu Ser Gln Gln Ser Leu Ser Gly Arg Arg Arg His Thr Leu
            20                  25                  30
Gln Arg Asn Ser Pro Ile Ser Glu Gln Gln Leu Glu Ala Gly Phe Ala
        35                  40                  45
Ala Leu Pro Ser Lys Met His Gln Thr Ser Ser Arg Leu Leu Arg Met
    50                  55                  60
Thr Glu Asp Asp Arg Pro Phe Thr Lys Val Trp Lys Glu Lys Lys Thr
65                  70                  75                  80
Gly Ala Ser Ser Ile Ile Asn Leu Ser Met Ile His Arg Met Leu Lys
                85                  90                  95
Ser Leu Glu Thr Ile Phe Val Asp Asp Leu Gly Phe Phe Phe Cys Arg
            100                 105                 110
Ile Leu Trp Thr Phe Ser Arg Pro Leu Trp Ser Val
        115                 120
```

<210> 34280
<211> 119
<212> PRT
<213> A.fumigatus

<400> 34280

```
Gly Ile Leu Ile Gly Tyr Thr Val Phe Ala His Phe Leu Pro Gly Leu
1               5                   10                  15
Tyr Asn Ala Phe Leu Ala Pro Gly Ser Pro Cys Glu Leu Asn Ile Asp
            20                  25                  30
His Ala Leu Arg Asn Ser Leu Ala Ser Arg Met Thr Lys Ala Val Gly
        35                  40                  45
Asp Asp Glu Ser Met Phe Lys Ser Leu Gln Glu Val Val Gln Leu Phe
```

```
    50                  55                  60
Glu Met Ala Gln Thr Ser Val Phe Lys Leu Met Ser Ser Val Ser Pro
65                  70                  75                  80
Phe Ser Ser Asp Asn Ser Leu Val Asn His Ser Ser Leu Met Arg Ile
                85                  90                  95
Arg Thr Leu Phe Gln Ser Ser Tyr Val Ile Arg Asn Met Arg Leu Ser
            100                 105                 110
Cys Arg Ser Met Thr Ser Thr
        115
```

<210> 34281
<211> 211
<212> PRT
<213> A.fumigatus

<400> 34281

```
Thr Leu Ile Ser Thr Ala Trp Leu Arg Arg Gly Ser Ser Lys Asn Gln
1               5                   10                  15
Asp Pro Ile Ile Leu Leu Ser Pro Ser Ala Ser Ser Leu Ile Arg Met
            20                  25                  30
Ser Asn Val Arg Ser Phe Leu Gln Asp Gly Val Phe Val Pro Pro Asp
        35                  40                  45
His Pro Thr Leu Ala Met Pro Ser Ser Ser Asn Asn Leu Leu Tyr Ile
    50                  55                  60
Tyr Arg Pro Leu Arg Ser Glu Ala Gly Ser Thr Ser Ala Ser Arg Pro
65                  70                  75                  80
Leu Gly Ala Ser Pro Pro Gly Ala Thr Ser Lys Lys Pro Thr Arg Phe
                85                  90                  95
Ile Leu Val Asp Ser Thr Ala Asn Phe Arg Pro Asp Tyr Trp Asn Arg
            100                 105                 110
Leu Val Ala Val Phe Thr Thr Gly Gln Thr Trp Gln Phe Lys Ser Tyr
        115                 120                 125
Lys Trp Thr Ser Pro Pro Glu Leu Phe Lys His Ala Thr Gly Ile Tyr
    130                 135                 140
Val Gly Trp Arg Gly Glu Asn Val Pro Arg Glu Val Arg Gly Trp Gly
145                 150                 155                 160
Arg Gly Val Gln Ser Phe Ala Val Glu Arg Trp Asp Glu Lys Gly Gly
                165                 170                 175
Val His Gly Ala Gly Arg Trp Arg Asp Arg Glu Val Val Glu Asn Ile
            180                 185                 190
Trp Thr Ala Ile Glu Glu Ser Met Lys Ala Arg Gly Trp Gly Ala Gly
        195                 200                 205
Ser Thr Lys
    210
```

<210> 34282
<211> 170
<212> PRT
<213> A.fumigatus

<400> 34282

```
Ser Ala Cys Pro Thr Ser Ala Pro Ser Cys Arg Thr Ala Ser Ser Cys
1               5                   10                  15
Pro Arg Thr Thr Arg Pro Ser Pro Cys Pro Ala Pro Pro Thr Thr Cys
            20                  25                  30
Ser Thr Phe Thr Ala Pro Ser Ala Gln Arg Pro Ala Arg Arg Pro Pro
```

```
        35                  40                  45
Leu Ala His Leu Ala Leu Leu Arg Pro Glu Gln Leu Pro Arg Asn Pro
    50                  55                  60
Pro Ala Ser Ser Ser Leu Thr Ala Pro Pro Thr Ser Val Arg Thr Thr
65                  70                  75                  80
Gly Thr Val Ser Leu Pro Phe Ser Gln Arg Ala Arg Pro Gly Ser Ser
                85                  90                  95
Ser Arg Thr Ser Gly Pro Pro Arg Pro Asn Phe Ser Ser Thr Pro Gln
            100                 105                 110
Ala Ser Thr Ser Ala Gly Ala Val Lys Thr Ser Pro Val Lys Ser Ala
        115                 120                 125
Ala Gly Ala Ala Ala Cys Arg Ala Ser Pro Ser Ser Asp Gly Thr Arg
    130                 135                 140
Lys Ala Val Ser Met Ala Pro Ala Ala Gly Ala Ile Val Lys Ser Ser
145                 150                 155                 160
Arg Ile Ser Gly Gln Pro Ser Lys Lys Ala
                165                 170
```

<210> 34283
<211> 94
<212> PRT
<213> A.fumigatus

```
<400> 34283
Pro Thr Ile Asp Ser Gln Phe Thr Arg His Leu Leu Gly Ser Pro Ser
1               5                   10                  15
Leu Asp Cys Ile Val Ala Thr Leu Phe Asn Pro Thr Ser Leu Thr Ser
            20                  25                  30
Asn Asn Arg Arg Thr Ile Ile Val Arg Ser Asn Ser Asn Ser Thr Thr
        35                  40                  45
Thr Thr Thr Tyr Asn Lys Arg Phe Leu Pro Ile Pro Pro Ser Arg Arg
    50                  55                  60
Pro Ala Ala Ile Glu Leu Leu Arg Pro Thr Ser Arg Arg Thr Gly Arg
65                  70                  75                  80
Ile Ser Asn Asn Met Pro Ala Pro Leu Arg Arg Asn Thr Gln
                85                  90
```

<210> 34284
<211> 70
<212> PRT
<213> A.fumigatus

```
<400> 34284
Arg Leu Lys Leu Thr Leu Ser His Phe Thr Trp Gly Tyr Ser Thr Phe
1               5                   10                  15
Thr Thr Phe Phe Asp Lys Ser Ala Tyr Gly Ala Phe Val Phe Ile Cys
            20                  25                  30
Ser Leu Cys Val Phe Ala Tyr Phe Ala Pro Leu Gly Arg Ser Tyr Thr
        35                  40                  45
Asn Leu Leu Arg Arg Ile Ala Asn Ser Asn Asn Met Thr Cys Thr Tyr
    50                  55                  60
Gln Thr Leu Val Ser Asn
65                  70
```

<210> 34285
<211> 395

<212> PRT
<213> A.fumigatus

<400> 34285

```
Pro Leu Glu Ser Ser Phe Leu Pro Gln Pro Leu Asn Cys Phe Arg Ser
1               5                  10                  15
Cys Met Ala Gly Val Gln Ala Gln Pro Thr Met Thr Asp Tyr Arg Leu
            20                  25                  30
Pro Ile His Gln Ala Pro Ser Arg Lys Pro Val Pro Gly Leu His Arg
        35                  40                  45
Gly Tyr Pro Phe Gln Ser Tyr Glu Pro His Gln Gln Gln Pro Pro His
    50                  55                  60
His Tyr Arg Pro Gln Gln Gln Gln Gln His His His His His Leu Gln
65                  70                  75                  80
Gln Glu Val Ser Pro His Pro Ser Val Ser Ser Ala Ser Arg Asn Arg
                85                  90                  95
Ala Ser Ser Ser His Val Ser Pro Tyr Gly Ala His Gln Gln Gln Tyr
            100                 105                 110
Ala Gly Ala Pro Ser Pro Gln Tyr Thr Met Thr Ser His Val Ser His
        115                 120                 125
Gln Ser Arg Arg Leu Ser Ser Ala Thr Thr Ser Thr Ser Ser Thr Gly
    130                 135                 140
Asn Asn Phe Ser Ser Asp Ile Arg Arg Ser Thr Ser Ser Arg Ser Thr
145                 150                 155                 160
Asn Thr Gln Val Gly Tyr Val Ala Leu Met Arg Arg Gln Lys Ala Thr
                165                 170                 175
Val Trp Cys Asp Arg Ala Gln Pro Glu Asp Pro Arg Leu Arg Ala Gln
            180                 185                 190
Lys Leu Ala Asp Lys Lys Arg Ala Tyr Leu Glu Val His Gly Ala Gly
        195                 200                 205
Ala Gly Arg Thr Gly Thr Leu Ala Ser Gly Lys Asn Lys His Gly Asn
    210                 215                 220
Lys Gly Val Thr Glu Phe Ser Ala Ser Ala Leu Val Gly Ala Thr Val
225                 230                 235                 240
Pro Val Arg Leu Ser Ala Asn Glu Val Gly Asp Gly Asp Glu Asp Gly
                245                 250                 255
His Ser Asp Asn Gly Phe Pro His Arg Arg Thr Gly Ser Gly Arg Ser
            260                 265                 270
Ser Leu Gly Ser Asn Tyr Arg Tyr Pro Ser Ser Tyr Gln Arg Pro Ser
        275                 280                 285
Gln Gly Thr Ser Gly Ser Asn Asn Thr Pro Pro Asn Glu Arg Ala Asp
    290                 295                 300
Leu Pro Glu Val Thr Glu Asn Pro Pro Ala Glu Arg His Glu Gln Glu
305                 310                 315                 320
Arg Ala Ser Ser Ala Lys Asp Asp Ser Ala Thr Ser His Ser Lys Thr
                325                 330                 335
Ser Glu Gln Glu Asp Ser Phe Gly Ser Val Gly Asp Met Ala Ala Pro
            340                 345                 350
Ser Ala Ala Thr Thr Ala Ala Glu Lys Ala Arg Lys Ala Asp Glu Leu
        355                 360                 365
Arg Arg Arg Gly Ser Val Asp Glu Arg Thr Thr Thr Met Thr Asn Val
    370                 375                 380
Arg Leu Phe Val Ala Asn Pro Asp Leu Ser Asp
385                 390                 395
```

<210> 34286

<211> 740
<212> PRT
<213> A.fumigatus

<400> 34286
Pro Phe His Ile Ser Pro Gly Lys Thr Asn Gly Leu Gln Arg Glu Ile
1 5 10 15
Met Asp Gln Ile Phe Pro Glu Arg Val Ser Leu Ser Arg Trp Cys Leu
20 25 30
Asn Lys Arg Ser Asn Ser Lys Val Thr Leu Phe Phe Phe Leu Ala Asp
35 40 45
Ile Arg Arg Phe Ile His Gln Thr Gly Gln Asn Ser Leu Asp Ser Ala
50 55 60
Ser Gly Gln Asn Leu Arg Ser Leu Leu Lys Ala Leu Ser Thr Gln Leu
65 70 75 80
Pro Cys Val Thr Pro Lys Val Val Arg Thr Lys Ser Gly Ser Arg Thr
85 90 95
Thr Gly Val Pro Ile Lys Ser Ala Asp Ala Phe Ser Val Ile Ser Pro
100 105 110
Ala Ala Ala Gly Val Phe Asp Asp Asp Ile Ala Pro Met Leu Val Gly
115 120 125
Pro Ala Cys Lys Leu Ala Val Glu Ser Pro Ser Leu Asp Glu Val Arg
130 135 140
Asn Lys Pro Leu Pro Arg Glu Pro Pro Ile Ala Leu Ala Pro Leu Ser
145 150 155 160
Val Arg His Asn Gly Pro Arg Pro Phe Gln Ala Cys Gln Arg Pro Ser
165 170 175
Ser Asp Trp Leu Cys Thr Thr Thr Pro Ala Ser Pro Ala Thr Arg Leu
180 185 190
Ser His Ser Gln Arg Thr Leu Ser Gln Ala Ala Gln Glu Leu Glu Asn
195 200 205
Phe Leu Ala Gly Ile Thr Glu Gln Arg His Asn Glu Pro Gln Leu Phe
210 215 220
Ser Ser Gln Ile Ser Asn Gly Pro Leu Gln Ile Ser Arg Gly Asn Met
225 230 235 240
Asp Met Ile Ala Thr Arg Pro Ala Pro Arg Pro Pro Thr Asn Ile Ala
245 250 255
Ser Val Lys Ser Lys Asp Asn Ser Ser Gln Lys Ile Ser Pro Glu Lys
260 265 270
Pro Glu Arg Asp Leu Gln Lys Pro Met Lys Lys Thr Lys Tyr Lys Gly
275 280 285
Pro Phe Ser Phe Ser Val Pro Gly Phe Ser Arg Lys Tyr Thr Asn Thr
290 295 300
His Leu Arg Ser Phe Ser Ser Ser Ser Leu Lys Ser Glu Val Glu Ser
305 310 315 320
Pro Ser Phe Arg Pro Gln Arg Pro Pro Arg Pro Glu Thr Ile His Asp
325 330 335
Glu Ala Glu Asp Thr Ala Glu Val Ala Gln Ser Pro Phe Leu Pro Val
340 345 350
Pro Ser Gln Arg Gln Arg Ser Ser Ser Phe Cys Ser Glu Arg Glu Leu
355 360 365
Arg Leu Arg Leu Pro Arg Leu Gln Thr Lys Gln Val Arg Ser His Glu
370 375 380
Asp Leu Val Ser Ser Ser Ser Ser Phe Val Glu Ala Glu Arg Val Ala
385 390 395 400
Glu Arg Ser Met Pro Ser Ile Arg Ala Asn Asn Val Glu Glu Lys Ile

```
                405                 410                 415
Phe Val Ala Ser Ser Lys Ser Gly Arg Ser Asn Thr Ser Asp Ser Leu
            420                 425                 430
Phe Glu Leu Asp Gly Gly Met Pro Gln Arg Met Ile Tyr Glu Leu Asp
        435                 440                 445
Ala Gly Leu Pro Ser Pro His Pro Lys Ile Asn Ile Ser Val His Lys
    450                 455                 460
Pro Ser Lys Thr Thr Ala Val Gln Leu Pro Asp Asp Ile Ala Leu Lys
465                 470                 475                 480
Ile Leu Glu Gln Val Ala Ser Leu Asp Asp Leu Phe His Leu Ala Val
                485                 490                 495
Val Ser Lys Gln Tyr Tyr Arg Val Phe Lys Gln His Glu Leu His Leu
            500                 505                 510
Met Lys Thr Thr Val Tyr Arg Met Ser Pro Pro Ala Trp Glu Leu Arg
        515                 520                 525
Glu Met Ser Pro Pro Trp Asp Ser Glu Trp Gln Ile Leu Val Asp Pro
    530                 535                 540
Asp Ala Pro Val Pro Glu Tyr Thr Pro Thr Leu Tyr Leu Gln Arg Tyr
545                 550                 555                 560
Ala Gln Asp Ile Tyr Thr Leu Ala Gln Leu Lys Ser Leu Ile Leu Ala
                565                 570                 575
Arg Cys Asn Thr Phe Leu Arg Gln Glu Thr Ile Asn Gly Leu Thr Gly
            580                 585                 590
Lys Asp Asp Thr Arg Ala Ala Glu Ile Asp Asp Ala Phe Trp Arg Ile
        595                 600                 605
Trp Thr Phe Cys Arg Ile Phe Gly Cys Gly Lys Asn Arg Glu Asn Asp
    610                 615                 620
Ile Val Gly Gln Met Asp Trp Leu Asn Gly Gly Val Met Ala His Asp
625                 630                 635                 640
Arg Asn Ser Ile Met Thr Thr Ser Leu Thr Glu Pro Phe Gly Met Asn
                645                 650                 655
Asn Val Leu Phe Glu Pro Pro Glu Gly Phe Gly Arg Gly Asn Gly Glu
            660                 665                 670
Gly Leu Ser Gln Ser Gln Leu Tyr Asp Met Thr Glu Ile Trp Thr Cys
        675                 680                 685
Leu Ala Val Leu Leu Gln Pro Ile His Gly Arg Arg Thr Glu Ala Arg
    690                 695                 700
Lys Ala Gly Val Phe Ala Gly Leu Asp Ile Ala Glu Asn Asp Thr Ala
705                 710                 715                 720
Lys Glu Glu Ala Met Ile Gly Lys Cys Ser Phe Leu Ser Ser Ser Ser
                725                 730                 735
Tyr Leu Gly Ser
            740
```

<210> 34287
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34287

```
Thr Asp Lys Gly Ile Glu Glu Trp Thr Tyr Tyr Val Leu Thr Leu Gly
1                   5                   10                  15
Pro Ser Ala Val Leu Ser Ile Gly Ser Ile Cys Ala Phe Asp Asp Ser
            20                  25                  30
Glu Ala Thr Phe Gln Thr Ala Gln Ser Ile Gly Leu Thr Lys Trp Glu
        35                  40                  45
```

```
Pro Ala Asp Ser Ser Ile Ser Arg Ser Thr Phe Leu Lys Glu Ala Val
    50                  55                  60
Phe
65
```

<210> 34288
<211> 73
<212> PRT
<213> A.fumigatus

<400> 34288

```
Gln Lys Gly Thr Leu Thr Tyr His Ser Phe Phe Leu Arg Arg Val Ile
1               5                   10                  15
Phe Cys Asp Val Glu Pro Gly Lys Asn Ala Ser Leu Ser Gly Leu Ser
            20                  25                  30
Ala Pro Ala Val Asn Gly Leu Glu Gln His Gly Lys Thr Ser Pro Tyr
        35                  40                  45
Phe Cys His Val Val Glu Leu Thr Leu Gly Lys Thr Phe Pro Val Pro
    50                  55                  60
Ala Pro Glu Pro Leu Arg Arg Phe Glu
65                  70
```

<210> 34289
<211> 86
<212> PRT
<213> A.fumigatus

<400> 34289

```
Asp Ile Val His Thr Glu Trp Leu Ser Glu Arg Arg Gly His Asp Ala
1               5                   10                  15
Val Thr Val Val Gly His Asn Ala Ala Ile Gln Pro Val His Leu Ser
            20                  25                  30
Tyr Tyr Ile Ile Leu Pro Ile Leu Ala Thr Ala Lys Asp Pro Ala Glu
        35                  40                  45
Ser Pro Asp Ser Pro Lys Gly Val Ile Asp Phe Cys Arg Ser Gly Ile
    50                  55                  60
Ile Phe Ala Cys Gln Thr Ile Tyr Arg Phe Leu Ala Lys Glu Gly Ile
65                  70                  75                  80
Ala Ala Gly Gln Asp Glu
                85
```

<210> 34290
<211> 305
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (63)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34290

```
Trp Gly Gln Gln Ala Gly Thr Ser Asn Arg Lys Asn Leu Pro Cys Gly
1               5                   10                  15
Pro Pro Lys Met Pro Asp Leu Pro Gly Ile Pro Val Thr Pro Gly Val
            20                  25                  30
```

```
Leu Pro Glu Gln Gln Lys Glu Ala Leu Ala Ala Ala Leu Glu Arg Ile
        35                  40                  45
Ala Gly Lys Met Ile Asp Thr Val Arg Ile Asp Thr Thr His Xaa Val
    50                  55                  60
Cys Arg Glu Gly Arg Gly Pro Leu Trp Glu Lys Ala Val Glu Met Asn
65                  70                  75                  80
Ile Pro Val Val Val Pro Glu Trp Val Asp Ala Cys Glu Ala Glu Gly
                85                  90                  95
Thr Ile Val Gly Val Arg Gly Tyr Tyr Leu Asn Ala Asp Pro Lys Ala
            100                 105                 110
Arg Gln Leu Gly Pro Ile His Ala Ser Thr His Gln His Thr Arg Ser
        115                 120                 125
Ser Val Ser Met Ala Thr Asn Ala Pro Ser Gln Ser Gln Ser Gln Ser
    130                 135                 140
Gln Ser Gln Ser Gln Ser Gln Ser Gln Ser Gln Ser Gln Ser Gln Ser
145                 150                 155                 160
Gln Pro Gln Ser Gln Ser Gln Ser Arg Leu Ser Leu Gln Pro Gln Pro
                165                 170                 175
Thr His Gln Arg Glu Leu Ser Val Gly Asp Pro Pro Val Thr Pro Phe
            180                 185                 190
Pro Gly Ala Asp Met Ser Gly Gln Pro Arg Ala Asp Glu Arg Glu Val
        195                 200                 205
Ser Ser Asp Glu Glu Asp Leu Pro Pro Pro Pro Pro Pro Lys Asp Asp
    210                 215                 220
Ala Ala Gly Ala Glu Pro Ala Val Asn Gly Lys Pro Glu Ser Thr Ser
225                 230                 235                 240
Pro Glu Gly Val Val Ser Ser Gly Asp Lys Glu Glu Arg Ser Glu Ser
                245                 250                 255
Asp Glu Lys His Asp Glu Lys Asp Glu Asp Glu Thr Ala His Glu Glu
            260                 265                 270
Ala Glu Glu Lys Gln Glu Gln Glu Glu Pro Thr Ser Asn Asp Ser Asp
        275                 280                 285
Ala Lys Gly Lys Gly Lys Glu Gly Glu Gly Asp Phe Ile Glu Ile Ser
    290                 295                 300
Leu
305
```

<210> 34291
<211> 176
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (113)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 34291
Val Glu Ala Gly Gly Ser Val Tyr Ser Glu Thr Val Ile Gly Val Gly
1               5                   10                  15
Ile Glu Thr Glu Thr Glu Thr Glu Thr Glu Thr Glu Thr Glu Thr Glu
            20                  25                  30
Thr Glu Thr Glu Thr Glu Met Ala His Trp Leu Pro Ser Thr Arg Arg
        35                  40                  45
Ile Trp Tyr Val Asp Val Ser Arg His Gly Trp Gly Arg Ala Val Trp
    50                  55                  60
```

```
Pro Trp Gly Leu His Ser Gly Ser Ser Pro Gly Leu Arg Arg Trp Cys
65                  70                  75                  80
Pro Arg Leu His Arg His Pro Pro Thr Pro Glu Pro Arg Arg Glu Cys
                85                  90                  95
Ser Ser Pro Pro Leu Ser Pro Thr Ala Gly Leu Cys Leu Leu Tyr Ile
            100                 105                 110
Xaa Ser Glu Trp Tyr Arg Cys Ala Leu Cys Arg Ser Ser Cys Arg Gln
        115                 120                 125
Tyr Val Pro Lys Pro Arg Arg Ala Pro Leu Phe Ala Val Arg Gly Gly
    130                 135                 140
Pro Pro Gly Ser Pro Gly Tyr Arg Ala Asn Arg Ala Ser Trp Val Val
145                 150                 155                 160
Arg Met Ala Gly Ser Ser Asp Trp Met Cys Arg Leu Val Gly Pro Arg
                165                 170                 175
```

<210> 34292
<211> 389
<212> PRT
<213> A.fumigatus

<400> 34292

```
Phe Arg Asp Thr Ile Asn His Leu Lys Phe Leu Leu Ala His Ser Gln
1               5                   10                  15
Phe Ser Ser Phe Ser Ala Thr Met Ser Val Leu Ser Thr Leu Ala Pro
            20                  25                  30
Val Pro Pro Asp Glu Ile Phe Ala Leu Asn Arg Ala Tyr Ala Thr Asp
        35                  40                  45
Pro Phe Pro Gln Lys Val Ser Leu Gly Val Gly Val Tyr Arg Thr Asp
    50                  55                  60
Asp Gly Lys Pro Trp Pro Leu Pro Cys Val Arg Glu Ala Glu Lys Gln
65                  70                  75                  80
Leu Leu Ala Glu Asp Ser Leu Thr Arg His Glu Tyr Thr Ala Ile Glu
                85                  90                  95
Gly Asp Ile Pro Phe Leu Glu Leu Ala Arg Asp Ile Met Phe Gly Phe
            100                 105                 110
Asp Gly Lys Asn Ala Ala Glu Lys His Lys Ser Arg Ile Gly Ser Val
        115                 120                 125
Gln Thr Val Ala Gly Thr Gly Ala Asn His Leu Gly Ala Leu Phe Leu
    130                 135                 140
Ala Thr His Met Lys Pro Gly Lys Val Trp Leu Ser Asn Pro Ser Trp
145                 150                 155                 160
Ala Asn His Met Thr Ile Trp Glu Leu Ala Gly Val Pro Arg Lys Thr
                165                 170                 175
Tyr Pro Tyr Tyr Asn Pro Thr Thr Arg Ser Phe Asp Phe Asp Gly Met
            180                 185                 190
Met Ala Thr Leu Glu Ala Glu Ala Gln Gln Gly Asp Val Ile Leu Leu
        195                 200                 205
His Ala Cys Ala His Asn Pro Thr Gly Leu Asp Pro Asn Lys Glu Gln
    210                 215                 220
Trp Lys Ala Ile Ala Asp Leu Cys Glu Arg Lys Lys Ile Phe Pro Phe
225                 230                 235                 240
Phe Asp Ser Ala Tyr Gln Gly Phe Ala Ser Gly Ser Leu Glu Glu Asp
                245                 250                 255
Ala Trp Ala Val Arg Tyr Phe Leu Asn Glu Lys Pro Gly Met Glu Met
            260                 265                 270
Cys Val Ala Gln Ser Phe Ser Lys Asn Phe Gly Leu Tyr Gly Gln Arg
```

```
        275                 280                 285
Val Gly Ala Phe His Tyr Val Leu Pro Gln Gly Ser Glu Ser Leu Arg
    290                 295                 300
Asp Thr Val Val Val Asn Leu Cys His Leu Ile Arg Gly Glu Tyr Ser
305                 310                 315                 320
Met Gly Pro Thr Ala Gly Cys Asn Leu Val Lys Lys Val Leu Thr Asn
                325                 330                 335
Glu Glu Leu Thr Ala Gln Trp His Lys Asp Leu Lys Val Met Ser Ser
            340                 345                 350
Arg Ile Arg Ser Met Arg Lys Ala Leu Tyr Asp Glu Leu Leu Arg Leu
        355                 360                 365
Gln Thr Pro Gly Ser Trp Arg His Ile Val Glu Gln Val Phe Pro Leu
    370                 375                 380
Arg Ser Leu Leu Pro
385
```

<210> 34293
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34293

```
Gly Cys Arg Pro Arg Gly Pro Gly Asp Thr Leu Trp Asn Lys Tyr Phe
1               5                   10                  15
Pro Ser Ala Pro Ser Ser Leu Glu Gln Val Cys Asn Gln Tyr Leu Thr
            20                  25                  30
Gln Lys Ala Asn Thr Tyr Leu Glu Trp Asn Val Leu Leu His Arg Pro
        35                  40                  45
His Pro Cys Ala Gly Ser Phe Pro Gln Arg Gln Val Ser His Leu Pro
    50                  55                  60
Ala
65
```

<210> 34294
<211> 154
<212> PRT
<213> A.fumigatus

<400> 34294

```
Cys Thr Gly Gln Val Cys Arg His Arg His Cys Ser Ala Arg Ser Ile
1               5                   10                  15
Arg Asp Ala Asp Arg Gly His His Arg Glu Ile Ser Ile Lys Ser Pro
            20                  25                  30
Ser Pro Ser Phe Pro Leu Pro Leu Ala Ser Leu Ser Phe Asp Val Gly
        35                  40                  45
Ser Ser Cys Ser Cys Phe Ser Ser Ala Ser Ser Cys Ala Val Ser Ser
    50                  55                  60
Ser Ser Phe Ser Ser Cys Phe Ser Ser Leu Ser Leu Arg Ser Ser Leu
65                  70                  75                  80
Ser Pro Glu Glu Thr Thr Pro Ser Gly Leu Val Asp Ser Gly Leu Pro
                85                  90                  95
Phe Thr Ala Gly Ser Ala Pro Ala Ala Ser Ser Phe Gly Gly Gly Gly
            100                 105                 110
Gly Gly Lys Ser Ser Ser Ser Asp Glu Thr Ser Leu Ser Ser Ala Arg
        115                 120                 125
Gly Trp Pro Leu Ile Ser Ala Pro Gly Lys Gly Val Thr Gly Gly Ser
```

```
    130                 135                 140
Pro Thr Leu Asn Ser Leu Trp Cys Val Gly
145                 150

<210> 34295
<211> 80
<212> PRT
<213> A.fumigatus

<400> 34295
Tyr Ala Phe Gln Leu Leu His Val Ala Ile Gln Asp Leu Val Phe Gly
1               5                   10                  15
Ala Asp Met His Glu Ala Trp Val Glu Tyr Pro Leu His Gln Leu Thr
            20                  25                  30
Val Ile Ser Ser Val Ser Ile Arg Gln Leu Gly Gln Asn Ile Pro Phe
        35                  40                  45
Leu Leu Ala Tyr Asn Val Thr Leu Thr Pro Lys Leu Ala Leu His Leu
    50                  55                  60
Ser Val Cys Gly Met Ile Tyr Pro Val Arg Gly Val Phe Trp Pro Gln
65                  70                  75                  80

<210> 34296
<211> 148
<212> PRT
<213> A.fumigatus

<400> 34296
Thr Trp Thr Cys Ile Asn Gln Gln Leu Asn Pro Lys Thr Asn Lys Trp
1               5                   10                  15
Glu Asp Lys Arg Leu Leu Tyr Asn Gln Ala Lys Ala Glu Ser Asn Ser
            20                  25                  30
His His Ala Pro Leu Ser Asp Gly Lys Thr Gly Ser Ser Tyr Pro His
        35                  40                  45
Trp Phe Thr Asn Gly Tyr Asp Gly Asn Gly Lys Leu Ile Lys Gly Arg
    50                  55                  60
Thr Pro Ile Lys Phe Gly Lys Ala Asp Cys Asp Arg Pro Pro Lys His
65                  70                  75                  80
Ser Gln Asn Gly Met Gly Lys Asp Asp His Tyr Leu Leu Glu Phe Pro
                85                  90                  95
Thr Phe Pro Asp Gly His Asp Tyr Lys Phe Asp Ser Lys Lys Pro Lys
            100                 105                 110
Glu Asp Pro Gly Pro Ala Arg Val Ile Tyr Thr Tyr Pro Asn Lys Val
        115                 120                 125
Phe Cys Gly Ile Val Ala His Gln Arg Gly Asn Gln Gly Asp Leu Arg
    130                 135                 140
Leu Cys Ser His
145

<210> 34297
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34297
Ala Leu Pro Met Phe Thr Leu Leu Leu Ile Ile Gln Arg Tyr His Ala
1               5                   10                  15
```

```
Tyr Gln Ser Val Asn Lys Ile Thr Met Pro Ala Ala Arg Thr Asp Leu
            20                  25                  30
Tyr Leu Gln Ser Tyr Ile Ser Leu Asn Val Gly Pro Ser Asn Gly Lys
        35                  40                  45
Ser Pro His Lys Ser Lys Val Trp Ser His Asp Ala Arg
    50                  55                  60
```

<210> 34298
<211> 269
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (257),(259)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34298

```
Val Ser Leu Ile Leu Ile Phe Pro Lys Tyr Pro Pro Gln Leu Leu Phe
1               5                   10                  15
Phe Pro Ser Leu Leu Thr Val Thr Arg Ala Ala Leu Ile Ile Pro Thr
            20                  25                  30
Pro Arg Gln Thr Phe Leu Ile Met Ser Asn Thr Phe Ser Phe Gly Ala
        35                  40                  45
Pro Ala Ser Ser Gly Ala Ser Ser Gly Ser Leu Phe Gly Thr Ala Gly
    50                  55                  60
Asn Ala Phe Gly Ser Asn Gln Asn Ser Ser Asn Thr Thr Thr Gly Gly
65                  70                  75                  80
Gly Leu Phe Gly Asn Val Gly Ala Ser Ser Ser Gly Thr Ser Thr Pro
                85                  90                  95
Ser Leu Phe Gly Ser Ala Pro Ala Thr Gly Lys Ser Gly Asn Thr Leu
            100                 105                 110
Phe Gly Gly Gly Thr Ser Ala Thr Ser Ser Ser Thr Pro Thr Gly Ser
        115                 120                 125
Thr Pro Ala Phe Ser Phe Gly Thr Gln Thr Lys Ser Gly Ser Thr Pro
    130                 135                 140
Gln Ser Pro Ser Leu Phe Gly Gly Gly Ser Gln Thr Pro Lys Pro Gly
145                 150                 155                 160
Glu Ser Ser Ala Ser Gly Gln Thr Gly Gly Asn Ala Leu Phe Gly Asn
                165                 170                 175
Ala Ala Lys Pro Ala Gly Asn Ile Phe Gly Ser Ala Ala Ala Thr Pro
            180                 185                 190
Ala Pro Ser Gly Gly Ser Leu Phe Gly Asn Thr Ser Thr Thr Pro Ala
        195                 200                 205
Gly Pro Pro Pro Gln Gly Thr Ala Ala Gly Gln Gly Gln Ser Leu Phe
    210                 215                 220
Gly Gln Ala Ala Gln Lys Pro Gly Gly Leu Phe Gly Gly Leu Asn Ala
225                 230                 235                 240
Thr Thr Thr Ser Ser Ser Thr Ala Ser Pro Thr Ala Thr Thr Ala Arg
                245                 250                 255
Xaa Ser Xaa His Glu Asp Asp Met Met Ser Leu Gly Ser
            260                 265
```

<210> 34299
<211> 81
<212> PRT

<213> A.fumigatus

<400> 34299
Ser Cys Lys Ala Cys Glu Glu Val Lys Lys Ala Gln Val Ile Ser Tyr
1 5 10 15
Asn Met Gly Phe Phe Leu Ser Cys Leu Phe Gly Tyr Tyr Leu Ser Val
20 25 30
Asn Ser Trp Glu Lys Ser Ala Arg Tyr Gln Ser Tyr Ser Val Gln Gly
35 40 45
Glu Val Gly Thr Ser Pro Tyr Pro Ile Arg His Gly Thr Leu Thr Phe
50 55 60
Leu Leu Asn Phe Gly Tyr Ile Phe Ala Arg Phe Arg Val Pro Met Ala
65 70 75 80
Phe

<210> 34300
<211> 85
<212> PRT
<213> A.fumigatus

<400> 34300
Tyr Tyr Trp Arg Leu Ala Leu Gly Gln Pro Phe Thr Val Asp Thr Ser
1 5 10 15
Gly His Tyr Glu Arg Ser Phe Met Cys Gly Leu Arg His Met Ala Glu
20 25 30
Thr Pro Val Glu Pro Gly His Arg Gln Gln Leu His Ile Asp Asp Asn
35 40 45
Val Ile Gln Cys Lys Ala Ser Leu Pro His Leu Tyr Ile His Tyr Thr
50 55 60
Phe Pro Pro Asp Ile Leu Leu Val Ser Thr Asp Arg Phe Tyr Met Lys
65 70 75 80
Phe Ser Arg Lys Asn
85

<210> 34301
<211> 253
<212> PRT
<213> A.fumigatus

<400> 34301
Ala Leu Phe Ala Arg Ile Tyr Thr Asn Ile Ile Ser Asn Ser Gln Pro
1 5 10 15
Pro Ile Ile Asp Phe Asp Thr Phe Gln Ser Phe Pro Asp Leu His Ala
20 25 30
Ala Leu Asp Gln Tyr Leu Asp Lys Leu Tyr Pro Thr Ser Lys Asn Val
35 40 45
Glu Ser Leu Pro Pro Leu Glu Pro Ile Gln Asp Ala Ser Ser Ile Phe
50 55 60
Ser Thr Glu Arg Ser Leu Ser Leu Trp Ser Gln Leu Val Ala Pro Pro
65 70 75 80
Pro Leu Gln Pro Gln Asn Trp Val Lys Ser Arg Ile Arg Arg Leu Phe
85 90 95
Leu Val Ser Leu Gly Val Pro Val Asp Leu Asp Glu Ile Leu Pro Ala
100 105 110
Ser Lys Gln Lys Lys Leu Val Leu Pro Ser Ile Asn Leu Ser Gly Ser

```
        115                 120                 125
Asp Thr Thr Gly Ser Ala Val His Ser Arg Ser His Ser Gln Ala Arg
    130                 135                 140
Lys Ser Gly Ser Gln Asp Gly Ile Asp Ser Pro Thr Thr Ser Ala Pro
145                 150                 155                 160
Thr Gly Arg His Arg Thr Ser Arg Arg Arg Asp Arg Ser Pro Pro Pro
                165                 170                 175
Gln Leu Asp Leu Ser Ala Val Arg Arg Leu Cys Ala Thr Thr Asp Ala
            180                 185                 190
Ala Leu Asp Gly Leu Thr Asp Ala Glu Leu Arg Thr His Val Lys Glu
        195                 200                 205
Leu Glu Gln Val Thr Leu Arg Ala Ser Ser Val Leu Glu Tyr Trp Leu
    210                 215                 220
Lys Arg Arg Asp Gly Leu Val Ser Glu Arg Glu Ala Phe Glu Gly Val
225                 230                 235                 240
Ile Glu Asn Leu Val Asn His Ala Arg Arg Val Arg Lys
                245                 250
```

<210> 34302
<211> 101
<212> PRT
<213> A.fumigatus

<400> 34302

```
Pro Arg Gly Leu Gly Asp Leu Gly His Ala Leu Met Gln Ile Ala Ala
1               5                   10                  15
Ile Gln Gly Leu Ala Ala Thr Leu Asp Ala Ser Ser Asp Gly Arg Ser
            20                  25                  30
Lys Phe Ser Ala Ser Glu Asp Ser Ser Asp Met Val Leu Ile Ile Ile
        35                  40                  45
His Ile Ser Thr Ala His Glu Ser Ser Phe Glu Thr Val Ala Asn Asp
    50                  55                  60
Val Arg Arg Gly Asn Leu Val Ser Ser Leu Gln Ser Met Cys His Ala
65                  70                  75                  80
Gln Tyr Tyr Leu Thr Gln Trp Leu Cys Leu Leu His Thr Ala Leu Gly
                85                  90                  95
Ile Ile Ala Asp Cys
            100
```

<210> 34303
<211> 267
<212> PRT
<213> A.fumigatus

<400> 34303

```
Ser Ala Asp Glu Glu Gln Val Arg Asp His Tyr Asp Arg Gly Asp Asp
1               5                   10                  15
Phe Tyr Ala Trp Phe Leu Gly Pro Arg Met Ile Tyr Thr Ser Gly Ile
            20                  25                  30
Ile Ser Asp Ile Asn Lys Glu Glu Thr Leu Glu Glu Leu Gln Asp Asn
        35                  40                  45
Lys Leu Ala Val Val Cys Glu Lys Ile Asn Val Lys Pro Gly Asp Thr
    50                  55                  60
Ile Leu Asp Leu Gly Cys Gly Trp Gly Thr Leu Ala Lys Phe Ala Ser
65                  70                  75                  80
Val His Tyr Gly Ala His Val Thr Gly Ile Thr Leu Gly Arg Asn Gln
```

```
                85                  90                  95
Thr Ala Trp Gly Asn Lys Gly Leu Arg Ser Ala Gly Ile Pro Glu Ser
            100                 105                 110
Gln Ser Arg Ile Leu Cys Leu Asp Tyr Arg Asp Ala Pro Arg Val Glu
        115                 120                 125
Gly Gly Tyr Lys Lys Ile Thr Cys Leu Glu Met Ala Glu His Val Gly
    130                 135                 140
Val Arg His Phe Gly Ser Phe Leu Ser Gln Val Tyr Glu Met Leu Asp
145                 150                 155                 160
Asp Asp Gly Val Phe Phe Leu Gln Ile Ala Gly Leu Arg Lys Ser Trp
                165                 170                 175
Gln Tyr Glu Asp Leu Ile Trp Gly Leu Phe Met Asn Lys Tyr Ile Phe
            180                 185                 190
Pro Gly Ala Asp Ala Ser Thr Pro Leu Gly Phe Val Val Asp Lys Leu
        195                 200                 205
Glu Gly Ala Gly Phe Glu Ile Lys Gly Val Asp Thr Ile Gly Val His
    210                 215                 220
Tyr Ser Ala Thr Leu Trp Arg Trp Tyr Arg Asn Trp Met Gly Asn Arg
225                 230                 235                 240
Glu Lys Val Glu Ala Lys Tyr Gly Lys Arg Trp Phe Lys Val Ser Pro
                245                 250                 255
Ser Asp Lys Phe Leu Leu His Val Val His His
            260                 265
```

<210> 34304
<211> 175
<212> PRT
<213> A.fumigatus

<400> 34304

```
Tyr Pro Ala Ile Lys Asn Ala Pro Val Pro Ala Asp Ala Ala Gly Ser
1               5                   10                  15
Asp Ser Phe Ser Asn Ile Leu Leu Phe Ser Leu Leu Leu Phe Val Pro
            20                  25                  30
Trp Tyr Leu Ala Arg Gln Val Gly Gly Gly Phe Tyr Thr Thr Ile Phe
        35                  40                  45
Phe Ala Ile Phe Thr Thr Val Pro Ile Leu Met Val Phe Trp Ser Val
    50                  55                  60
Ala Ser Ser Ile Ser Pro Arg Lys Asn Glu Lys Ala Lys Tyr Ala Gly
65                  70                  75                  80
Arg Pro Val Glu His Tyr Leu His Phe His Asn Glu His Asp Arg Ala
                85                  90                  95
Thr Tyr Arg Gly Lys Ser Lys Ile Pro Met Glu Val Phe Tyr Glu Lys
            100                 105                 110
Tyr Phe Asn Gly Glu Val Asp Phe Lys Gly Asp Ala Leu Glu Ala Leu
        115                 120                 125
Glu Phe Arg His Asp Trp Ala Asn Phe Arg Phe Thr Met Gly Leu Tyr
    130                 135                 140
Lys His Phe Leu Phe Gly Phe Ile Pro Glu Leu Leu Val His Ser Arg
145                 150                 155                 160
Ser Gln Gly Lys Val Ala Phe Ser Trp Leu Phe Cys Thr Asp Glu
                165                 170                 175
```

<210> 34305
<211> 98
<212> PRT

<213> A.fumigatus

<400> 34305
Pro His Arg Pro Val Asn Leu Arg Phe Glu Ile Arg Val Ala Lys Leu
1 5 10 15
Ile Met Ile His Pro Ser Ser Val Arg Ser Leu Val Thr Leu Arg Leu
20 25 30
Ser Gly Ser Ser Pro Gly Leu Met Ile Arg Asp Gln Val Leu Ser Glu
35 40 45
Tyr Ser Ile His His Ala Ser Val Ser Leu Leu Asn Leu Phe Leu Cys
50 55 60
Asp Ser Ile Ala His Thr Asn Ala Leu Ser Ser His Leu Leu Gly Lys
65 70 75 80
Lys Ser Trp Asn Val Tyr Asn Pro Glu Asn Ile Ala Arg Val Arg Arg
85 90 95
Asp Glu

<210> 34306
<211> 186
<212> PRT
<213> A.fumigatus

<400> 34306
Trp Met Met Pro Tyr Trp Ile Pro Leu Glu Ser Cys Ser Ser Asp Thr
1 5 10 15
Pro Lys Asn Arg Leu Asp Leu Phe Gln Arg Met Val Lys Ile Gly Ser
20 25 30
Val Asn Leu His Val Tyr Asp Ile Leu Thr Asp Ala Gly His Gly Thr
35 40 45
Asp Leu Asp Met Pro Gly Lys Ser Lys Arg Arg Arg Gly Leu Asp Glu
50 55 60
Ala Ser Asn Phe Gly Ala Arg Glu Val Leu Ser Lys Lys Arg Glu Leu
65 70 75 80
Ser Gln Val Asn Val Trp Ile Gln Tyr Ile Val Phe Pro His Leu Leu
85 90 95
Gly Val Asn Leu Gln Asn Leu Ser Pro Ser Arg Leu Val Arg Lys Arg
100 105 110
Asp Leu His Val Gln Phe Glu Thr Thr Arg Pro Gln Gln Ser Phe Val
115 120 125
Asn His Val Leu Pro Val Gly His Thr Asn Gln Glu Asp Ile Val Gln
130 135 140
Leu Ile Asn Thr Ile Gln Phe Arg Gln Gln Leu Val Asp His Thr Val
145 150 155 160
Pro Asn Ala Cys Ala Thr Thr Cys Ala Ala Ala Thr Leu Leu Ala His
165 170 175
Ser Ile Gln Leu Val Lys Asn Asn Asp Met
180 185

<210> 34307
<211> 116
<212> PRT
<213> A.fumigatus

<400> 34307
Leu Ile Thr Ser Ser Val Ala Val Ser Thr Gln Asp Phe Pro Pro Ser

```
1               5                   10                  15
Arg Asp Gly Leu Asp Leu Leu Leu Leu Val Asn Asp Leu Tyr Val Phe
            20                  25                  30
Ser Ala Arg Pro Leu Asp Gly Phe Pro Pro Gly His Ile Ser Met Ser
        35                  40                  45
Asp Pro Gln Arg Thr Trp Ala Gly Val Ala Phe Thr Asp Ser Val Lys
    50                  55                  60
Ala Gln Ile Tyr Asp Pro Phe Ser Gln Gly Gly Gln Ala Tyr Leu Gly
65                  70                  75                  80
Ser Thr Asp Ile Glu Val Gly Phe Ala Gly Lys Lys Arg Ile Glu Thr
                85                  90                  95
Pro Tyr Asp Gln Asp Glu Leu Ala Asn Ala Val Val Lys Val Asn Thr
            100                 105                 110
Arg Leu Asp Arg
        115
```

<210> 34308
<211> 363
<212> PRT
<213> A.fumigatus

<400> 34308

```
Asn Phe Glu Asn Gln Ile Phe Ser Pro Gly Gln Lys Ile Leu Met Asp
1               5                   10                  15
His Lys Ser Ile Pro Leu Leu Leu Thr Val Lys Thr Val Gln Arg Val
            20                  25                  30
Asp Leu Thr Ser Glu Lys Ala Gly Ala Thr Ala Gly Ser Thr Glu Thr
        35                  40                  45
Asp Pro Thr Ala Arg Gly Ile Ser Thr Arg His Thr Gln Ile Thr Phe
    50                  55                  60
Phe Lys Asp Ala Arg Thr Gly Ile Ser Leu Lys Pro Ser Asn Arg Arg
65                  70                  75                  80
Pro Ala Ala Ser Ser Ile Ile Thr Pro Asp Phe Lys Phe Glu Asp Met
                85                  90                  95
Gly Ile Ala Gly Leu Asp Ala Glu Phe Ser Thr Ile Phe Arg Arg Ala
            100                 105                 110
Phe Ala Ser Arg Ile Phe Pro Pro Gly Leu Val Glu Lys Leu Gly Ile
        115                 120                 125
Gln His Val Lys Gly Ile Leu Leu Cys Gly Pro Pro Gly Thr Gly Lys
    130                 135                 140
Thr Leu Ile Ala Arg Gln Ile Gly Lys Met Leu Asn Ala Arg Glu Pro
145                 150                 155                 160
Lys Val Ile Asn Gly Pro Glu Val Leu Asn Lys Phe Val Gly Gln Ser
                165                 170                 175
Glu Glu Asn Ile Arg Lys Leu Phe Ala Asp Ala Glu Lys Glu Tyr Lys
            180                 185                 190
Glu Lys Gly Glu Glu Ser Gly Leu His Ile Ile Ile Phe Asp Glu Leu
        195                 200                 205
Asp Ala Val Cys Lys Gln Arg Gly Ser Gly Ala Gly Gly Gly Thr Gly
    210                 215                 220
Val Gly Asp Ser Val Val Asn Gln Leu Leu Ser Lys Leu Asp Gly Val
225                 230                 235                 240
Asp Gln Leu Asn Asn Ile Leu Leu Ile Gly Met Thr Asn Arg Lys Asp
                245                 250                 255
Met Ile Asp Glu Ala Leu Leu Arg Pro Gly Arg Leu Glu Leu His Met
            260                 265                 270
```

```
Glu Ile Ser Leu Pro Asp Glu Ala Gly Arg Ala Gln Ile Leu Lys Ile
        275                 280                 285
His Thr Gln Lys Met Arg Glu Asn Asn Ile Leu Asp Pro Asp Val Asp
    290                 295                 300
Leu Ala Glu Leu Ala Leu Leu Thr Lys Asn Phe Ser Gly Ala Glu Ile
305                 310                 315                 320
Ala Gly Leu Val Lys Ser Ala Ser Ser Phe Ala Phe Thr Arg His Val
                325                 330                 335
Lys Val Gly Thr Met Ala Gly Ile Ser Glu Asp Val Val Asn Met Lys
            340                 345                 350
Val Asn Arg Ala Asp Phe Tyr His Ala Leu Glu
        355                 360
```

<210> 34309
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34309

```
Arg Leu Thr Glu Pro Ile Phe Thr Met Arg Trp Asn Lys Ser Asn Leu
1               5                   10                  15
Phe Leu Gly Val Ser Glu Glu Gln Leu Ser Ser Gly Ile Gln Tyr Gly
            20                  25                  30
Ile Ile His Tyr Ser Pro Thr Ile Asn Glu Ile Leu Lys Gly Val Gln
        35                  40                  45
Leu Phe Val Lys Gln Val Ser Asn Ala Glu Ser Ser Pro
    50                  55                  60
```

<210> 34310
<211> 205
<212> PRT
<213> A.fumigatus

<400> 34310

```
His Gly Pro Thr Ala Ser Gly Lys Thr Ala Leu Ala Ala Arg Ile Ala
1               5                   10                  15
Ile Asp Ser Gly Phe Pro Phe Ile Lys Leu Ile Ser His Glu Asp Met
            20                  25                  30
Val Val Phe Ser Glu Met Ala Arg Val Gln Tyr Ile Ser Lys Ile Phe
        35                  40                  45
Asp Asp Ala Tyr Lys Ser Arg Thr Ser Val Val Val Val Asp Asn Ile
    50                  55                  60
Glu Arg Ile Ile Asp Trp Val Pro Ile Gly Pro Arg Phe Ser Asn Thr
65                  70                  75                  80
Ile Leu Gln Thr Leu Met Val Phe Leu Arg Lys Gln Pro Thr Lys Gly
                85                  90                  95
Arg Arg Leu Leu Ile Leu Ala Thr Thr Thr Glu Arg Ala Val Leu Lys
            100                 105                 110
Gln Leu Asp Ile Tyr Asn Ser Phe Asn Ser Asp Ile Met Val Pro Asn
        115                 120                 125
Val Met Thr Tyr Asp Glu Leu Arg His Leu Met Glu Gln Ser Glu Ala
    130                 135                 140
Phe Asp Ala Ser Glu Ile Asp Gln Ala Leu Ala Gly Val Gly Gly Ile
145                 150                 155                 160
Thr Glu Asp Arg Thr Ile Gly Val Gly Val Lys Lys Val Leu Leu Gly
                165                 170                 175
```

Ile Glu Thr Ala Lys Gln Asp Pro Asp Lys Val Gly Arg Phe Val Arg
180 185 190
Val Ile Asn Arg Ala Ile Glu Glu Glu Arg Thr Phe Gln
195 200 205

<210> 34311
<211> 107
<212> PRT
<213> A.fumigatus

<400> 34311
Leu Arg Leu Leu Ala Gly Ser Tyr Ala Leu Val Gly Ala Lys Val Ala
1 5 10 15
Ala Asp Ser Thr Val Ala Lys Lys Leu Arg Gln Ala Gly Val Ile Ile
20 25 30
Leu Gly Lys Thr Ser Leu Ser Glu Trp Ala Asn Phe Arg Ser Leu Asn
35 40 45
Gly Ser Ser Gly Trp Asn Ala Gln Gly Gly Gln Thr Tyr Ala Ala Tyr
50 55 60
Tyr Pro Lys Gln Asp Pro Ser Gly Ser Ser Ser Gly Ser Gly Val Ala
65 70 75 80
Ala Asp Leu Gly Leu Ala Phe Ala Ala Leu Gly Thr Glu Val Asn Asp
85 90 95
Phe His Leu His Gly Leu Tyr Ala Ile Val Cys
100 105

<210> 34312
<211> 67
<212> PRT
<213> A.fumigatus

<400> 34312
Ala Glu Arg Lys Cys Val Pro Asp Arg Ser Ser Ile Val Tyr Arg Ser
1 5 10 15
Ile Arg Gly Cys Ala Ser Leu Tyr Phe His Ser His Val Thr Leu Lys
20 25 30
Gln Met Val Ser Gly Ala Leu Cys Val Cys Asp Asp His Cys Ile Lys
35 40 45
Ser Ser Glu Phe Ala Glu Trp Tyr Ser Ser Ser Ser Met Cys Ile Ser
50 55 60
Leu Pro Asp
65

<210> 34313
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34313
Ser Phe Thr Lys Val Met Asn Lys His Thr Lys Lys Gly Glu Lys Gln
1 5 10 15
Ile Leu Leu Phe Asn Gly His Gly Ser Tyr Leu Ile Ile Lys Phe Leu
20 25 30
Gln Leu Cys Lys Asp Asn Ser Ile Ile Pro Phe Arg Phe Leu Pro Tyr
35 40 45
Ile Ile Tyr Leu Tyr Gln Pro Leu Asp Gly Lys Leu Phe Leu Ser Tyr

50 55 60
Lys
65

<210> 34314
<211> 196
<212> PRT
<213> A.fumigatus

<400> 34314
Val Val Ile Arg Ala His Val Trp Ala His Thr Asp Val Asn Gln Thr
1 5 10 15
Ile Arg Phe Arg Pro Ser Asn Asp Ser Pro Arg Glu Ile Thr Asp Gln
20 25 30
Asp Thr Thr Ile Ala Ser Ile Lys Ser Leu Leu Ser Thr Met Thr Lys
35 40 45
Gln Ile Asp Arg Leu Glu Asn Lys Ile Glu Glu Leu Asn Leu Thr Ala
50 55 60
Lys Val Ala Ile Gln Lys Lys Asn Arg Val Ser Ala Leu Ala Ala Val
65 70 75 80
Arg Ser Lys Lys Leu Ala Glu His Asn Leu Lys Gln Arg Leu Asp Thr
85 90 95
Val Thr Gln Leu Glu Glu Val Tyr Ser Lys Ile Glu Asn Ala Ala Asp
100 105 110
Gln Val Glu Tyr Val Arg Val Met Glu Ala Ser Thr Gly Val Leu Arg
115 120 125
Gly Leu His Thr Gln Ile Gly Gly Val Glu Arg Val Glu Asp Val Val
130 135 140
Glu Glu Leu Arg Glu Glu Met Ser Arg Val Asp Glu Ile Gly Asn Ile
145 150 155 160
Met Asn Glu Val Ala Pro Glu Ile Asp Glu Thr Glu Leu Asp Asp Glu
165 170 175
Leu Glu Glu Leu Glu Ser Arg Glu Arg Gln Ala Val Glu Glu Lys Glu
180 185 190
Ala Glu Lys Thr
195

<210> 34315
<211> 140
<212> PRT
<213> A.fumigatus

<400> 34315
Asn Ile Leu Val Ile Pro Lys Leu Leu Glu Glu Tyr Ile Asn Gln Ala
1 5 10 15
Leu Glu Arg Ala Glu Pro Ser Ile Ser Arg Tyr Ile Ser Lys Thr Trp
20 25 30
Val Tyr Cys Phe Glu Lys Gln Leu Pro Glu Tyr Leu Ser Leu Gly Ser
35 40 45
Val Arg Gln Lys Met Lys Glu Ser Lys Tyr Ile Gln Ala Glu Asp Ala
50 55 60
Gly Leu Leu Gly Ser Trp Tyr Asn Gln Leu Thr Asn Ile Ile Lys Asp
65 70 75 80
Thr Pro Ala Trp Leu Val Tyr Asn Phe Asp Lys Cys Arg Phe Gln Pro
85 90 95
Gly Glu Gly Lys Ser Arg Lys Val Ile Ser Leu Lys Gly Lys Gly Lys

```
            100                 105                 110
Val Pro Asn Leu Thr Glu Ser Lys Arg Gly Glu Asn Ile Thr Ala Ile
        115                 120                 125
Glu Cys Val Ser Val Asp Gly Trp His Met Asp Pro
    130                 135                 140
```

<210> 34316
<211> 157
<212> PRT
<213> A.fumigatus

<400> 34316

```
Arg Asp Ser Leu Ser Asn Met Ser Asp Leu Leu Asn Tyr Ile Leu Thr
1               5                   10                  15
Gln Glu Asp Ser Phe Lys Lys Ser Val Thr Thr Cys Ile Ser Lys Gln
            20                  25                  30
Lys Phe Ala Pro Lys Arg Lys Ala Asp Tyr Leu Gly Pro Glu Thr Ala
        35                  40                  45
Cys Pro Ser Leu Tyr Ser Asp Phe Thr Leu Gln Lys Lys Thr Asn Pro
    50                  55                  60
Asp Gly Tyr Ala Val Asn Val Ala Ala Trp Glu Arg Ala Leu Thr Arg
65                  70                  75                  80
Ala Ala Arg Arg Gly Tyr Val Ser Thr Ser Pro Ser Arg Glu Pro Ser
                85                  90                  95
Ser Thr Thr Gly Thr Ala Val Gln Ser Asp His Leu Ile Leu Arg Thr
            100                 105                 110
Asp Asp Ser Leu Leu Arg Asp Leu Glu Ile Pro Glu Tyr Gly Arg Pro
        115                 120                 125
Val Ala Leu Gly Ala Met Leu Val Cys Leu Ser Phe Gln Ser Pro Glu
    130                 135                 140
Asp Leu His Leu Leu Ser Met Leu Val Pro Cys Thr Gly
145                 150                 155
```

<210> 34317
<211> 91
<212> PRT
<213> A.fumigatus

<400> 34317

```
Ser Leu Phe Cys Leu Leu Phe Phe His Arg Leu Ser Leu Pro Thr Leu
1               5                   10                  15
Gln Phe Phe Lys Leu Ile Ile Gln Leu Cys Leu Val Asp Leu Arg Cys
            20                  25                  30
Asn Leu Ile His Asp Val Ala Asp Phe Val His Pro Gly His Leu Phe
        35                  40                  45
Thr Gln Leu Leu Asn Asn Val Leu Asn Pro Leu Asp Ala Thr Asn Leu
    50                  55                  60
Ser Met Gln Ser Ala Lys Asn Thr Arg Ala Arg Phe His His Ser Asp
65                  70                  75                  80
Val Phe Asn Leu Val Cys Gly Ile Phe Asp Leu
                85                  90
```

<210> 34318
<211> 169
<212> PRT
<213> A.fumigatus

<400> 34318
Glu Leu Tyr Ser Gly Leu Ser Gly Ser Ser Cys His Gly Asp Ala Leu
1 5 10 15
Ala Val Thr Ser Tyr Phe Gln Gly Ser Ala Leu Ser Thr Val Asp Met
20 25 30
Lys Ser Ser Ile Ser Ala Arg Leu Cys Pro Arg Gly Pro Ala Asp Gly
35 40 45
Leu Ser Pro Gly Ile Pro Ser Met Ala Arg Pro Ala Thr Trp Pro Pro
50 55 60
Gln Gly Met Arg Ser Val Val Gly Leu Lys Pro Tyr Thr Pro Gln Gln
65 70 75 80
Arg Glu Gly Ile Trp Ile Asp Pro Ala Met Ser Val Pro Thr Ala Arg
85 90 95
Ile Glu Pro Arg Lys Ala Thr Ser Ala Pro Ser Pro Pro Leu Asp Pro
100 105 110
Pro Ala Val Arg Leu Val Ser Cys Gly Phe Lys Val Arg Pro Lys Met
115 120 125
Leu Phe Ser Glu Ser Pro Val Phe Val Val Ser Val Ile Glu Pro Gly
130 135 140
Tyr Ala Arg Val Trp Met Ser Thr Thr Thr Asn His His Arg Leu Arg
145 150 155 160
Asp Ile Lys Asn Cys Pro Glu Val Lys
165

<210> 34319
<211> 314
<212> PRT
<213> A.fumigatus

<400> 34319
Pro Gly Ser Met Thr Asp Thr Thr Lys Thr Gly Asp Ser Glu Asn Asn
1 5 10 15
Ile Phe Gly Arg Thr Leu Asn Pro His Asp Thr Asn Leu Thr Ala Gly
20 25 30
Gly Ser Ser Gly Gly Glu Gly Ala Leu Val Ala Phe Arg Gly Ser Ile
35 40 45
Leu Ala Val Gly Thr Asp Ile Ala Gly Ser Ile Gln Ile Pro Ser Leu
50 55 60
Cys Cys Gly Val Tyr Gly Phe Lys Pro Thr Thr Asp Arg Ile Pro Trp
65 70 75 80
Gly Gly Gln Val Ala Gly Leu Ala Met Glu Gly Ile Pro Gly Leu Lys
85 90 95
Pro Ser Ala Gly Pro Leu Gly His Ser Leu Ala Asp Ile Glu Leu Phe
100 105 110
Met Ser Thr Val Leu Lys Ala Glu Pro Trp Lys Tyr Asp Val Thr Ala
115 120 125
Ser Ala Ser Pro Trp Gln Glu Leu Pro Leu Arg Pro Glu Tyr Ser Ser
130 135 140
Gln Val Lys Leu Thr Ile Gly Ile Leu Pro Glu Ser Lys Asp Phe Pro
145 150 155 160
Leu His Pro Pro Val Arg Arg Ala Leu Glu Ser Ala Ile Lys Ser Leu
165 170 175
Cys Gln Arg Gly His His Ile Val Arg Leu Pro Asp Asp Pro Ser Arg
180 185 190
Asp Leu Ala Tyr Ala Ser Arg Leu Ala Phe Gln Tyr Phe Ile Tyr Gly

```
        195                 200                 205
Pro His Ile Asp His Ile Thr Ser Ser Gly Glu Pro Leu Val Thr Ser
    210                 215                 220
Val Ala Lys Met Ser Ser Pro Met Phe Thr Gly Pro Phe Pro Leu Asp
225                 230                 235                 240
Met Glu Leu Pro Pro Cys Glu Lys Ile Ser Ala Leu His Thr Ala Arg
                245                 250                 255
Gln Glu Tyr Ala Asp Ala Trp Arg Thr Cys Trp Val Gly Asn Gly Leu
            260                 265                 270
Asp Val Val Leu Ala Pro Gly Ala Gln Asn Thr Ala Val Pro His Asp
        275                 280                 285
Thr Phe Gly Trp Pro Pro Tyr Thr Val Ile Trp Asn Leu Leu Asp Val
    290                 295                 300
Arg Ser Leu Trp Thr Asp Ala Trp Met Leu
305                 310
```

<210> 34320
<211> 166
<212> PRT
<213> A.fumigatus

<400> 34320

```
Pro Pro Gln Leu Cys Lys Ala Val Glu Pro Cys His Tyr Arg Asp Ile
1               5                   10                  15
Tyr Arg Arg Lys Met Ala Ile Ser Pro Ser Pro Lys Thr Asp Trp Gln
            20                  25                  30
Gly Leu Val Ala Ala Lys Arg Lys Arg Pro Asp Ala Gln Ile Pro Ser
        35                  40                  45
Glu Trp Arg Leu Ser Asp Asp Phe Arg Ala Ser Val Pro Ala Asp Gly
    50                  55                  60
His Leu Ile Glu Ala Asp Ile Ala Arg Arg Ser Gly Ile Leu Ser Asp
65                  70                  75                  80
Lys Glu Leu Asp Ile Thr Glu Asn Phe Ser Ala Val Glu Leu Leu Lys
                85                  90                  95
Asn Leu Ala Glu Arg Lys Leu Ser Ala Val Asp Val Thr Thr Ala Phe
            100                 105                 110
Cys Lys Arg Ala Ala Ile Ala Gln Gln Leu Val Ser Gly Phe Asp Ile
        115                 120                 125
Pro Arg Glu Val Pro Ser Ile Ile Ala Val Arg Tyr Arg Arg Leu Ile
    130                 135                 140
Thr Val Asp Phe Met Phe Asn Gly Thr Phe Leu Cys Gln Ser His Arg
145                 150                 155                 160
Ala Cys Ala Val Leu Gly
                165
```

<210> 34321
<211> 104
<212> PRT
<213> A.fumigatus

<400> 34321

```
Thr Ser Cys Leu Thr Glu His Phe Phe Ala Lys Ala Ile Glu Arg Ala
1               5                   10                  15
Gln Phe Leu Asp Glu Tyr Leu Gln Arg Glu Lys Lys Val Ile Gly Pro
            20                  25                  30
Leu His Gly Leu Pro Asn Ser Ile Lys Asp Ser Phe Cys Leu Glu Gly
```

```
        35                  40                  45
Ile Gln Ser Thr Val Gly Tyr Val Ser Leu Leu Gln Asn Glu Pro Val
    50                  55                  60
Ser His Asn Ser Ala Leu Val Glu Ile Leu Phe Asp Leu Gly Ala Val
65                  70                  75                  80
Leu Asn Ile Pro Gln Thr Met Met Val Ser Cys Arg Thr His Pro Tyr
                85                  90                  95
Pro Gly Ile Thr Gly Phe Asn Asp
            100
```

<210> 34322
<211> 515
<212> PRT
<213> A.fumigatus

<400> 34322

```
Leu Phe His His Cys Gly Val Gly Cys Phe Trp Pro Tyr Asp Asp Ser
1               5                   10                  15
Pro Phe Ala Leu Phe Cys Leu Ser Thr Gln Arg Val Phe Pro Asn Pro
            20                  25                  30
Arg Ile Val Ser Leu Ala Tyr Ala Leu Ser Leu Asp Asp Arg Phe Ala
        35                  40                  45
Asp Lys Lys Ile Ile Leu Val Asp Arg Trp Asn Phe Glu Pro Pro Asn
    50                  55                  60
Ala Thr Gly Ser Val His Asn Pro Ala Ala Ala Asn Ala Asp Thr Ser
65                  70                  75                  80
Arg Val Ile Arg Arg Asp Tyr Pro His Gly Pro Tyr Ala Ser Leu Ala
                85                  90                  95
Leu Glu Ala Met Lys His Trp Arg Gly Lys Phe Gly Glu Asn Asn Arg
            100                 105                 110
Tyr Val Asn Gln Arg Leu Leu Phe Ser Gly Glu Gly Ser Ser Leu Thr
        115                 120                 125
Thr Pro Pro Lys Ala Leu Glu Thr Val Asn Tyr Ile Lys Lys Ala Tyr
    130                 135                 140
Ala Ile Ser Cys Glu Leu Thr Pro Gly Gly Arg Asp Ala Val Gln Val
145                 150                 155                 160
Leu Asp Ser Leu Asp Glu Val Arg Ala Phe Leu Gly Asn Thr Pro Ser
                165                 170                 175
His Pro Pro His Leu Pro Leu Asn Lys Asp Pro Ala Ala Arg Asp Leu
            180                 185                 190
Arg Gly Tyr Ile Ser Asn Asp Cys Gly Trp Ala Asp Ala Gly Ala Ser
        195                 200                 205
Ile Glu Trp Leu Arg Gln Glu Val Leu Arg Leu Gly Arg Val Glu Cys
    210                 215                 220
Val Val Gly Glu Val Glu Ser Leu Val Tyr Ser Asp Asp Gln Arg Ala
225                 230                 235                 240
Val Lys Gly Val Lys Leu Val Asp Gly Lys Val Leu Thr Ala Glu Leu
                245                 250                 255
Thr Val Ile Ala Ala Gly Ala Arg Ser Ser His Ile Leu Gly Ile Pro
            260                 265                 270
Lys Leu Cys Asp Val Tyr Ser Glu Phe Val Ala Tyr Ile Gln Leu Thr
        275                 280                 285
Lys Glu Glu Ala Asp Glu Leu Arg Arg Arg Gln Trp Pro Ile Leu Val
    290                 295                 300
Asn Cys His Arg Gly Val Phe Ala Val Gly Pro Asp His Asp Asn Cys
305                 310                 315                 320
```

```
Leu Lys Phe Gly His Phe Ser Tyr Ser Gly Ile Val Asp Val Leu Arg
                325                 330                 335
Glu Ala Ser Ile Gln Val Pro Thr Arg Pro Asp Gly Trp Glu Ala Gln
            340                 345                 350
Gln Lys Tyr Trp Ser Asp Pro Arg Phe Ala Phe Gly Gly Glu Val Lys
        355                 360                 365
Val Ser Ala Leu Gly Asp Val Asp Asp Tyr Glu Asn Pro Ala Ala Gln
    370                 375                 380
Arg Ala Leu Ala Asp Tyr Arg Leu Phe Leu Leu Glu Leu Leu Gly Pro
385                 390                 395                 400
Thr Gly Leu Gln Gly Val Asp Thr Leu Gly Leu Asp Gln Ser Asp Asn
                405                 410                 415
Leu Leu Asn Asn Ile Ala Asn Arg Pro Phe Thr Arg Val Arg Lys Cys
            420                 425                 430
Trp Tyr Asn Asp Thr Pro Ala Leu Asp Phe Val Val Asp Tyr His Pro
        435                 440                 445
Ser Tyr Gly Lys Thr Leu Phe Val Ala Thr Gly Gly Cys Asp His Ala
    450                 455                 460
Phe Lys Phe Leu Pro Ile Ile Gly Glu Lys Thr Leu Ala Leu Ile Leu
465                 470                 475                 480
Arg Asn Arg Gly Asp Ser Ala Val Ser Leu Pro Ala Gly Val Glu Pro
                485                 490                 495
Ser Leu Glu Glu Leu Ser Glu Leu Trp Arg Phe Pro Val Glu Leu Leu
            500                 505                 510
Gln Asp Asn
        515
```

<210> 34323
<211> 120
<212> PRT
<213> A.fumigatus

<400> 34323

```
Arg Asn Met Lys Lys Thr Ala Leu Ile Leu His Thr Leu Gln Ser Gln
1               5                   10                  15
Arg Lys Tyr Ile His Tyr Ile Ala Cys Asp Val Asp Arg Val Ala Leu
            20                  25                  30
Gln Arg Gly Leu Arg Asn Leu Gln Ala Ile Phe Pro Ala Ser Thr Ser
        35                  40                  45
Ser Ile Lys Ile Gln Gly Leu Val Ala Thr Tyr Glu Asp Cys Ala Ala
    50                  55                  60
Trp Leu Gln Arg Asn Pro Gly Ser Gly His Thr Ser Leu Met Trp Leu
65                  70                  75                  80
Gly Asn Ser Leu Ala Asn Phe Pro Pro Pro Glu Ala Ser Glu Tyr Ile
                85                  90                  95
Arg Ser Phe Leu Ser Thr Gly Ala Ser Leu Ile Arg Leu Gln Pro Pro
            100                 105                 110
Gly Leu Glu Gly Ser Ala Leu Ala
        115                 120
```

<210> 34324
<211> 475
<212> PRT
<213> A.fumigatus

<400> 34324

```
Arg Lys Ser Phe Leu Arg Leu Val Thr Met Ser Pro Asp Glu Lys Trp
1               5                  10                  15
Trp Lys Asn Ala Ile Ile Tyr Gln Ile Tyr Pro Ala Ser Phe Lys Asp
            20                  25                  30
Ser Asn Gly Asp Gly Ile Gly Asp Ile Pro Gly Ile Ile Ser Gln Leu
        35                  40                  45
Asp Tyr Ile Ala Ser Leu Gly Val Asp Val Val Trp Leu Cys Pro Met
    50                  55                  60
Tyr Asp Ser Pro Gln His Asp Met Gly Tyr Asp Val Ser Asp Tyr Glu
65                  70                  75                  80
Lys Val Tyr Pro Pro Tyr Gly Thr Val Glu Asp Met Glu Thr Leu Ile
                85                  90                  95
Asp Ala Cys His Arg Arg Gly Leu Arg Ile Ile Leu Asp Leu Val Val
            100                 105                 110
Asn His Thr Ser His Glu His Lys Trp Phe Lys Glu Ser Arg Ser Ser
        115                 120                 125
Lys Asn Ser Pro Lys Arg Asp Trp Tyr Ile Trp Arg Pro Ala Lys Tyr
    130                 135                 140
Asp Ala Asn Gly Asp Arg Lys Pro Pro Asn Asn Trp Arg Ser Val Phe
145                 150                 155                 160
Gly Gly Ser Ala Trp Glu Trp Asp Glu Lys Thr Gln Glu Tyr Tyr Leu
                165                 170                 175
His Leu Phe Leu Ala Gln Gln Pro Asp Leu Asn Trp Glu Asn Pro Glu
            180                 185                 190
Val Arg Gln Ala Val Tyr Ala Ser Ala Met Glu Phe Trp Leu Gln Lys
        195                 200                 205
Gly Val Asp Gly Phe Arg Val Asp Thr Val Asn Met Tyr Ser Lys Asp
    210                 215                 220
Pro Ser Tyr Pro Asp Ala Pro Ile Val Asn Pro Lys Ser Asp Thr Gln
225                 230                 235                 240
Val Ala Phe Ser Leu Phe Cys Asn Gly Pro Arg Ile His Glu Tyr Leu
                245                 250                 255
Arg Glu Met Asn Lys Val Leu Ala Lys Tyr Asp Ala Met Thr Val Gly
            260                 265                 270
Glu Leu Pro Glu Thr His Thr Leu Glu Gly Val Leu Arg Tyr Val Ser
        275                 280                 285
Ala Ala Glu Lys Gln Leu Asn Met Val Phe Ser Phe Asp Val Val Asp
    290                 295                 300
Leu Gly Leu Gly Lys Glu Tyr Lys Phe Leu Thr Thr Pro Arg Gly Trp
305                 310                 315                 320
Thr Leu Pro Asp Leu Lys Ala Ala Ile Lys Arg Thr Gln Asp Ile Leu
                325                 330                 335
Lys Gly Thr Asp Gly Trp Thr Thr Val Phe Ile Glu Asn His Asp Gln
            340                 345                 350
Gly Arg Ser Val Ser Arg Phe Gly Ser Asp Arg Thr Pro Glu Leu Arg
        355                 360                 365
Asp Thr Ser Ala Met Met Leu Ala Met Phe Gln Cys Thr Leu Ser Gly
    370                 375                 380
Thr Gln Phe Ile Tyr Gln Gly Gln Glu Ile Gly Thr Val Asn Ala Pro
385                 390                 395                 400
Glu Glu Trp Pro Ile Glu Glu Tyr Lys Asp Ile Asp Ser Thr Lys Tyr
                405                 410                 415
Tyr His Met Val Arg Glu Met Thr Asn Asn Asp Pro Val His Met Lys
            420                 425                 430
Thr Ala Met Lys Ala Leu Gln His Leu Ala Arg Asp His Ala Arg Leu
        435                 440                 445
```

```
Pro Met Gln Trp Ser Pro Ala Ala Asn Ala Gly Phe Ser His Pro Ser
    450                 455                 460
Ala Ser Ser Pro Arg Gly Trp Gln Asp Pro Arg
465                 470                 475

<210> 34325
<211> 176
<212> PRT
<213> A.fumigatus

<400> 34325
Lys Pro Ala Asn Leu Cys Gly Glu Val Pro Phe Pro Cys Phe Leu Ser
1               5                   10                  15
Thr Gly Leu Ala Leu Pro Gly Asn Ser Asn Thr Asn Phe Cys Tyr Cys
            20                  25                  30
Leu Val Ile Ile Met Glu Ile Glu Lys Ser Thr Gly Ile Glu His Val
        35                  40                  45
Glu Glu Glu Ala Ala Ser Arg Arg Pro His Pro Gln Pro Ala Ser His
    50                  55                  60
Gln Asp Leu Ile Ala Ser Ser Glu Ala Gln Ala Ala Leu Glu Lys Glu
65                  70                  75                  80
His Ser Met Thr Leu Trp Gln Ala Leu Lys Ile Tyr Pro Lys Ala Val
                85                  90                  95
Gly Trp Ser Ile Leu Leu Ser Cys Ala Ile Ile Met Glu Gly Tyr Asp
            100                 105                 110
Val Val Leu Ile Gly Ser Phe Phe Ala Tyr Pro Gln Phe Asn Gln Lys
        115                 120                 125
Tyr Gly His Ile Met Ser Asp Gly Asn Tyr Gly Leu Ala Ala Lys Trp
    130                 135                 140
Gln Ala Ala Leu Thr Asn Ser Met Ser Cys Gly Gln Ile Ile Gly Leu
145                 150                 155                 160
Phe Ile Asn Gly Val Val Ser Glu Cys Phe Gly Cys Pro Arg Thr Leu
                165                 170                 175

<210> 34326
<211> 343
<212> PRT
<213> A.fumigatus

<400> 34326
His Thr Ala Ile Ala Pro Thr Met Asp Ala Leu Gly Ala Phe Thr Tyr
1               5                   10                  15
Met Cys Asp Asn Leu Pro Ala Trp Ile Asp Gln Val Ser Glu Leu Ala
            20                  25                  30
Ala Tyr Thr Ala Ala Lys His Ala Glu Tyr Thr Glu Ala Tyr Lys Lys
        35                  40                  45
Tyr Ala Pro Val Arg Ser Arg Arg Arg Lys Asn Ser Ser Val Cys Ser
    50                  55                  60
Ile His Thr Asp Asp Asn Phe Pro Leu Ser Gln Lys Arg Gly Thr Ser
65                  70                  75                  80
Val Glu Pro Thr Gln Gly Thr Pro Ser Thr Ala Ala Glu Ala Ser Ile
                85                  90                  95
Thr Gln Ile Arg Phe Val Gly Asn Pro Arg Lys Arg Asn Ala Asp Gly
            100                 105                 110
Thr Pro Ser Ile Asn Ser Ala Glu Glu Thr Ala Asp Phe Val Ser Ile
        115                 120                 125
```

```
Arg His Asn Val Val Ile His Tyr Asp Ala His Thr Gln Lys Ser Leu
    130                 135                 140
Glu Ala Met Val Arg Asn Ile Gly Thr Ala Arg Asn Asn Met Arg Arg
145                 150                 155                 160
Gly Lys Met Ser Gln Ile Ser Leu Gly Gly Leu Arg Pro Arg Met Gly
                165                 170                 175
Lys Pro Asp Ala Arg Arg Asn Leu Leu Gly Gln Ala Asp Ser Ser Asp
            180                 185                 190
Ala Asp Ile Leu Ile Asn Ile Arg Ser Met Arg Thr Arg Gly Pro Pro
        195                 200                 205
Pro Ala Glu Ala Ser Ser Ser Arg Ile Pro Pro Lys Glu Ser Val Phe
    210                 215                 220
Asp Val Val Asp Arg Gln Leu Glu Leu Ala His Ser His Cys Glu Thr
225                 230                 235                 240
Ala Ala Tyr Gln Phe Leu Arg Tyr Gly Asp Cys Ser Ala Glu Leu Lys
                245                 250                 255
Ser Val Val Glu Thr Phe Arg Ser Leu Leu Glu Leu Ala Thr Glu Glu
            260                 265                 270
Ala Arg Asn Leu Lys Ala Glu Gln Pro Glu Glu Ser Leu Gln Glu Asp
        275                 280                 285
Met Lys Lys Glu Ser Val Thr Val Ser Pro Thr Lys Thr Ala Ala Glu
    290                 295                 300
Pro Glu Gly Gly Lys Pro Gln Ala Ser Cys Thr His Glu Ile Glu Val
305                 310                 315                 320
Asp Asp Ala Ser Ala Val Ser Val Glu Ser Ile Asp Ile Lys Ala Phe
                325                 330                 335
Arg Ala Ser Arg Leu Arg Val
            340
```

<210> 34327
<211> 267
<212> PRT
<213> A.fumigatus

<400> 34327

```
Arg Gly Ser Phe Glu Pro Cys Gly Glu Asp Ile Ala Gly Phe Glu His
1                   5                   10                  15
Pro Asn Arg Asp Lys Glu Ala Gln Asp Phe Trp Leu Leu Ser His Thr
            20                  25                  30
His Phe Ser Arg Phe Phe Ala Ile Val Asn Gly Ser Val Pro Leu Ser
        35                  40                  45
Glu Gln Val Gln Arg Ser Ile Glu Lys His Leu Leu Lys Leu Ser Lys
    50                  55                  60
Leu His Val Glu Met Ala Lys Glu Arg Pro Ala Ala Phe Ala Leu Leu
65                  70                  75                  80
Pro Asp Ser Ile Pro Leu Val Gln Ser Tyr Trp Thr Leu Val Val Lys
                85                  90                  95
Leu Gly Glu Asn Tyr Ser Gln Leu Gly Glu Asp Gly Asp Ser Asp Asn
            100                 105                 110
Lys Thr Leu Met Glu Lys Val Gly Leu Arg Ala Leu Leu Leu Ile Arg
        115                 120                 125
Ala Cys Ser Lys Met Ala Phe Asn Pro Ala Gln Thr Phe Lys Tyr Gln
    130                 135                 140
Thr Pro Gln Asp Lys Glu Glu Lys Gln Arg Ser Ile Glu Gln Ile Lys
145                 150                 155                 160
Ser Asp Ile Phe Thr His Glu Phe Val Val Ser Val Met Glu Leu Leu
```

```
                165                 170                 175
Val Thr Gln Phe Phe Arg Phe Arg Lys Ala Asp Phe Gln Glu Trp Glu
            180                 185                 190
Ala Glu Pro Glu Glu Trp Glu Arg Lys Glu Glu Asp Ile Ala Glu Ala
        195                 200                 205
Trp Glu Phe Ser Ile Arg Ser Cys Ser Glu Lys Leu Phe Leu Asp Leu
    210                 215                 220
Val Ile His Phe Lys Asp Leu Leu Ile Pro Arg Leu Leu Asn Val Phe
225                 230                 235                 240
Phe Ser Phe Ala Ser Lys Phe Lys Leu Pro Arg Thr Ser Thr Asn Thr
                245                 250                 255
Ile Asp His Phe Pro Ser Arg Ser Arg Glu Ala
            260                 265
```

<210> 34328
<211> 245
<212> PRT
<213> A.fumigatus

<400> 34328

```
Thr Ser Ser Ser His Leu Gln Val Ser Ser Ser Tyr Gln Gly His Leu
1               5                   10                  15
Pro Thr Leu Leu Thr Ile Ser Pro Pro Gly Pro Glu Lys Arg Asp Val
            20                  25                  30
Leu Leu Lys Asp Ser Leu Tyr Ser Ala Ile Gly Leu Ala Ser Ala Ser
        35                  40                  45
Leu Glu Gln Gln Leu Asp Phe Asn Ser Phe Leu Glu Thr Ala Leu Val
    50                  55                  60
Gln Glu Val Gln Ile Gln Glu His Gly Tyr Asn Val Leu Arg Arg Arg
65                  70                  75                  80
Ile Ala Ile Val Leu Gly Gln Trp Val Pro Val Lys Pro Asp Glu Leu
                85                  90                  95
Asn Arg Asn Ala Ile Tyr Gln Ile Phe Gln His Leu Leu Gly Lys Gln
            100                 105                 110
Asp Pro Leu Asn Asp Leu Val Val Arg Ile Thr Ala Gly Arg Gln Leu
        115                 120                 125
Lys Asn Val Leu Asp Pro Phe Glu Phe Ser Pro Ala Val Phe Met Pro
    130                 135                 140
Tyr Ala Gln Ser Ile Leu Gln Asp Leu Met Ser Leu Ile Gln Glu Val
145                 150                 155                 160
Glu Leu Pro Glu Thr Lys Met Gly Leu Leu Glu Ser Val Arg Val Leu
                165                 170                 175
Val Val Lys Met Glu His His Val Cys Thr Pro Leu Pro Thr Gln Leu
            180                 185                 190
Asn Lys Ser Ala Asn Pro Arg Leu Asp Cys Ala Ile Leu Gly Pro Asp
        195                 200                 205
Ile Ser Phe Thr Ala Ser Phe Val Gly Ala Ile Arg Arg Gly Ala Ser
    210                 215                 220
His Glu Thr Gly His Ser Asn Phe Asn Leu Val Thr His Thr Phe Phe
225                 230                 235                 240
Glu Ala Gly Leu Asp
                245
```

<210> 34329
<211> 67
<212> PRT

<213> A.fumigatus

<400> 34329
Arg His Asn Lys Pro Ile Pro Gly Ala Thr Gly His Tyr Ser Phe Gly
1 5 10 15
Gly Arg Asp Ser Gln Lys Gly Ala Cys Trp Ser Trp Lys Ser Ile Phe
20 25 30
Arg Pro Gly Gly Trp Lys Glu Pro Asp Ile Ala Ile Ala Gly Asn Ala
35 40 45
Phe Glu Thr Asp Leu Leu Phe Leu Leu Ser Glu Ile Asp Asp Asp Lys
50 55 60
Lys His Pro
65

<210> 34330
<211> 101
<212> PRT
<213> A.fumigatus

<400> 34330
Phe Ile Tyr Gln Phe Ser Asn Asp His Leu Ile Leu Lys Thr Thr Leu
1 5 10 15
Ser Ser His Ser Leu Ala Ser Leu Val Pro Tyr Ile Ala Tyr Pro Tyr
20 25 30
Leu Ser Arg Ser Ala Pro Val Ser Met Ala Gly Phe Asp Phe Ser Asn
35 40 45
Tyr Asn Arg Asn Ala Ala Leu His Ala Lys Gly Val Pro Leu Pro Lys
50 55 60
Ala Thr Ser Thr Gly Thr Thr Ile Val Gly Cys Ile Phe Asp Asn Gly
65 70 75 80
Val Val Val Gly Asp Asp Gly Ala His Arg Ile Ile Ala Cys Asp Asp
85 90 95
Gly Leu Ser Ala Ser
100

<210> 34331
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34331
Glu Gly Lys Ile Glu Ser Ala Cys Gly Gln Ser Ile Ile Thr Ser Asp
1 5 10 15
Tyr Ser Val Gly Ser Ile Ile Thr Tyr His Asn Thr Ile Ile Glu Asp
20 25 30
Thr Thr His Asn Cys Cys Thr Arg Thr Cys Arg Phe Arg Glu Arg His
35 40 45
Thr Phe Gly Val Gln Ser Arg Val Ala Ile Val Ile Gly Glu Val Glu
50 55 60
Ala Cys His Thr Asp Gly Arg Gly Ala Gly
65 70

<210> 34332
<211> 240
<212> PRT
<213> A.fumigatus

<400> 34332
Glu Val Gly Phe Lys Gly Val Ser Gly Asp Ser Asn Val Arg Phe Leu
1 5 10 15
Pro Thr Pro Trp Pro Glu Asp Ala Leu Pro Ala Pro Thr Ser Ser Leu
20 25 30
Leu Ala Val Ala Pro Thr Lys Gly Ile Val Ala Gly Gly Ala Arg Asn
35 40 45
Trp Leu Val Met Ala Ser Ser Asp Ala Val Arg Lys Ala Ile Gly Ala
50 55 60
Thr Thr Gly Glu Ser Lys Val Lys Thr Lys Pro Phe Glu Pro Gln Ala
65 70 75 80
Thr Ile Pro Phe Pro Ala Arg Pro Thr His Val Ala Phe Ala Ser Gly
85 90 95
Asp Asn Ala Leu Val Leu Ala Thr Glu Asn Gly Ala Glu Leu Val Val
100 105 110
Tyr Gln Thr Ala Thr Leu Leu Thr Gly Asn Pro Gln Pro Ala Leu Gly
115 120 125
Ile Pro Met Asn Gly Thr Thr Leu Arg Ala Met Ala Pro Asn Pro Ser
130 135 140
Pro Ser Glu Asp Ile Leu Ser Ser Leu Val Ala Leu Val Thr Ala Asn
145 150 155 160
Gly Glu Leu Leu Ile Ala Asp Leu Lys Gly Ala Asn Leu Ile Arg Gly
165 170 175
Pro Ser Gly Gln Val Leu Arg Thr Gly Val Ser Ser Val Cys Trp Ser
180 185 190
Asn Lys Gly Lys Gln Leu Val Ala Gly Leu Ala Asp Gly Thr Ala Val
195 200 205
Gln Leu Thr Pro Asp Gly Thr Gln Lys Asp Val Ile Pro Arg Pro Ser
210 215 220
Asp Leu Glu Gly Asp Cys His Gly Thr Leu Gly His Tyr Tyr Ser Leu
225 230 235 240

<210> 34333
<211> 222
<212> PRT
<213> A.fumigatus

<400> 34333
Ser Arg Ile Val Ser Ser Ile Ala Trp Leu Glu Asn Asp Ile Phe Leu
1 5 10 15
Met Val Tyr Thr Pro Asn Ala Thr Glu Asp Asp Met Gly Gln Thr Pro
20 25 30
Ala Ser Ser Tyr Tyr Ile Ile Thr Arg Arg Lys Gly Ala Pro Phe Leu
35 40 45
Val Gln Lys Met Pro Glu Leu Cys Met Pro Phe Gly Val Asn Arg Ser
50 55 60
Pro Ala Tyr Gln Phe Ile Ala Arg Leu Arg Asp Tyr Lys Pro His Leu
65 70 75 80
Lys Asp Ile Leu Ile Val Ser Ser Thr Ala Ser Thr Asp Ile Gly Leu
85 90 95
Ile Thr Arg Ser Asp Gln Pro Leu Ala Ser Asp Asp Ser Ala Lys Gly
100 105 110
Thr Val Gly Leu Phe Thr Thr Thr Glu Val Asn Asp Asp Thr Lys Arg
115 120 125
Ala Ser Leu Pro Leu Asn Glu Ala Ser Ser Asp Thr Ser Val Ile Gly

```
    130                 135                 140
Leu Gly Val Asp Leu Ser Ser Thr Glu Pro Val Val Ser Pro Ile Gln
145                 150                 155                 160
Gly Glu Asp Ile Ala Glu Ser Ser Thr Pro Leu Pro Asn Leu Phe Leu
                165                 170                 175
Leu Asn Asn Glu Gly Ile Leu Cys Ser Trp Trp Ile Ile Tyr Ser Asp
            180                 185                 190
Ser Ile Arg Gln Lys Leu Pro Tyr His Gly Met Val Ser Val Ser Pro
        195                 200                 205
Gln Pro Pro Thr Val Phe Thr Arg Gly Trp Lys Glu Arg Ser
    210                 215                 220
```

<210> 34334
<211> 136
<212> PRT
<213> A.fumigatus

<400> 34334

```
Ser Gly Arg Asn Asp Ser His Ser Ser Leu Ser Pro Cys Pro Asn Arg
1               5                   10                  15
His Gln His Pro Leu Ala Pro Ile Leu Arg Ala Tyr Phe Arg Ser Val
            20                  25                  30
Ile Val Ser Pro Thr Ile Ser Thr Leu Leu Gly Ser Thr Ala Asn Pro
        35                  40                  45
Ser Pro Tyr Thr Pro Phe Asn Arg Gly Thr Ser Thr Ser Val Lys Leu
    50                  55                  60
Val Ala Ser Gly Phe Leu Phe Ala Pro Gly Val Pro Ser Pro Met Ile
65                  70                  75                  80
Ser Ala Ser Gly Thr Asn Ser Ala Ser Ser Ile Leu Ser Asn Ala Val
                85                  90                  95
Leu Ile Gly Gly Thr Ala Leu Leu Leu Thr Ile Ala Met Gly Ile Arg
            100                 105                 110
Arg Glu Trp Ser Pro Ser Ser Ser Ser Arg Arg Pro Gly Asn Gly Phe
        115                 120                 125
Val Asn Phe Ser Ser Cys Ala Ala
    130                 135
```

<210> 34335
<211> 221
<212> PRT
<213> A.fumigatus

<400> 34335

```
Arg Ser Pro His Asn Val Asp Glu Leu Leu Ser Thr Cys Met Phe Met
1               5                   10                  15
Gly Ile Thr Ser Leu Cys Pro Asp Arg Phe Gln Pro Thr Asp Ser Trp
            20                  25                  30
Val Leu Thr Asn Ala Pro Gly Ala Met Asn Trp Leu Cys Leu Gln Ser
        35                  40                  45
Gly Ile Arg Thr Ile Ile Lys Leu Ala Gly Pro Tyr Ile Gln Ser Ser
    50                  55                  60
Ile Trp Ala Ser Ala Phe Gln Gln Thr His Gln Glu Glu Val Gln Leu
65                  70                  75                  80
Tyr Glu Glu Gly Val Pro Gln Gly Arg Glu Gly Leu Asp Pro Asp Leu
                85                  90                  95
Ala Asp Leu Cys Gly Ile Asp Asp Ser Thr Thr Ala Ala Ser Met Asn
```

```
            100                 105                 110
Pro Tyr Tyr Glu Pro Leu Arg Leu Leu Ala Ala Ile Ser Gly Leu Glu
        115                 120                 125
Lys Asn Met Lys Asn Ala Ala Gln Cys Ala Ser Phe Met Gly Arg Leu
    130                 135                 140
Asp Asn Asp Phe Leu Ala Leu Leu Arg Glu Arg Asp Pro Pro Ala Leu
145                 150                 155                 160
Leu Ile Leu Ala Gln Trp Met Gly Leu Leu Cys Thr Leu Ser Glu Trp
                165                 170                 175
Gln Pro Trp Val Glu Gly Arg Ile Arg Gly Glu Cys Thr Ala Ile Cys
            180                 185                 190
Met Tyr Leu Glu His Ser Thr Asp Pro Arg Val Arg Arg Leu Leu Leu
        195                 200                 205
Phe Pro Ala Ser Ala Cys Gly Tyr His Leu Thr Tyr Ala
    210                 215                 220
```

<210> 34336
<211> 241
<212> PRT
<213> A.fumigatus

<400> 34336

```
Leu Thr Arg Ser Ile Lys Leu Arg Ser Thr Met Ala Asp Leu Val Ile
1               5                   10                  15
Leu Asp Phe Asp Gly Thr Ile Phe Asp Thr Arg Glu Ala Ile Gln His
            20                  25                  30
Ala Ala Arg Leu Thr Phe Thr Thr Leu Leu Pro Thr His Glu Ile Pro
        35                  40                  45
Tyr Ala Lys Ala Arg Arg Leu Met Ala Thr Gly Ala Gly Leu Ser Glu
    50                  55                  60
Thr Phe Arg Ala Leu His Pro Asp Pro Ser Thr Phe Asn Glu Glu Lys
65                  70                  75                  80
Trp Val Ala Thr Tyr Arg Ser Leu Tyr Ala Ala His Glu Glu Lys Phe
                85                  90                  95
Thr Asn Pro Phe Pro Gly Leu Arg Glu Leu Leu Glu Gly Leu His Ser
            100                 105                 110
Arg Arg Ile Pro Ile Ala Ile Val Ser Asn Lys Ala Val Pro Pro Ile
        115                 120                 125
Lys Thr Ala Leu Glu Arg Met Glu Leu Ala Glu Phe Val Pro Glu Ala
    130                 135                 140
Leu Ile Ile Gly Asp Gly Thr Pro Gly Ala Lys Arg Lys Pro Asp Ala
145                 150                 155                 160
Thr Ser Phe Thr Asp Val Leu Val Pro Arg Leu Lys Gly Val Tyr Gly
                165                 170                 175
Glu Gly Phe Ala Val Asp Pro Ser Arg Val Leu Met Val Gly Asp Thr
            180                 185                 190
Ile Thr Asp Leu Lys Tyr Ala Arg Asn Ile Gly Ala Arg Gly Cys Trp
        195                 200                 205
Cys Arg Phe Gly Gln Gly Asp Lys Glu Glu Cys Glu Ser Phe Arg Pro
    210                 215                 220
Asp Tyr Ala Val Asp Ser Leu Ala Glu Val Leu Glu Ile Ala Val Lys
225                 230                 235                 240
Glu
```

<210> 34337

<211> 78
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (33)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34337
Ile Gly Arg Asp Val Ser Gly Val Val Asn Ala Ala Trp Asp Val Gly
1 5 10 15
Gly Ala Gln Gly Ala Ser Gly Arg Tyr Arg His Arg Glu Ala Phe Ala
20 25 30
Xaa Cys Leu Gln Met Ala Leu Met Met Gly Met Asp Asp Asp Glu Trp
35 40 45
Glu Asp Val Thr Arg Gly Gly Glu Thr Ala Asp Val Leu Asp Lys Ile
50 55 60
Ser Arg Glu Glu Arg Ala Arg Ile Arg Ala Met Val Arg Arg
65 70 75

<210> 34338
<211> 230
<212> PRT
<213> A.fumigatus

<400> 34338
Arg Arg Val Val Ser Lys Ala Asn Trp Thr Tyr Lys Leu Cys Gln Leu
1 5 10 15
Thr Leu Gly Gly Ile Val Ala Asn Asn Ala Ser His Asp Thr Lys Asp
20 25 30
Asn Thr Gly Pro Arg Gly Gln Lys Pro Arg Gly Gly Ser Arg Ser Asn
35 40 45
Gln Ala Gly Asn Ser Ala Gly Thr Pro Ala Asp His Arg Pro Leu Ser
50 55 60
Ser Gln Thr Pro Ile Glu Lys Asn Pro Gly Asn Ser Ser Lys Gly Ser
65 70 75 80
Ser Gln Val Cys Val Pro Ala Ser His Gly Ser Pro Asn Val Gly Pro
85 90 95
Glu Gly Arg Thr Thr Val Glu Ser Lys Pro Thr Lys Pro Glu Glu Asp
100 105 110
Arg Ser Glu Glu Asn Glu Arg Asp Val Val Arg Thr Glu Val Gln His
115 120 125
His Thr Phe Leu Thr Thr Thr Glu Asp His Arg Ile Gly Glu Gly Cys
130 135 140
His Thr Gly Ser Asp Phe Asp Arg Thr Thr Thr Gly Val Ile Gln Asn
145 150 155 160
Thr Ile Phe Glu Cys Pro Thr Ile His Ile Pro Tyr Pro Ala Asn His
165 170 175
Arg Thr Ile Asp Asn Ser Ser Pro Asp Glu Gly Glu Asn His Ser Arg
180 185 190
Lys Gln Thr Ser Thr Phe Cys Asn Ser Ala His Tyr Asn Ser Arg Ser
195 200 205
Asp Ala Thr Glu Leu His Leu Cys His Pro Gly Trp Val Ser Leu Gln
210 215 220
Cys Pro Leu Asn Pro Asn

225 230

<210> 34339
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34339
Ile Pro Pro Ser Asp Arg Val Ile Val Leu Ala Ala Phe Ser Ala Leu
1 5 10 15
Cys Leu Ser Pro Gly Ile Gly Asn Pro Asn Tyr Ile Pro Ser Leu Cys
20 25 30
Pro Pro Tyr Asn Ala Ala Val Thr His Pro Gly Glu Arg Val Trp Phe
35 40 45
Ser Arg Val Leu Arg Phe Ser Ala Phe Phe Ile Asn Ser Thr Gly Thr
50 55 60

<210> 34340
<211> 221
<212> PRT
<213> A.fumigatus

<400> 34340
Pro Leu Phe Phe Ile Val Lys Tyr Trp Ile Arg Ile Asp Asp Ser Met
1 5 10 15
Asp Val Phe Ala Glu His Gly Val Ala Gly Ile Ile Gly Leu Ile Phe
20 25 30
Asn Ala Leu Phe Ala Asp Asp Ala Ile Val Gly Leu Asp Gly Val Asn
35 40 45
Thr Gly Thr Gly Val Gly Gly Trp Val Ile His Asn Tyr Lys Gln Leu
50 55 60
Tyr Val Gln Ile Ala Phe Ile Val Ala Ser Cys Ala Tyr Ser Phe Val
65 70 75 80
Val Ser Ala Ile Ile Ala Tyr Ala Ile Asn Ala Ile Pro Gly Leu Lys
85 90 95
Leu Arg Ala Ser Glu Glu Ala Glu Leu Leu Gly Met Asp Asp Asp Gln
100 105 110
Leu Gly Glu Phe Ala Tyr Asp Tyr Val Glu Val Arg Arg Asp Tyr Leu
115 120 125
Ala Trp Thr Pro Gln Lys His Asp Gln Leu Glu Asp Gly His Glu Ile
130 135 140
Pro His Ala Ala Arg Tyr Gly Ile Gly Glu His Ser Glu Met Leu Glu
145 150 155 160
Gly Gln Thr Pro Val Gly Ile Asp Ser Arg Gly Cys Ser Glu Gly Asp
165 170 175
Ser Gly Ile Gln Glu Ile Lys Ile Ala Pro Ala Pro Arg Pro Val Ala
180 185 190
Glu His Asn Pro Pro Ala Gln Val Gln Glu Thr Gln Val Pro Pro Ala
195 200 205
Ala Pro Gln Ile Asp Glu Lys Arg Asp Gly Ser Ser Gln
210 215 220

<210> 34341
<211> 135
<212> PRT
<213> A.fumigatus

<400> 34341
Phe Gln Tyr Val Leu Leu Leu Val Ser Ala Arg Phe Val Trp Asp His
1 5 10 15
Asp Ser Asn Gly Ile Ile Ser Gly Thr Glu Asn Val Asn Lys Trp Phe
20 25 30
Gln Ser Gly Asp Gln Ala Tyr Ile Ile Val Ala Ser Ala Met Val Met
35 40 45
Val Met Ile Pro Gly Leu Gly Phe Leu Tyr Ser Gly Leu Ala Arg Arg
50 55 60
Lys Ser Ala Leu Ser Met Ile Trp Ala Cys Met Ala Ser Phe Ser Val
65 70 75 80
Val Thr Phe Gln Trp Tyr Phe Trp Gly Tyr Ser Leu Ala Phe Ser Pro
85 90 95
Thr Ala Thr Asn Gly Tyr Ile Gly Asn Leu Arg Asn Phe Gly Leu Met
100 105 110
Lys Thr Leu Ala Asp Pro Ser Pro Gly Ser Pro Leu Ile Pro Asn Leu
115 120 125
Leu Tyr Ala Phe Tyr Gln Val
130 135

<210> 34342
<211> 215
<212> PRT
<213> A.fumigatus

<400> 34342
Met Gln Phe Cys Gly Val Thr Ala Ala Ile Ile Met Gly Ala Val Ala
1 5 10 15
Glu Arg Gly Arg Leu Leu Pro Ala Met Val Phe Thr Phe Ile Trp Ala
20 25 30
Thr Ile Val Tyr Cys Pro Met Val Cys Trp Val Trp Asn Val Asn Gly
35 40 45
Trp Ala Phe Lys Tyr Gly Val Leu Asp Tyr Ala Gly Gly Gly Pro Val
50 55 60
Glu Ile Gly Ser Gly Met Ala Ala Leu Ala Tyr Ser Met Val Leu Gly
65 70 75 80
Arg Arg Gln Glu Arg Met Met Leu Asn Phe Arg Pro His Asn Val Ser
85 90 95
Leu Ile Leu Leu Gly Thr Val Phe Leu Trp Phe Gly Trp Leu Gly Phe
100 105 110
Asn Gly Gly Ser Ser Phe Gly Ala Asn Ile Arg Ala Thr Val Ala Cys
115 120 125
Trp Asn Thr Asn Leu Thr Ala Ala Phe Gly Ala Ile Thr Trp Val Leu
130 135 140
Leu Asp Trp Arg Leu Ala Arg Lys Trp Ser Met Val Gly Trp Cys Ser
145 150 155 160
Gly Thr Ile Ser Gly Leu Val Ala Ala Thr Pro Ala Ser Gly Phe Leu
165 170 175
Thr Pro Trp Ala Ser Val Ile Leu Gly Ile Val Thr Gly Val Val Cys
180 185 190
Asn Tyr Ala Thr Lys Gly Lys Leu Thr Glu Phe Ile Gly Pro Val Cys
195 200 205
Leu Ala Asn His Ser Ser Leu
210 215

<210> 34343
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34343
Ile Leu Asp Ala Arg Leu Gly Gly Glu Tyr Val Cys Leu Ile Gly Gln
1 5 10 15
Arg Cys Cys Cys Ala Thr Ile Asn Val Leu Ser Pro Gly Tyr Ala Ile
20 25 30
Tyr Ser Ser Arg Arg Ser Leu Tyr Thr Met Ser Lys Arg Gln Gly Glu
35 40 45
Ile Thr Ala Ala Pro Leu His Gly Cys Ala Arg Ala Pro Pro Gly
50 55 60

<210> 34344
<211> 166
<212> PRT
<213> A.fumigatus

<400> 34344
Leu Thr Val Ser Thr Thr Gly Lys Tyr Arg Asn Lys Phe Thr Asp Ala
1 5 10 15
Val Glu Phe Arg Val Arg Ser Thr Ala Asn Thr Asn Val Val Phe Phe
20 25 30
Asn Gly Gln Leu Leu Ala Leu Lys Glu Asp Ser Pro Pro Tyr Ala Met
35 40 45
Asp Pro Ile Thr Leu Glu Thr Lys Gly Leu Tyr Asp Phe Glu Gly Gln
50 55 60
Leu Pro Ala Leu Thr Phe Thr Ala His Pro Lys Phe Asp Pro Val Thr
65 70 75 80
Gly Glu Met Val Cys Phe Gly Tyr Glu Ala Arg Gly Asp Gly Thr Pro
85 90 95
Asp Val Cys Tyr Tyr Arg Val Ser Pro Thr Gly Gln Phe Lys Glu Val
100 105 110
Val Trp Leu Val Ala Pro Val Val Ala Met Ile His Asp Phe Ala Val
115 120 125
Thr Asp Asn Trp Val Ser Glu Pro Val Trp Gln Glu Ser Ser Gly Asp
130 135 140
Val Arg Leu Met Pro Glu Pro Arg Leu Phe Phe Gln Ser Tyr Pro Lys
145 150 155 160
Cys Val Thr Leu Asn Ala
165

<210> 34345
<211> 224
<212> PRT
<213> A.fumigatus

<400> 34345
Trp Phe Gln Tyr Lys Asn Ser Phe Pro Gly His Thr Ala Asn Ala Tyr
1 5 10 15
Glu Asp Lys Glu Gly His Leu Val Ile Asp Leu Gly Leu Ser Glu Lys
20 25 30
Asn Val Phe Phe Trp Trp Pro Asp Ala Gln Gly Asn Ala Pro Glu Pro
35 40 45

```
Asn Ser Ile Leu Ser Gln Leu Val Arg Phe Thr Leu Asn Pro His Ala
    50                  55                  60
Glu Asp Leu Ala Leu Pro Glu Pro Lys Ile Leu His Gln Gly Asn Ser
65                  70                  75                  80
Glu Phe Tyr Arg Ile Asp Asp Arg Phe Ala Thr His Ser Tyr Arg His
                85                  90                  95
Cys Tyr Phe Asp Leu Met Asp Pro Gln Leu Gly Thr Asp Phe Glu Arg
            100                 105                 110
Ile Arg Pro Asn Leu Gly Gly Gly Tyr Pro Leu Tyr Asn Ser Leu Ala
        115                 120                 125
His Phe Asp Asn Ala Thr Gly Gln Thr Glu Val Tyr Phe Pro Gly Asn
    130                 135                 140
Thr His Leu Val Gln Glu Pro Val Phe Ile Pro Arg Lys Asp Ser Thr
145                 150                 155                 160
Thr Glu Gly Asp Gly Trp Val Leu Ala Leu Val Asn Asn Tyr Ala Thr
                165                 170                 175
Met Ala Ser Glu Leu His Leu Leu Asp Thr Arg Asp Phe Thr His Ala
            180                 185                 190
Gln Ala Lys Ile Leu Leu Pro Ile Arg Leu Arg His Gly Leu His Gly
        195                 200                 205
Ser Trp Val Asp Gly Arg Asp Ile Gly Ser Gln Thr Glu Gln Leu Gln
    210                 215                 220
```

<210> 34346
<211> 414
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14),(15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34346

```
Leu Pro Ser Thr Cys Ala Ala Arg Pro Gly His Val Cys Xaa Xaa Leu
1               5                   10                  15
Pro Pro Arg Arg Ser Pro Leu Leu Asn Val Arg His Gly Lys Glu Tyr
            20                  25                  30
Gly Leu Ala Val Trp Phe Trp Ile Gly Thr Gly Leu Pro Gln Cys Leu
        35                  40                  45
Arg Trp Val Trp Ile Leu Thr Gln Gln Leu Pro Thr Thr Leu Ser Met
    50                  55                  60
Thr Phe Gly Arg Pro Pro Ala Ile Pro Asp Ser Tyr Val Gln Leu Asp
65                  70                  75                  80
Leu Pro Val Val Asp Ser Val Gly Glu Gly Glu Pro Phe Val Asp Asp
                85                  90                  95
Lys Thr Ile Arg His Ser Ile Gln Phe Phe Asn Ser Thr Met Ser Val
            100                 105                 110
Ala Ala Pro Leu Pro Ala Pro Gln Gln Thr Leu Pro Gln Phe Asp Cys
        115                 120                 125
Lys Asp Trp Thr Asp Ala Asp Gln Asn Pro Leu Gln Thr Asn Gly Gln
    130                 135                 140
His His Arg Pro Ser Leu Arg Pro Ile Leu Gly Cys Gly Ser Gly Pro
145                 150                 155                 160
Ser Val Gly Glu Thr Val Gly Arg Val Leu Leu Ile Glu Asn Gln Leu
                165                 170                 175
```

```
Phe Ser Trp Val Met Ala Leu Pro Glu Asn Leu Arg Leu Leu Thr Leu
            180                 185                 190
Gln Gly Leu His Glu Glu Ile Ser Lys Ser Glu Asn Gln Pro Gly Pro
        195                 200                 205
Phe Phe Ser Leu Lys Phe Arg Val Ile Leu Thr Leu Arg Tyr Leu His
    210                 215                 220
Thr Gln Ile Leu Val His Arg Pro Ile Leu Val Lys Phe Leu Asp Ala
225                 230                 235                 240
Ser Leu Pro Ser Gly Leu Glu His Gly Gln Glu Arg Ile Met Asn Glu
                245                 250                 255
Ile Gly His Ser Ser Met Asn Lys Cys Val Glu Ser Ala Met Gly Ile
            260                 265                 270
Ile Asp Ile Ile His Glu Trp Phe Phe Ala Thr Gly Arg Gln Arg Asp
        275                 280                 285
Leu Val Gly Ala Trp Trp Tyr Ser Leu Tyr Tyr Ser Lys Leu Pro Leu
    290                 295                 300
Ser Ser Leu Ala Ser Ile Pro Val Cys Arg Trp Leu Ile Leu Ser Cys
305                 310                 315                 320
Phe Gly Gly Thr Ala Phe Asn Ala Ala Leu Val Ile Ile Gly Ala Thr
                325                 330                 335
Trp Val Gln Arg Ala Arg Gln Ser Ala His Asp Ser Pro Val His Gln
            340                 345                 350
Ser Thr Asn Ile Gln Pro Tyr Pro Ser Arg Ala Val Ala Thr Leu Tyr
        355                 360                 365
Arg Leu Asp Thr Gly Asn Arg Met Val Asp Arg Cys Arg Tyr Tyr Leu
    370                 375                 380
Glu Gln Leu Ile Ser Val Leu His Leu Gln Arg Lys Gly Ser Asn Ala
385                 390                 395                 400
Leu Pro Val Asp Ser Met Thr Leu Ile Gly Leu His Ser Arg
                405                 410
```

<210> 34347
<211> 75
<212> PRT
<213> A.fumigatus

<400> 34347

```
Ser Gln Phe Leu Leu Phe Gln Lys Gln Lys Ala Thr Val Phe Thr Phe
1               5                   10                  15
Gly Lys Ile Lys Pro Ile Asn Met Asn Ser Ser Ile Pro Phe Asn Leu
            20                  25                  30
Lys Ala Ile Arg Thr Ala Asp Ser Ile Ala Ile Ala Leu Ser Val Thr
        35                  40                  45
Arg Cys Leu Ser Arg Pro Pro Ser Phe His Val Gly Arg Gly Ala Asn
    50                  55                  60
Gly Ser Glu Ala Gly Ser Trp Pro Ala Arg Glu
65                  70                  75
```

<210> 34348
<211> 427
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (371)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34348

```
Arg Leu Gln Ala Ala Arg Lys Arg Ser Ile Gly Ser Ser Gly Ser Asp
1               5                  10                  15
Pro Thr Ile Gln Ser Gln Met Ala His Gly Ser Glu Asp Cys Ala Ser
            20                  25                  30
Val Leu Glu Gln Phe Val His Asp Val Ala Asn Leu Pro Ala Glu Ile
        35                  40                  45
Asn His Leu Met Glu Glu Ile Gln Ala Lys Asp Lys Ile Ile Gln Asp
    50                  55                  60
Cys Arg Ala Thr Ile Asn Ser Arg Asp Ser Ser Leu Gln Lys Phe Ile
65                  70                  75                  80
Lys Leu Asn Gly Ser Leu Thr Pro Asn Pro Lys Glu Glu Gln Tyr Ser
                85                  90                  95
Lys Val Ile Leu Gln Asn Leu Asp Arg Ala Gln Gln Leu Gln Asp Glu
            100                 105                 110
Lys Ile Gln Leu Ser Glu Lys Ala Cys Ile Leu Leu Asp Arg Gln Ile
        115                 120                 125
Lys Lys Leu Asp Ile Lys Ile Arg Asp Leu Gln Asn Asp Gly Val Leu
    130                 135                 140
Ser Asn Asp Pro Pro Leu Pro Ser Leu Phe Asn Asn Lys Asp Gln Tyr
145                 150                 155                 160
Arg Asp Pro Pro Lys Ile Phe Phe Pro Asp Ala Thr Ala Ala Asp Thr
                165                 170                 175
Thr Ser Ser Pro Leu Gln Pro Thr Ser Gly Asn Thr Asn Ser Leu Leu
            180                 185                 190
Gly Ile Ser Gln Arg Leu Asn Gln Ser Leu Ala Arg Ser Thr Ser Ser
        195                 200                 205
Ala Ala Leu Ala Thr Gln Gly Ala Ala Arg Ser Ser Ala Pro Ala Thr
    210                 215                 220
Pro Ser Gly Thr Thr His Phe Gln His Arg Gln Arg Glu Ser Ser Ala
225                 230                 235                 240
Gly Ala Val Glu Asn Lys Arg Arg Arg Leu Asn Ala Ser Leu Gly Thr
                245                 250                 255
Leu Pro Ala Ala Ser Ser Asn Leu Arg Gln Ser Ser Leu Gly Pro Gly
            260                 265                 270
Thr Pro Lys Gly Gly Thr Pro Ala Ser Ser Arg Ala Gly Ser Ala Gly
        275                 280                 285
Pro Arg Ala Thr Gly Ala Thr Lys Lys Ala Ala Thr Lys Lys Val Ala
    290                 295                 300
Pro His Gln Gln Leu Lys Lys Ile Lys Ala His Gly Lys Ala Thr Lys
305                 310                 315                 320
Arg Ser Ser Ser Ala Ser Gly Arg Val Lys Leu Thr Gly Ala Thr Lys
                325                 330                 335
Lys Ser Pro Ser Ala Ala Gly Gly Asp Glu Asp Glu Asp Asp Ser Leu
            340                 345                 350
Leu Ser Ser Ala Glu Ala Ser Asp Ser Asn Ala Ser Asp Thr Arg Arg
        355                 360                 365
Met Asp Xaa Asp Ile Asp Glu Glu Asn Glu Glu Glu Glu Gly Lys Arg
    370                 375                 380
Asp Thr Lys Val Tyr Cys Thr Cys Arg Tyr Val Ser His Gly Asp Met
385                 390                 395                 400
Gly Ala Cys Asp Asn Glu His Cys Pro Tyr Lys Cys Phe Leu Gly Arg
                405                 410                 415
Gly Trp Ser Asp Arg Gly Ala Gly Gly Asn Trp
```

420 425

<210> 34349
<211> 178
<212> PRT
<213> A.fumigatus

<400> 34349
Arg Gly Val Leu Ile Asn Gly Ser Trp Asn Lys Trp Thr Val Cys Glu
1 5 10 15
Phe Val Leu Leu Asn Leu Arg Asp Leu Gly Ile Asp Ser Ser Leu Trp
20 25 30
Ile Gly Leu Ala Asn Val Arg Val Thr Asp Glu Glu Ile Ala Phe Leu
35 40 45
Lys Lys Gln Cys Pro Tyr Phe Asn His Ala Tyr Leu Arg Tyr Leu Ser
50 55 60
Thr Phe Gln Leu Lys Pro Ser Glu Gln Ile Asp Ile Lys Phe Arg Pro
65 70 75 80
Val Gln Asp Ser Gly Ser Asp Asp Asp Leu Gly Asp Ile Glu Tyr Met
85 90 95
Val Lys Gly Leu Trp Val Glu Thr Ile Leu Tyr Glu Ile Pro Leu Leu
100 105 110
Ala Leu Thr Ser Gln Ala Tyr Phe Met Phe Thr Asp Lys Asp Trp Asp
115 120 125
His Ser Asn Gln Glu Glu Lys Ala Phe Arg Lys Gly Cys Thr Leu Leu
130 135 140
Glu Asn Gly Cys Ile Phe Ser Glu Phe Gly Ser Arg Arg Arg Arg Asp
145 150 155 160
Tyr His Thr Gln Asp Leu Val Met His Gly Leu Cys Arg Ala Ala Glu
165 170 175
Lys Gly

<210> 34350
<211> 354
<212> PRT
<213> A.fumigatus

<400> 34350
Gln His Leu Ser Tyr Gly Ile Thr Ala Glu Asp Ile Lys Ala Asp Leu
1 5 10 15
Thr Ala Gly Lys Gly Leu Pro Glu Trp Ile Phe Ser Ala Tyr Gly Pro
20 25 30
Gly Arg Asn Ala Pro Arg Gln Leu Phe Gly Gly Pro Gln Arg Glu Gln
35 40 45
Ser Phe Glu Glu Leu Arg Leu Arg His Tyr Glu Ala Ala Ala Ala Gly
50 55 60
Asn Ile Glu Val Ala Val Gln Glu Ala Gln Ala Leu Tyr Ala Glu Ser
65 70 75 80
Ile Lys Gln Met Glu Ala Ala Leu Asn Asp Val Asn Gly Ala Val Lys
85 90 95
Phe Ile Leu Asp Gly Ile Asn Glu His Pro Asn Arg Ile Asp Ile Thr
100 105 110
Glu Gly Lys Ala Gly Pro Ala Ser Gly Gln Gly Pro Ser Pro Phe Gly
115 120 125
Gln Pro Ala Ala Val Ala Gln Thr Ser Ala Phe Gly Gln Pro Ser Ala

```
    130                 135                 140
Leu Gly Gly Ala Gly Ala Pro Ala Phe Gly Lys Pro Ala Gly Phe Gly
145                 150                 155                 160
Gln Pro Ser Ala Phe Gly Gln Pro Ser Thr Leu Gly Gln Thr Pro Gly
                165                 170                 175
Phe Gly Gln Pro Ser Ala Leu Gly Gln Ser Thr Pro Phe Gly Lys Pro
            180                 185                 190
Ser Ala Leu Gly Gln Pro Ala Phe Gly Lys Pro Ala Phe Gly Gln Pro
        195                 200                 205
Ser Phe Gly Gln Thr Ala Phe Gly Gln Pro Ser Ala Pro Gly Thr Gly
    210                 215                 220
Thr Gly Pro Phe Gly Gln Pro Ser Thr Thr Ser Pro Phe Gly Gln Ile
225                 230                 235                 240
Ser Ser Gln Asn Gln Gly Gln Gly Gly Gly Phe Ala Gln Ala Ala Gly
                245                 250                 255
Ala Thr Thr Thr Ser Pro Phe Ala Gln Ala Ala Gly Gly Gln Gln Pro
            260                 265                 270
Ala Ala Pro Ala Gly Phe Gly Gln Thr Ser Thr Thr Thr Gln Thr Ser
        275                 280                 285
Ala Thr Pro Phe Gly Arg Pro Val Gln Ala Pro Ser Pro Phe Gly Thr
    290                 295                 300
Ala Ser Gly Thr Asp Ser Ser Phe Trp Pro Thr Arg Cys Ser Pro Glu
305                 310                 315                 320
Pro Ile Arg Ser Cys Gly Ser Thr Gly Asn Ser Val Thr Phe Gln Ser
                325                 330                 335
Thr Tyr Trp Arg Phe Trp Ser Ser Ser Ser Ser Gly Ser Asn Asn Leu
            340                 345                 350
Ser Ile
```

<210> 34351
<211> 75
<212> PRT
<213> A.fumigatus

<400> 34351

```
Lys Val His Lys Ile Arg Ile Thr Leu Thr Ser Arg Lys Val Ala Ser
1               5                   10                  15
Leu Glu Lys Val Cys Ser Glu Leu Ile Asp Arg Ala Arg Ser Lys Ser
            20                  25                  30
Leu Gln Val Lys Gly Pro Val Arg Leu Pro Thr Lys Thr Leu His Ile
        35                  40                  45
Ser Thr Arg Lys Thr Pro Cys Gly Glu Gly Ser Lys Thr Trp Asp Lys
    50                  55                  60
Tyr Glu Met Arg Ile His Lys Arg Leu Ile Glu
65                  70                  75
```

<210> 34352
<211> 158
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (110)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34352
Arg Asp Ala Ser Tyr Val Pro Lys Leu Phe Ala Asp Asn Glu His Arg
1 5 10 15
Pro Glu Tyr Tyr Ile Pro Gln Leu Glu Asn Phe Asp Glu Thr Val Tyr
20 25 30
Thr His Glu Asp Tyr Ser Glu Gly Thr Leu Leu Leu Leu Asn Pro Val
35 40 45
Gly Ala Glu Met Val Ser Val Gly Tyr Ser Ser Ser Trp Gly Ser Leu
50 55 60
Asp Ile Ser Ser Leu Thr Arg Ser Leu Thr Met Asp Pro Ser Arg Phe
65 70 75 80
Cys Ala Cys Ile Arg Arg Asp Pro Gln Glu Glu Tyr Leu Arg Leu Ser
85 90 95
Ile Gly Ile Leu Tyr Thr Phe Leu Asp Trp Val Leu Asn Xaa Arg Arg
100 105 110
Gly Lys Asp Gly Arg Arg Leu Pro Gly Ile Lys Arg Lys Ser Ser Leu
115 120 125
Glu Thr Phe Trp Lys Val Phe Arg Leu Val Tyr Glu Arg Ala Thr Ser
130 135 140
Ser Lys Ile Glu Lys Pro Met Asn Arg Gln Met His Arg Val
145 150 155

<210> 34353
<211> 325
<212> PRT
<213> A.fumigatus

<400> 34353
Tyr Val Pro Tyr Asp Leu Asn Val Thr Asp Arg Leu Ala Thr Gly Ser
1 5 10 15
Val Ser Asp Ala Leu Arg Asn Leu Ile Met His His Ala Asp Thr Arg
20 25 30
Thr Phe Leu Lys Tyr Tyr Leu His Arg Arg Ile Asp Lys Asp Leu Ala
35 40 45
Ala Ile Ile Arg Gly Leu Asp Pro Gln Glu Asp Met Met Arg Ala Ala
50 55 60
Cys Arg Met Ser Arg Thr Ile Asp Pro Lys Arg Pro Gln Glu Leu Thr
65 70 75 80
Thr Ala Gln Ser Ser Ser Val Asn Lys Gln Pro Glu Ile Gln Asp Leu
85 90 95
Ile Arg Arg Arg Gly Glu Leu Arg Arg Gln Leu Gly Arg Pro Leu Ala
100 105 110
Arg His His Gly Thr Val Lys Tyr Glu Val Tyr Gln Lys Leu Asn Gln
115 120 125
Glu Leu Ala Gly Ala Arg Gln Arg Ala Arg Asp Ala Leu Leu Ala Gln
130 135 140
Leu Gln Glu Lys Tyr Asp Arg Glu Gln Pro Met Leu Glu Ile Gln Arg
145 150 155 160
Gln Leu Ser Gly Thr Lys Leu Ala Glu Thr Val Asn Gln Thr Leu Asp
165 170 175
Tyr Cys Glu Glu Leu Pro Ala Pro Gln Lys Arg Leu Ile Glu Thr Ile
180 185 190
Phe Thr Leu Pro Arg Ser Thr Leu Glu Asp Glu Met Arg Arg Arg Thr
195 200 205
Asp Ala Ile Asp Ala Ile Ala Ala Tyr Cys Leu Phe Glu Glu Gly Val

```
    210                 215                 220
Thr Cys Arg Leu Ala Arg Asp Lys Arg Pro Thr Gly Gln Met Val Glu
225                 230                 235                 240
Ala Thr Lys Pro Glu Gly Tyr Asp Val Lys Asp Gln Glu Thr Asn Ala
                245                 250                 255
Ala Glu Ser Cys Ser Gln Ser Asp Gln Leu Leu Glu Ala Ala Ile Arg
            260                 265                 270
Ser Val Met Thr Glu Lys Arg Pro Arg Val Cys Phe Ile Cys Val Gly
        275                 280                 285
Gln Pro Asn Leu Asp Ile Lys Arg Arg Val Lys Gln Phe Lys Glu His
    290                 295                 300
Gly Asp Leu Thr Lys His Ile Arg Arg Lys His Val Lys Pro Ser Pro
305                 310                 315                 320
Glu Gly Arg Ser Leu
                325
```

<210> 34354
<211> 108
<212> PRT
<213> A.fumigatus

```
<400> 34354
Val Ile Arg Lys Leu Ala Lys Lys His Lys Leu Ser Ser Lys Gly Arg
1               5                   10                  15
Glu Lys Ser Ala Met Tyr Val Glu Asp Leu Ala Lys Val Val Glu Thr
            20                  25                  30
Val Ile Ser Thr Thr Lys Lys Lys Phe Gly His Gly Arg His Arg Ile
        35                  40                  45
Glu Leu Cys Leu Phe Leu Gln Leu Ala Gly Leu Thr Thr Asn Arg Pro
    50                  55                  60
Gln Ala Ile Leu Asp Leu Lys Tyr Arg His Ile Lys Val Cys Leu Leu
65                  70                  75                  80
Arg Asp Pro Lys Gly Gly Pro His Arg Ile Val Ile Glu Phe Thr Phe
                85                  90                  95
Glu Phe Thr Lys Glu Phe Leu Gly Ala Lys Asp Glu
            100                 105
```

<210> 34355
<211> 138
<212> PRT
<213> A.fumigatus

```
<400> 34355
Pro Trp Thr Arg Asn Thr Phe Ile Leu Pro Glu Ile Ile Phe Asp Pro
1               5                   10                  15
Ser Leu Ile Leu Ser Pro His Val Phe Leu Leu Gly Leu Leu Phe Ala
            20                  25                  30
Asp Arg Ala Phe Ala Arg Val Asp Gly Glu Glu Val Leu Met Ser Ala
        35                  40                  45
Glu Gln Leu Leu Arg Leu Arg Ile Pro Asp Glu Cys Asn Glu Leu Gln
    50                  55                  60
Leu Thr Leu Asp Pro Ala Leu Asp Asn Ile Pro Val Phe Arg Gln Ser
65                  70                  75                  80
Glu Arg Thr Leu Glu Gly Ile Thr Ile Ser Leu Asp Lys Ala Leu Pro
                85                  90                  95
Tyr Ser Thr Leu Leu Pro Trp Val Lys Lys Val Gly Ala Ile Ala Gly
```

```
            100                 105                 110
Phe Arg Gln Val Ser Arg Pro Tyr Ser Leu Arg Tyr Gly Ala Gly Lys
        115                 120                 125
Ala Leu Asp Asn Ser Gly Ser Leu Leu Phe
    130                 135
```

<210> 34356
<211> 859
<212> PRT
<213> A.fumigatus

<400> 34356

```
Ser Gly Ser Arg Phe Gly Asn Tyr Ile Gly Glu Pro Val Asp Ser Glu
1               5                   10                  15
Glu Glu Asn Gln Asp Glu Glu Leu Lys Pro Gln Thr Phe Ala Phe Asp
            20                  25                  30
Glu Ala Phe Gly Glu Glu Glu Asp Glu Asn Gln Asn Ala Asp Gln Leu
        35                  40                  45
Met Glu Val Asp Gly Ile Ser Tyr Leu Ser Lys His Tyr Tyr Leu Thr
    50                  55                  60
Pro Val Leu Thr Ser Tyr Ala Glu Gly Pro Ser Asn Ala Val Val Leu
65                  70                  75                  80
His Glu Asp Lys Gln Tyr Tyr Pro Ser Ala Lys Gln Val Tyr Gly Asp
                85                  90                  95
Glu Val Glu Thr Leu Val Gln Glu Glu Asp Ser Gln Pro Leu Ser Gln
            100                 105                 110
Pro Ile Ile Ala Pro Val Gln Gln Lys Lys Phe Ser Ile Glu Glu Ala
        115                 120                 125
Asp Leu Pro Pro Val His Phe Ser Arg Glu Phe Met Thr Asp Leu Leu
    130                 135                 140
Ser Phe Pro Ser Gln Ile Arg Asn Ile Ala Leu Val Gly His Leu His
145                 150                 155                 160
His Gly Lys Thr Ala Phe Met Asp Met Leu Val Thr Glu Thr His Asp
                165                 170                 175
Leu Thr Glu Arg Leu Glu Lys Arg Val Gly Lys Arg Lys Glu Glu Gln
            180                 185                 190
Leu Arg Tyr Thr Asp Ile His Phe Leu Glu Arg Glu Arg Gly Leu Ser
        195                 200                 205
Ile Lys Ser Ala Pro Met Thr Leu Val Leu Gln Asn Thr Lys Gly Lys
    210                 215                 220
Ser His Leu Phe Asn Ile Ile Asp Thr Pro Gly His Val Asn Phe Val
225                 230                 235                 240
Asp Glu Val Ala Thr Ser Ser Arg Leu Val Asp Gly Ile Val Leu Val
                245                 250                 255
Val Asp Val Val Glu Gly Val Gln Ala Asn Thr Glu Gln Ile Ile Lys
            260                 265                 270
His Ala Val Leu Glu Gly Leu Pro Ile Thr Met Val Val Asn Lys Met
        275                 280                 285
Asp Arg Leu Ile Leu Glu Leu Lys Ile Pro Pro Asn Asp Ala Tyr Phe
    290                 295                 300
Lys Leu Lys His Val Val Glu Glu Val Asn Thr Ile Ile Glu Arg Thr
305                 310                 315                 320
Leu Pro Gly Gln Gly Glu Arg Tyr Arg Leu Ser Pro Glu Lys Gly Asn
                325                 330                 335
Val Ala Phe Ala Cys Ala Ser Met Glu Trp Cys Phe Thr Leu Gln Ser
            340                 345                 350
```

```
Phe Ala Lys Met Tyr Ala Glu Thr Tyr Pro Gln Val Glu Thr Ser Asp
        355                 360                 365
Phe Ala Leu Arg Leu Trp Gly Asp Ile Phe Phe Asn Pro Gly Ser Arg
    370                 375                 380
Lys Phe Thr Arg Lys Gly Val Glu Glu Asn Ser Lys Arg Thr Phe Val
385                 390                 395                 400
Gln Phe Val Leu Glu Pro Ile Tyr Lys Leu Tyr Ser His Thr Ile Ser
                405                 410                 415
Glu Ser Pro Asp Asp Leu Lys Glu Thr Leu Ala Gly Val Gly Ile Asn
            420                 425                 430
Leu Lys Pro Ser Gln Leu Lys Ser Asp Ala Arg Val Leu Leu Asn Met
        435                 440                 445
Val Cys His Glu Phe Phe Gly Pro Ala Thr Gly Phe Val Asp Met Ile
    450                 455                 460
Val Gln His Ile Pro Ser Pro Val Glu Gly Ser Gln Arg Thr Leu Asp
465                 470                 475                 480
Arg Tyr Tyr Thr Gly Pro Leu Asp Thr Lys Val Ala Ala Ala Met Ala
                485                 490                 495
Ala Cys Asp Pro Asp Gly Pro Leu Val Val His Val Thr Lys Leu Phe
            500                 505                 510
Thr Ser Thr Asp Ala Thr Lys Phe His Ala Phe Gly Arg Val Met Ser
        515                 520                 525
Gly Thr Ala Arg Pro Gly Gln Pro Val Arg Val Leu Gly Glu Gly Tyr
    530                 535                 540
Thr Pro Glu Asp Glu Glu Asp Met Ala Thr Ala Thr Ile Ser Asp Thr
545                 550                 555                 560
Trp Ile Ala Glu Thr Cys Tyr Ser Ile Pro Thr Ser Gly Val Pro Ala
                565                 570                 575
Gly Asn Phe Val Leu Leu Gly Gly Val Asp Asn Ser Ile Val Lys Thr
            580                 585                 590
Ala Thr Ile Val Pro Leu Arg Leu Glu Asp Asp Glu Glu Ala Tyr Ile
        595                 600                 605
Phe Lys Pro Ile Arg His Met Thr Glu Ser Val Phe Lys Val Ala Val
    610                 615                 620
Glu Pro Val Asn Pro Ser Glu Leu Pro Lys Met Leu Asp Gly Leu Arg
625                 630                 635                 640
Lys Ile Asn Lys Ser Tyr Pro Leu Ile Ser Thr Lys Val Glu Glu Ser
                645                 650                 655
Gly Glu His Val Val Leu Gly Thr Gly Glu Leu Tyr Met Asp Cys Val
            660                 665                 670
Leu His Asp Leu Arg Arg Leu Tyr Ser Glu Met Glu Ile Lys Val Ser
        675                 680                 685
Asp Pro Val Thr Arg Phe Cys Glu Thr Val Val Glu Thr Ser Ala Ile
    690                 695                 700
Met Cys Tyr Ser Ile Thr Pro Asn Lys Lys Asn Lys Ile Thr Met Ile
705                 710                 715                 720
Ala Glu Pro Leu Asp Asp Gly Ile Ala Glu Asp Ile Glu Ser Gly Arg
                725                 730                 735
Val Ser Ile Lys Asp Pro Ile Arg Lys Val Ala Arg Phe Phe Glu Asp
            740                 745                 750
Lys Tyr Asp Trp Asp Lys Leu Ala Ala Arg Ser Ile Trp Ala Phe Gly
        755                 760                 765
Pro Asp Glu Met Gly Pro Asn Ile Leu Gln Asp Asp Thr Leu Pro Ser
    770                 775                 780
Gln Val Asp Lys Lys Leu Leu Gly Asn Val Arg Asp Ser Ile Thr Gln
785                 790                 795                 800
```

```
Gly Phe Ser Trp Gly Thr Arg Glu Gly Pro Leu Cys Glu Glu Arg Lys
                805                 810                 815
Ser Ser Gly Cys Phe Ser Ile Ala Gln Ser Val Ser Phe Leu Ser Asn
            820                 825                 830
Asp Leu Leu His His Phe Ser Ser Pro Leu Glu Pro Tyr Asn Val Phe
        835                 840                 845
Ser Cys Arg Gly Thr Ser Tyr Ile Phe Lys Leu
    850                 855
```

<210> 34357
<211> 95
<212> PRT
<213> A.fumigatus

<400> 34357

```
Ser Thr Ile Ile Ala Met Ser Glu Val Gln Lys Pro Val Glu Glu Thr
1               5                   10                  15
Pro Val Ala Val Pro Thr Ala Glu Pro Val Glu Ala Pro Ala Ala Thr
            20                  25                  30
Glu Ala Ala Ala Thr Glu Ala Pro Ala Ala Glu Ala Pro Lys Glu Thr
        35                  40                  45
Pro Val Glu Asn Gly Glu Ala Thr Pro Ala Ala Ala Glu Thr Thr Glu
    50                  55                  60
Ala Thr Ala Glu Gln Pro Lys Glu Glu Ala Lys Glu Glu Ile Thr Pro
65                  70                  75                  80
Ala Thr Glu Gly Val Leu Gly His Lys Gly Pro Gly Leu Val Lys
                85                  90                  95
```

<210> 34358
<211> 66
<212> PRT
<213> A.fumigatus

<400> 34358

```
Ser Lys Arg Tyr Leu Arg Thr Leu Thr Arg His Arg Ala Met Leu Thr
1               5                   10                  15
Ser Ser Phe Phe Phe Leu Val Ile Arg Gly Leu Arg Phe Ser Lys Arg
            20                  25                  30
Phe Phe Tyr Phe Ser Asn Asp Pro Val Glu Ala Lys Gln Leu Ser Val
        35                  40                  45
Phe Gln Gln Asn Glu Lys Pro Ala Val Ala Asn Pro Ile Val Ala Trp
    50                  55                  60
Ala Thr
65
```

<210> 34359
<211> 80
<212> PRT
<213> A.fumigatus

<400> 34359

```
Ser Phe Arg Leu Ile Thr Glu Val Ala Phe Arg Leu Arg Met Trp Ile
1               5                   10                  15
Asp Ser Phe Val Ile Asn Ser Arg Lys Thr Gln Gly Ala Pro Leu Pro
            20                  25                  30
Val Val Gln Ile Asp Arg Ser Lys Leu Asn Gly Ser Arg Leu Ser Thr
```

```
        35                  40                  45
Glu Ser Leu Gly Leu Ala Trp Ala Asp Pro Phe Arg Thr Asn Pro Leu
    50                  55                  60
Ile Val Pro Lys Phe Leu Gly Arg Phe Gln Leu Asn Phe Gly Arg Phe
65                  70                  75                  80
```

<210> 34360
<211> 180
<212> PRT
<213> A.fumigatus

<400> 34360

```
Arg Asn His Thr Arg Leu Asp His Val Leu Ile Pro Gln Phe Gln Gln
1               5                   10                  15
Leu Pro Gln Ser Leu Gly Met Ser Ile Arg Gln Val Val His Leu Ala
            20                  25                  30
Arg Ile Ile Gly Gln Ile Ile Gln Leu Pro Ser Leu Gly Thr Phe Gly
        35                  40                  45
Phe Arg Asn Ile Tyr Asp Leu Pro Val Thr Glu Ala Lys Arg Arg Thr
    50                  55                  60
Ala Ala Gly Leu Pro Ser Leu Asp Glu Val Leu Leu Val Asn Pro Phe
65                  70                  75                  80
Arg Leu Ala Thr Arg Pro Arg Ile Glu Ala Leu Ala Ala His Gly Asp
                85                  90                  95
His Phe Thr Ala Leu Val Arg Gly Ser Arg Met Leu Asp Ser Arg His
            100                 105                 110
Ile Glu Asp Ser Arg Cys Glu Ile His Asp Arg Gly Lys Leu Val Cys
        115                 120                 125
Asn Ser Thr Pro Arg Arg Gly His Ala Ala Gly Glu Pro Gly Gln Glu
    130                 135                 140
Gly Asp Ala Asp Ala Ala Phe Ser Cys Val Gly Phe Val Gln Thr Gly
145                 150                 155                 160
Arg Gly Gly Gly Gly Leu Arg Pro Ala Arg Thr Val Thr Asp Glu Arg
                165                 170                 175
Ser Trp Leu Gly
            180
```

<210> 34361
<211> 194
<212> PRT
<213> A.fumigatus

<400> 34361

```
Ala Phe Val Ala Ala Thr Phe Gly Ala Val Val Gly His Glu Ala Asp
1               5                   10                  15
Lys Gly Val Val Gln Phe Ala Asp Gly Gly Gln Val Val Asp Asp Leu
            20                  25                  30
Ala Asp Ile Gly Ile Asp Ala Leu His His Ala Gly Val Asp Ile His
        35                  40                  45
Gly Gly Ala Gly Leu Phe Phe Leu Phe Arg Cys Val Val Gly Pro Phe
    50                  55                  60
Phe Asn Leu Val Cys Asp Asp Gly Val Arg Phe Tyr Val Arg Thr Asp
65                  70                  75                  80
His Pro Gln Leu Leu Glu Pro Leu Gln Ser Leu Gln Thr Gln Arg Ile
                85                  90                  95
Gly Ser Val Ile Val Asp Ala Ala Val Val Val Asp Val Leu Ala Gly
```

```
            100                 105                 110
Arg Leu Glu Arg Pro Met Arg Gly Arg Glu Gly Gln Val Arg Glu Glu
        115                 120                 125
Gly Ala Leu Ile Leu Ser Leu Val Pro Val Gly Glu Ile Leu Lys His
    130                 135                 140
Leu Ile Ala Val Ser Ile Arg Arg Ile Pro Pro Leu Arg Gln Leu Leu
145                 150                 155                 160
His Val Met Val Ile Phe His Val Glu Gly Asp Val Ala Arg Phe Lys
                165                 170                 175
Glu Ser Arg Arg Val Ile Gly Pro Leu Glu Leu Arg Leu Ile Gly Ile
            180                 185                 190
Val Val
```

<210> 34362
<211> 180
<212> PRT
<213> A.fumigatus

<400> 34362

```
Ala Arg Arg Gln Met Gly Lys Arg Ala Leu Glu Ala Ser Leu Val Trp
1               5                   10                  15
Arg Ser Leu Gly Arg Lys Pro Gln Val Pro Phe Pro Arg His Asp Gly
            20                  25                  30
Val Val Ala Arg Ile Pro Gln Gln Leu Gly Gln Arg Asp Asp Ala Leu
        35                  40                  45
Val Gln Val Ser Leu Val Thr Gly His Ala Ala Leu Arg Cys Gly Ala
    50                  55                  60
Asp Leu Gly Ala Leu Gly Ser Val Leu Pro Gly Asp Val Gly Pro Phe
65                  70                  75                  80
Asp Gln Val Pro Lys Thr Cys Asp Val Val Val Cys Pro Gly His Asp
                85                  90                  95
His Gly Ala Gly Gly Thr Ile Ala Val Ser Pro Gly Gln Glu Gln Glu
            100                 105                 110
Gly Ala Glu Met Leu Glu Lys Arg His Leu Arg Thr Ser Ser Arg Ser
        115                 120                 125
Met Lys Val Cys Glu Thr Tyr Ala Ser Ile Glu Ser Lys Thr Ile Asp
    130                 135                 140
Ile Trp Cys Ala Asp Phe Ser Ser Glu Ala Ala Tyr Ile Gly Glu Ala
145                 150                 155                 160
Gln Val Ile Gly Asp Asp Asp Glu Glu Val Gly Thr Phe Ile His Asp
                165                 170                 175
Ser Ala Thr Gly
            180
```

<210> 34363
<211> 113
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (53),(58),(60),(61),(63),(64),(67),(68),(69),(70)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34363

```
Gln Thr Asn Pro Thr Tyr Asn Pro Lys Ser Pro Ile His Gln Pro Leu
1               5                  10                  15
Thr Gln Pro Ile Phe Ile Thr Asn Ser Asn Ser Asn Thr Ile Asn Phe
            20                  25                  30
Thr Ile Leu Ile Leu Ile Asn Gln Ser Lys Ser Ile Pro Leu Pro Asn
        35                  40                  45
Asn Ser Lys Ile Xaa Gln His Phe Pro Xaa Gln Xaa Xaa Val Xaa Xaa
    50                  55                  60
Gln Lys Xaa Xaa Xaa Xaa Leu Pro Ser Ser Pro Pro Ser Ser Leu Gln
65                  70                  75                  80
Ile Ser Leu Ser His Ser Gln His His Pro Val Ala Leu Ser Trp Ile
                85                  90                  95
Asn Val Pro Thr Ser Ser Ser Ser Ser Pro Met Thr Trp Ala Ser Pro
            100                 105                 110
Met
```

<210> 34364
<211> 329
<212> PRT
<213> A.fumigatus

<400> 34364

```
Asn Arg Thr Pro Ser Ser Gln Thr Arg Leu Lys Asn Gly Pro Thr Thr
1               5                  10                  15
His Arg Lys Arg Lys Lys Ser Pro Ala Pro Pro Trp Met Ser Thr Pro
            20                  25                  30
Ala Trp Trp Ser Ala Ser Met Pro Met Ser Ala Arg Ser Ser Thr Thr
        35                  40                  45
Trp Pro Pro Ser Ala Asn Trp Thr Thr Pro Leu Ser Ala Ser Cys Pro
    50                  55                  60
Thr Thr Ala Pro Lys Val Ala Ala Thr Lys Ala Tyr Pro Met Ser Arg
65                  70                  75                  80
Val Gly His Ala Pro Ser Pro Glu Tyr Thr Thr Asn Ser Leu Glu Ile
                85                  90                  95
Leu Ala Lys Pro Thr Pro Phe Ile Cys Tyr Gly Pro Arg Trp Ala Gln
            100                 105                 110
Ala Ala Thr Ala Pro Ser Arg Leu Tyr Lys Ala Tyr Thr Thr Glu Gly
        115                 120                 125
Gly Val Arg Val Pro Phe Leu Ala Arg Phe Pro Ser Ser Val Ala Ala
    130                 135                 140
Ala Arg Ser Gly Ile Thr Asp Gln Phe Ala Thr Val Met Asp Leu Ala
145                 150                 155                 160
Pro Thr Ile Leu Asp Met Ala Gly Val Lys His Pro Ala Pro Thr Tyr
                165                 170                 175
Gln Gly Arg Glu Val Val Pro Met Arg Gly Lys Ser Phe Tyr Pro Trp
            180                 185                 190
Ala Arg Gly Glu Ser Glu Arg Ile His Glu Lys Asp Phe Ile Gln Gly
        195                 200                 205
Trp Glu Thr Cys Gly Arg Ala Ala Leu Arg Phe Gly Asp Trp Lys Ile
    210                 215                 220
Val Tyr Ile Pro Lys Pro Lys Gly Pro Glu Arg Trp Gln Leu Tyr Asn
225                 230                 235                 240
Leu Ala Asp Asp Pro Gly Glu Val His Asp Leu Ala Asp Ala His Pro
                245                 250                 255
Glu Arg Leu Arg Gln Leu Leu Lys Leu Trp Asp Gln Tyr Val Ile Glu
```

```
            260                 265                 270
Thr Gly Val Ile Pro Leu Asn Pro Asp Leu Gly Asp Phe Leu Glu Ala
        275                 280                 285
Thr Glu Ala Gln Met Pro Glu Asn Ala Trp Met Glu Tyr Asp Tyr Trp
    290                 295                 300
Lys Lys Gly Ala Arg Asp Glu Pro Glu Lys Phe Met Arg Lys Pro Gln
305                 310                 315                 320
Arg Phe Gln Arg Val Val Lys Gln Phe
                325
```

<210> 34365
<211> 86
<212> PRT
<213> A.fumigatus

<400> 34365

```
Arg Met Asp Arg Leu His Thr Gly Arg Glu Lys Lys Val Leu His Arg
1               5                   10                  15
His Gly Cys Leu Arg Arg His Gly Gly Val His Arg Cys Gln Cys Arg
            20                  25                  30
Gln Gly Arg Pro Leu Pro Gly Leu His Arg Arg Thr Gly Gln His Leu
        35                  40                  45
Cys Leu Leu His Val Arg Gln Pro Arg Arg Arg Leu Pro Leu Arg Arg
    50                  55                  60
Pro Thr Pro Cys Pro Glu Trp Val Met Pro His Leu Gln Asn Ile Arg
65                  70                  75                  80
Gln Thr Ala Trp Arg Phe
                85
```

<210> 34366
<211> 108
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15),(20),(21),(22),(25),(26),(28),(29),(30),(31)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34366

```
Pro Ile Gln Ile His Ser Pro Ser Gln Gln Phe Gln Asn Gln Xaa Thr
1               5                   10                  15
Leu Pro Phe Xaa Xaa Xaa Cys Pro Xaa Xaa Lys Xaa Xaa Xaa Xaa Ser
            20                  25                  30
Pro Leu Ile Ser Pro Leu Leu Pro Ser Asp Leu Pro Val Ser Phe Pro
        35                  40                  45
Ala Ser Ser Cys Cys Ala Ile Met Asp Lys Arg Pro Asn Phe Leu Val
    50                  55                  60
Ile Val Ala Asp Asp Leu Gly Phe Ser Asp Val Gly Cys Phe Gly Gly
65                  70                  75                  80
Glu Ile Arg Thr Pro Asn Ile Asp Arg Leu Ala Leu Asn Gly Gly Ile
                85                  90                  95
Arg Phe Thr Asp Phe His Ala Ala Ala Ala Cys Ser
            100                 105
```

<210> 34367

<211> 362
<212> PRT
<213> A.fumigatus

<400> 34367

```
His Phe Ser Thr Leu Leu Leu Leu Thr Trp Thr Asn Arg Asp Ser Pro
1               5                  10                  15
Thr Arg Ala Met Ile Met Thr Gly Thr Asp His His Ile Ala Gly Leu
            20                  25                  30
Gly Asn Leu Ile Glu Trp Thr Asn Ile Ser Gly Gln Asn Gly Pro Lys
        35                  40                  45
Gly Ser Gln Ile Ser Thr Ala Pro Gln Arg Gly Met Pro Gly Tyr Glu
    50                  55                  60
Gly Tyr Leu Asn Glu Arg Val Val Ala Leu Pro Glu Leu Leu Arg Asp
65                  70                  75                  80
Ala Gly Tyr His Thr Val Met Ser Gly Lys Trp His Leu Gly Leu Thr
                85                  90                  95
Pro Glu Arg Ser Pro Tyr Lys Arg Gly Phe Glu Arg Ser Phe Ala His
            100                 105                 110
Leu Pro Ala Cys Ser Asn His Tyr Ala Tyr Glu Pro Gln Leu Gln Gly
        115                 120                 125
Ser Asp Asp Thr Pro Thr Phe Leu Glu Ala Ser Tyr Ile Ala Leu His
    130                 135                 140
Met Glu Asp Asp His Tyr Val Lys Gln Leu Pro Glu Gly Trp Tyr Ser
145                 150                 155                 160
Ser Asp Gly Tyr Gly Asp Lys Met Leu Gln Tyr Leu Ser Asp Trp His
                165                 170                 175
Glu Arg Lys Asp Glu Arg Pro Phe Phe Ala Tyr Leu Pro Phe Thr Ala
            180                 185                 190
Pro His Trp Pro Leu Gln Ala Pro Arg Glu Tyr Ile Asp His Tyr Arg
        195                 200                 205
Gly Val Tyr Asp Asp Gly Pro Asp Ala Leu Arg Leu Lys Arg Leu Gln
    210                 215                 220
Arg Leu Lys Glu Leu Gly Met Ile Arg Pro Asp Val Glu Pro His Pro
225                 230                 235                 240
Val Val Ala Asp Glu Val Lys Glu Trp Thr Asp Tyr Thr Pro Glu Glu
                245                 250                 255
Lys Lys Lys Ser Cys Thr Ala Met Asp Val Tyr Ala Gly Met Val Glu
            260                 265                 270
Cys Ile Asp Ala Asn Val Gly Lys Val Val His Tyr Leu Ala Ser Ile
        275                 280                 285
Gly Glu Leu Asp Asn Thr Phe Val Cys Phe Met Ser Asp Asn Arg Ala
    290                 295                 300
Glu Gly Cys Arg Tyr Glu Gly Leu Pro His Val Gln Ser Gly Ser Cys
305                 310                 315                 320
Pro Ile Ser Arg Ile Tyr Asp Lys Gln Pro Gly Asp Phe Ser Gln Ala
                325                 330                 335
Asn Ser Phe His Leu Leu Arg Ser Ala Leu Gly Ala Gly Arg His Arg
            340                 345                 350
Pro Val Pro Ser Val Gln Ser Leu His Asn
        355                 360
```

<210> 34368
<211> 188
<212> PRT
<213> A.fumigatus

<400> 34368
Arg Pro Ser Gly Pro Gly Gly Ala Gly Ser Gln Thr Thr Ala Pro Thr
1 5 10 15
Val Pro Glu Gly Trp Thr Thr Thr Val Thr Val Cys Thr Gln Cys Ala
20 25 30
Ala Lys Pro Thr Thr Val Thr Trp Thr Leu Pro Val Thr Glu Thr Gly
35 40 45
Ser Thr Ser Thr Asp Ala Val Pro Ala Pro Pro Ala Ala Thr Gly Glu
50 55 60
Gly Ser Asn Pro Thr Gln Pro Ser Gly Ala Ser Pro Thr Gly Gly Asn
65 70 75 80
Gly Ser Phe Ser Glu Glu Pro Val Pro Pro Pro Ala Val Thr Gln Val
85 90 95
Ser Thr Ser Thr Glu Ile Val Thr Leu Val Arg Pro Thr Ser Ser Arg
100 105 110
Pro Leu Ile Leu Gly Thr Gly Thr Val His Pro Ser Ser Thr Leu Ala
115 120 125
Val Lys Pro Ser Ala Lys Pro Ser Gly Gln Asn Ser Gly Ser Ser Ser
130 135 140
His Val Pro Ile Pro Pro Ser Tyr Thr Gln Glu Ala Val Ser Pro Leu
145 150 155 160
Ser Thr Gly Ala Ala Ser Arg Val Thr Gly Leu Gly His Gly Leu Val
165 170 175
Leu Thr Val Leu Thr Leu Ser Ala Phe Phe Val Leu
180 185

<210> 34369
<211> 128
<212> PRT
<213> A.fumigatus

<400> 34369
Leu Met Arg Thr Val Glu Leu Leu Leu Asp Glu Val Ser Phe Asp His
1 5 10 15
Glu Arg Asp His Leu Ile Phe Ala Gly Asp Met Ile Asn Lys Gly Pro
20 25 30
Asp Ser Leu Gly Val Val Asp Leu Val Arg Lys Tyr Asn Ala Ser Cys
35 40 45
Val Arg Gly Asn His Glu Asp Arg Val Leu Leu Leu Arg His Asp Met
50 55 60
Asp Ala Ser Asn Thr Leu Ser Pro Asp Ser Asp Asp Gly Ile Ser Pro
65 70 75 80
Asp Leu Phe Phe Gly Leu Lys Lys Glu Asp Arg Ala Leu Ala Arg Gln
85 90 95
Leu Ser Asn Glu Gln Val Gln Trp Leu Asp Ala Cys Pro Val Ile Leu
100 105 110
Asn Val Gly Gln Ile Pro Glu Met Gly Gln Val Val Val Val His Gly
115 120 125

<210> 34370
<211> 357
<212> PRT
<213> A.fumigatus

<400> 34370

```
Ser Ser Leu Asn Arg His Ala Leu Ala Thr Leu Ala Asp Val Gly Thr
1               5                  10                  15
Pro Lys Val His Cys Ile Arg Lys Arg Leu Gly Gln Ile Val Pro Trp
            20                  25                  30
Val Lys Phe Asp Cys Arg Asn Glu Leu Phe Gly Gly Ser Ala Ala Ala
        35                  40                  45
Asp Leu Leu Ala Pro Trp Ser Trp Asp Asp Ser Asp Lys Gly Arg Lys
    50                  55                  60
Pro Asp Tyr Val Leu Asp Cys Ile Asp Asn Ile Thr Ser Lys Val Glu
65                  70                  75                  80
Leu Leu His Tyr Cys His Ser Asn Ser Ile Pro Val Ile Ser Ser Met
                85                  90                  95
Gly Ala Gly Cys Lys Ser Asp Pro Thr Arg Ile Met Val Gly Asp Ile
            100                 105                 110
Ser Leu Ser Thr Asp Asp Pro Leu Ser Arg Ser Thr Arg Arg Arg Leu
        115                 120                 125
Lys Leu Leu Gly Val Asn Ser Gly Ile Pro Val Val Phe Ser Thr Glu
    130                 135                 140
Lys Pro Gly Pro Gly Lys Ala Ser Leu Leu Pro Leu Ala Glu Glu Glu
145                 150                 155                 160
Phe Ala Lys Gly Gln Val Gly Glu Leu Gly Val Leu Pro Asp Phe Arg
                165                 170                 175
Val Arg Ile Leu Pro Val Leu Gly Thr Met Pro Ala Val Phe Gly Tyr
            180                 185                 190
Thr Val Ala Asn His Val Ile Cys Asp Ile Ser Gly Tyr Pro Asn Asp
        195                 200                 205
Tyr Asn Val Gly Gly Lys Gly Arg Glu Lys Leu Tyr Asp Ser Ile Ile
    210                 215                 220
Ala Ser Leu Gln Gly Leu His Glu Arg Leu Ala Arg Ala Glu Ala Gly
225                 230                 235                 240
Gln Asp Leu Ile Gly Leu Arg Ile Pro Ile Ser Lys Asp Asp Val Gly
                245                 250                 255
Tyr Leu Val Glu Glu Ile Trp Arg Gly Arg Ser Ala Ile Ser Asn Leu
            260                 265                 270
Thr Asn Arg Leu Ile Leu Val Pro Trp Gln Arg Pro Ala Arg Gly Phe
        275                 280                 285
Leu Pro Asp Pro Glu Trp Glu Lys Glu Gly Gln Lys Phe Ile Pro Ile
    290                 295                 300
Asp Leu Lys Asn Leu Val Cys Met Thr Lys Glu Glu Gly Ala Arg His
305                 310                 315                 320
Glu Arg Glu Val Leu Arg Gly Gly Lys Asp Val Thr Glu Val Tyr Asp
                325                 330                 335
Pro Lys Val Leu Glu Lys Val Lys Trp His Met Ala Glu Val Glu Val
            340                 345                 350
Gln Glu Lys Phe Arg
        355
```

<210> 34371
<211> 696
<212> PRT
<213> A.fumigatus

<400> 34371

```
Val Gly Gly Asp Pro Asp His Val Ile Gly Leu Glu Phe Trp Pro Val
1               5                  10                  15
Tyr Arg Arg Lys Pro Phe Gln Asp Tyr Arg Arg Arg Asp Tyr Glu Lys
```

```
            20                  25                  30
Gly Gly Tyr Arg Arg Met Val Arg Leu Glu Ala Glu Ile Ser Ser Phe
        35                  40                  45
Gln Lys Asp Gly His Asp Leu Glu Arg His Gly Glu Arg Ile Arg Asp
    50                  55                  60
Ile Glu Glu Phe Arg Ser Ala Ala Glu Arg Met Glu Gly Ser Arg Asp
65                  70                  75                  80
Leu Gly Ala Gln Leu Phe Thr Ala Leu Val Arg Ala Leu Gly Met Glu
                85                  90                  95
Ala Arg Val Val Ala Asn Leu Gln Pro Leu Gly Phe Gly Trp Thr Lys
            100                 105                 110
Ala Glu Ala Tyr Thr Pro Arg Pro Lys Val Asp Glu Gly Pro Val Glu
        115                 120                 125
Glu Asn Gly Gly Ser Glu Pro Ile Val Gly Leu Glu Ser Asp Ser Thr
    130                 135                 140
Asp Ser Glu Ser Asp Pro Pro His Lys Tyr Asn Pro Arg Lys Tyr Asp
145                 150                 155                 160
Lys Asp Leu Pro Phe Pro Ile Tyr Trp Thr Glu Val Ala Ser Pro Val
                165                 170                 175
Thr His Glu Ile Ile Pro Val Asp Pro Leu Ile Leu Ser Asn Pro Val
            180                 185                 190
Ala Thr Thr Pro Glu Leu Gln Ala Ala Phe Glu Pro Arg Gly Ala Lys
        195                 200                 205
Ala Glu Lys Ala Lys Gln Val Ile Cys Tyr Val Val Ala Tyr Ser Ser
    210                 215                 220
Asp Lys Thr Ala Lys Asp Val Thr Thr Arg Tyr Leu Arg Arg Arg Thr
225                 230                 235                 240
Trp Pro Gly Lys Thr Lys Gly Tyr Arg Ile Pro Val Glu Lys Ile Pro
                245                 250                 255
Val Pro Gly Arg Lys Arg Lys Phe Phe Glu Tyr Asp Trp Phe Arg Thr
            260                 265                 270
Ile Leu Arg Val Tyr Glu Arg Ser Glu Glu Asn Arg Thr Lys Val Asp
        275                 280                 285
Glu Ile Glu Asp Thr Thr Asp Leu Arg Pro Asn Gln Pro Glu Lys Lys
    290                 295                 300
Gln Val Lys Glu Gly Asp Thr Leu Gln Ser Leu Arg Ser Ser Thr Glu
305                 310                 315                 320
Phe Val Leu Glu Arg Phe Leu Arg Arg Glu Glu Ala Leu Arg Pro Gly
                325                 330                 335
Ala Gln Pro Val Arg Thr Phe Val Ser Gly Lys Gly Asp Lys Ala Lys
            340                 345                 350
Glu Glu Lys Val Tyr Arg Arg Ala Asp Val Leu Lys Cys Leu Ser Ala
        355                 360                 365
Glu Ser Trp His Lys Glu Gly Arg Arg Ile Lys Met Gly Glu Ala Pro
    370                 375                 380
Leu Lys Leu Val Pro Ile Arg Ala Val Thr Leu Leu Arg Lys Arg Glu
385                 390                 395                 400
Val Asp Glu Met Glu Arg Glu Thr Gly Glu Lys Pro Lys Gln Gly Leu
                405                 410                 415
Tyr Ala Lys Tyr Gln Thr Glu Tyr Ile Ile Pro Pro Pro Ile Arg Asp
            420                 425                 430
Gly Ile Ile Pro Lys Asn Glu Tyr Gly Asn Ile Asp Cys Phe Val Pro
        435                 440                 445
Ser Met Val Pro Arg Gly Ala Val His Ile Pro Trp Pro Gly Thr Val
    450                 455                 460
Arg Ile Cys Lys Lys Leu Gly Ile Asp Tyr Ala Glu Ala Val Thr Gly
```

```
465                 470                 475                 480
Phe Glu Phe Gly Ser Lys Met Ala Val Pro Val Ile Gln Gly Val Val
                485                 490                 495
Val Ala Ser Glu Asn Glu Asp Leu Val Lys Asp Ala Trp Arg Ala Glu
            500                 505                 510
Asp Ala Glu Lys Arg Lys Lys Glu Gln Leu Lys Ala Glu Lys Arg Ile
        515                 520                 525
Leu Gln Thr Trp Arg Lys Phe Leu Phe Gly Leu Arg Ile Ala Glu Arg
    530                 535                 540
Val Arg Glu Glu Tyr Gly Ala Glu Asp Gly Asp Met Glu Arg Glu Ser
545                 550                 555                 560
His Asn Pro Phe Ala Ser Arg Gln Ala Arg Ser Gln Ala Arg Pro Pro
                565                 570                 575
Ala Val Pro Glu Ala Leu His Asp Trp His Gly Glu Pro Ala Asp Arg
            580                 585                 590
Gly Gly Gly Phe Leu Leu Pro Gly Asp Asp Asp Gly Asp Asp Gly Asp
        595                 600                 605
Leu Val Val Glu Asp His His Pro Arg Gln Ala His Pro Pro Val Gln
    610                 615                 620
Gln Thr Glu Ala Leu Ser Gln Asp Glu Gly Glu Glu Gly Thr Gly Tyr
625                 630                 635                 640
Asp Ala Val Ser Ile Ser Ser Asp Gly Pro Gly Asp Leu Ser Ser Pro
                645                 650                 655
Gln Gln Ile Ser Asp Ser Glu Glu Thr Glu Pro Ser Val Ser Ala Ser
            660                 665                 670
Asp Tyr Glu Pro Pro Ser Arg Arg Arg Arg Thr Arg Asn Ser Gly Gln
        675                 680                 685
Arg Thr Arg Gly Lys Leu Ser Gln
    690                 695
```

<210> 34372
<211> 111
<212> PRT
<213> A.fumigatus

```
<400> 34372
Thr Asp Phe Leu Asp Asn Ser Pro Asn Ser Gln Gln Asp Ile Ala Phe
1               5                   10                  15
Glu His Gln His Gly Cys Glu Leu Pro Pro Glu Leu Thr Lys Asn Trp
            20                  25                  30
Pro Leu Gly Leu Asp Arg Ile Lys Glu Leu Trp Thr Ala Asn Thr Glu
        35                  40                  45
Gly His Leu Leu Ala Phe Leu Cys Ser Val Ala Glu Lys Tyr Glu Pro
    50                  55                  60
Gly Asn Ser Ile Thr Gln Tyr Phe Leu Phe Gly Pro Arg Ala Phe His
65                  70                  75                  80
Ile Leu Gln Pro Glu Asn Val Glu Ala Ile Leu Ser Thr Asn Phe Lys
                85                  90                  95
Gly Ser His Gly Tyr Leu His Gln Phe Tyr Leu Ser His Ala Ile
            100                 105                 110
```

<210> 34373
<211> 140
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (72),(92),(133)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34373
Gly Ser Glu Val Phe Val Phe Thr Pro Pro Gly Pro Leu Asn Asn Arg
1 5 10 15
Glu Ala Ile Arg Thr Thr Ile Leu Pro Thr Gly Gly Gly Pro Asp Ala
20 25 30
Asn Arg Leu Ile Leu Val Arg Lys Gly Glu Ala His Val Phe Ser Gln
35 40 45
Tyr Val Asn Ser Arg Lys Lys Asn Ile Tyr Gly Pro Asp Ala Tyr Cys
50 55 60
Phe Arg Ser Gly Asn Met Val Xaa Arg Gln Thr Gly Ser Tyr Trp Gly
65 70 75 80
Gly Ile Phe Ser Phe Pro Arg Lys Ala Phe Gly Xaa Ala Leu Gly Arg
85 90 95
Ile Ser Pro Leu Ile Gly Ile Ser Tyr Pro Ile Cys Glu Ala Tyr Ala
100 105 110
Lys Leu Phe His Pro Ser Ser Cys Gln Arg Gly His Arg Ile Asn Pro
115 120 125
Phe Trp Arg Arg Xaa Lys Pro Pro Pro Leu Gly Pro
130 135 140

<210> 34374
<211> 81
<212> PRT
<213> A.fumigatus

<400> 34374
Leu His Pro Lys Ser Leu Glu Trp Lys Asp Gly Asp Arg Asp Ser Trp
1 5 10 15
Gly Thr Pro Leu Pro Phe Ala Gly Val Arg Ser Glu Ile Cys Ala Leu
20 25 30
Leu Thr Phe Pro Arg Ala Cys Tyr Ala Met Tyr Asp Lys Ala Pro Pro
35 40 45
Ala Leu Ser Asp Glu Leu Gly Val Trp Gln Lys Lys Cys Leu Ser Asn
50 55 60
Leu Leu Pro Asp Leu Phe Pro Pro Asp Val Val Tyr Arg Ser Lys Gly
65 70 75 80
Val

<210> 34375
<211> 73
<212> PRT
<213> A.fumigatus

<400> 34375
Val Asn Ser Arg Leu Leu Val His His Glu Gln Ala Met Ile Arg Leu
1 5 10 15
Arg Glu Glu Ile Ala Ser Val Met Gly Asp Ser Ala His Pro Thr Lys
20 25 30
Glu Gln Ile Lys Lys Met Pro Tyr Leu Ser Cys Val Ile Lys Glu Ser
35 40 45

```
Lys Tyr Ser Phe Pro Ser Ile Pro Ser Pro Val Ala Lys Glu Val Arg
    50                  55                  60
Ser Ser Ser Leu Pro Pro Pro Val His
65                  70

<210> 34376
<211> 262
<212> PRT
<213> A.fumigatus

<400> 34376
Ala Arg Gln Gln His His Ser Val Leu Phe Ile Arg Ser Glu Ser Leu
1               5                   10                  15
Ser His Phe Ala Ala Arg Glu Arg Gly Gly Asp Ser Phe Tyr Gln Phe
            20                  25                  30
Gln Arg Phe Ala Trp Leu Pro Ala Ser Val Leu Pro Phe Ser Arg His
        35                  40                  45
Leu Asp Tyr Gly Phe Gly Ala Arg Ala Ala Ile Phe Ala Pro Leu Leu
    50                  55                  60
Gly Asn Gly Ile Phe Thr Gln Glu Gly Pro Ala Trp Arg His Ser Arg
65                  70                  75                  80
Asp Leu Leu Arg Lys Gln Phe Ser Arg Val Gln Asn Arg Ile Leu Glu
                85                  90                  95
His Phe His Glu His Val Asp Asn Met Val Ala Arg Leu Pro Leu Asp
            100                 105                 110
Gly Val Val Asp Leu Gln Pro Leu Phe Phe Asn Leu Thr Leu Asp Ile
        115                 120                 125
Ala Thr Ala Leu Leu Phe Gly Arg Ser Val Tyr Ser Leu Lys Ala Gly
    130                 135                 140
Thr Asp Gln Asp Ala Asp Asn Arg Leu Phe Ala Glu Ser Phe Asn Ile
145                 150                 155                 160
Ala Gln Asp Gly Leu Ala Lys Arg Phe Arg Ile Ala Pro Trp His Phe
                165                 170                 175
Leu Tyr Asn Pro Pro Gly Phe Arg Lys Ala Cys Gly Asp Val His Arg
            180                 185                 190
Phe Leu Glu Gln Tyr Ile Asp Gln Leu Asp Leu Glu Asn Ser Glu Asp
        195                 200                 205
Leu Asp Asp Lys Thr Tyr Gly Phe Ile Lys Arg Val Ala His Glu Ser
    210                 215                 220
Ala Ser Arg Gln His Leu Arg Asp Gln Leu Leu Asn Val Leu Leu Ala
225                 230                 235                 240
Gly Lys Asp Thr Thr Ala Cys Cys Leu Ser Trp Thr Leu Tyr Val Ala
                245                 250                 255
Leu Val Glu Glu Phe His
            260

<210> 34377
<211> 87
<212> PRT
<213> A.fumigatus

<400> 34377
Glu Arg Ser Gly Ala Val Ser Pro Arg Arg Leu Tyr Phe Arg Arg Lys
1               5                   10                  15
Val Ser Ser Lys Met Phe Ser Thr Val Lys Leu Glu Ile Leu Thr Phe
            20                  25                  30
```

```
Ile Ser Leu Lys Ile Thr Leu Glu Asp Lys Asp Leu Val Arg Asp Val
        35                  40                  45
Gln Gln Thr Phe Ser Ala Phe Gly Pro Cys His Val Lys Ile Lys Arg
    50                  55                  60
Asp Lys Arg Lys Ile Pro Thr Ala Phe Val Gln Phe Glu Val Ser Thr
65                  70                  75                  80
Ser Trp Leu Leu Ser Ser Ser
                85
```

<210> 34378
<211> 377
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (3),(4),(15),(24),(25),(27),(54)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34378

```
His Arg Xaa Xaa Lys Pro Pro Ala Lys Arg Ser Lys Gly Val Xaa Arg
1               5                   10                  15
Asp Ile Ile Pro Arg Glu Arg Xaa Xaa Leu Xaa Thr Arg Leu Ala Asp
            20                  25                  30
Leu Leu Glu Arg Asp Leu Asp Thr Ile Ala Ala Ile Glu Ala Leu Asp
        35                  40                  45
Asn Gly Lys Ala Phe Xaa Ile Ala Lys Gly Asp Val Thr Leu Ser Ala
    50                  55                  60
Asn Cys Ile Arg Tyr Tyr Gly Gly Trp Ala Asp Lys Ile Val Gly Gln
65                  70                  75                  80
Thr Ile Asp Thr Asp Pro Gly Cys Leu Thr Tyr Thr Arg His Glu Pro
                85                  90                  95
Val Gly Val Cys Gly Gln Ile Ile Pro Trp Asn Phe Pro Leu Leu Met
            100                 105                 110
Trp Ala Trp Lys Ile Gly Pro Ala Ile Ser Thr Gly Asn Thr Val Val
        115                 120                 125
Leu Lys Thr Ala Glu Gln Thr Pro Leu Ser Ala Leu Tyr Val Ala Lys
    130                 135                 140
Leu Val Lys Glu Ala Gly Phe Pro Pro Gly Val Ile Asn Ile Leu Ser
145                 150                 155                 160
Gly Phe Gly Arg Val Ala Gly Ala Ala Ile Ala Ala His Met Asp Ile
                165                 170                 175
Asp Lys Val Ala Phe Thr Gly Ser Thr Leu Val Gly Arg Gln Ile Leu
            180                 185                 190
Gln Val Ala Ala Arg Ser Asn Leu Lys Lys Val Thr Leu Glu Leu Gly
        195                 200                 205
Gly Lys Ser Pro Asn Ile Val Phe Pro Asp Ala Asp Leu Asp Asp Ala
    210                 215                 220
Ile Lys Tyr Val Asn Leu Gly Ile Tyr Phe Asn His Gly Gln Cys Cys
225                 230                 235                 240
Ala Ala Gly Ser Arg Val Leu Val His Glu Ser Ile Tyr Asp Lys Phe
                245                 250                 255
Leu Ala Leu Phe Lys Gln Arg Ala Glu Glu Asn Lys Val Gly Asp Pro
            260                 265                 270
Phe His Pro Glu Thr Phe Gln Gly Pro Gln Val Ser Gln Val Gln Phe
        275                 280                 285
```

```
Asp Arg Ile Met Gly Tyr Ile Asn Glu Gly Lys Lys Ala Gly Ala Lys
    290                 295                 300
Val Val Thr Gly Gly Ala Arg His Gly Glu Lys Gly Tyr Tyr Ile Gln
305                 310                 315                 320
Pro Thr Ile Phe Ala Asp Val His Glu Asp Met Lys Ile Val Lys Glu
                325                 330                 335
Glu Ile Phe Gly Pro Val Cys Thr Val Gln Lys Phe Ser Thr Glu Glu
            340                 345                 350
Glu Ala Ile Glu Ile Ala Asn Asn Thr Asn Tyr Gly Glu Ser Leu Leu
        355                 360                 365
Tyr Ser Val Leu Trp Val Ile Arg Cys
    370                 375
```

<210> 34379
<211> 241
<212> PRT
<213> A.fumigatus

<400> 34379

```
Arg Thr Pro Val Met Ser Arg Trp Ala Ser Val Ala Arg Ser Ser His
1               5                   10                  15
Gly Thr Ser Arg Cys Ser Cys Gly Arg Gly Arg Ser Asp Arg Pro Phe
            20                  25                  30
Pro Pro Ala Thr Pro Leu Ser Ser Lys Arg Arg Ser Lys Arg Arg Phe
        35                  40                  45
Pro Leu Cys Thr Trp Pro Asn Trp Ser Arg Arg Pro Ala Ser Pro Pro
    50                  55                  60
Val Ser Ser Thr Ser Ser Arg Asp Ser Gly Ala Trp Arg Ala Leu Arg
65                  70                  75                  80
Ser Arg Pro Thr Trp Ile Ser Thr Arg Trp Pro Leu Pro Ala Arg Arg
                85                  90                  95
Trp Trp Ala Ala Arg Ser Ser Arg Ser Gln Arg Gly Ala Thr Ser Arg
            100                 105                 110
Lys Ser Pro Ser Ser Trp Ala Ala Ser Leu Pro Thr Ser Ser Phe Pro
        115                 120                 125
Thr Pro Ile Trp Thr Thr Pro Ser Ser Thr Ser Thr Trp Val Ser Thr
    130                 135                 140
Ser Thr Thr Ala Asn Ala Val Pro Pro Ala Arg Val Ser Trp Cys Thr
145                 150                 155                 160
Asn Pro Ser Met Thr Ser Ser Trp Arg Ser Ser Ser Ser Ala Arg Arg
                165                 170                 175
Lys Thr Arg Ser Ala Thr Arg Ser Thr Arg Arg Arg Ser Arg Val Pro
            180                 185                 190
Arg Ser Leu Arg Cys Asn Leu Thr Gly Ser Trp Asp Thr Ser Met Arg
        195                 200                 205
Val Arg Arg Pro Ala Pro Arg Trp Ser Leu Val Glu Arg Ala Met Val
    210                 215                 220
Lys Arg Val Thr Thr Ser Ser Leu Pro Phe Ser Pro Met Cys Met Lys
225                 230                 235                 240
Thr
```

<210> 34380
<211> 158
<212> PRT
<213> A.fumigatus

<400> 34380
Ala Gly Gly Arg Leu Trp Pro Asp His Pro Met Glu Leu Pro Ala Ala
1 5 10 15
His Val Gly Val Glu Asp Arg Thr Gly His Phe His Arg Gln His Arg
20 25 30
Cys Pro Gln Asn Gly Gly Ala Asn Ala Ala Phe Arg Phe Val Arg Gly
35 40 45
Gln Thr Gly Gln Gly Gly Arg Leu Pro Pro Arg Cys His Gln His Pro
50 55 60
Leu Gly Ile Arg Ala Arg Gly Gly Arg Cys Asp Arg Gly Pro His Gly
65 70 75 80
Tyr Arg Gln Gly Gly Leu Tyr Arg Leu Asp Ala Gly Gly Pro Pro Asp
85 90 95
Pro Pro Gly Arg Ser Glu Glu Gln Pro Gln Glu Ser His Pro Arg Ala
100 105 110
Gly Arg Gln Val Ser Gln His Arg Leu Ser Arg Arg Arg Ser Gly Arg
115 120 125
Arg His Gln Val Arg Gln Pro Gly Tyr Leu Leu Gln Pro Arg Pro Met
130 135 140
Leu Cys Arg Arg Leu Ala Cys Pro Gly Ala Arg Ile His Leu
145 150 155

<210> 34381
<211> 88
<212> PRT
<213> A.fumigatus

<400> 34381
Phe Asn Pro Arg Phe Pro Ser Phe Tyr Leu Thr Leu Arg His Thr Leu
1 5 10 15
Pro His Arg Arg Arg Pro Asp Thr Met Asp Thr Glu Gln Gly Leu Lys
20 25 30
Asn His Thr Ala Lys Thr Ser Pro His Asp Glu Thr Ala Met Ala Ser
35 40 45
Leu Thr Thr Ile Pro Thr Ser Val Thr Leu Ser Ala Glu Gln Phe Glu
50 55 60
Lys Leu Tyr Leu Ser Pro Leu Thr Gln Arg Gln Gly Met Leu Ser Lys
65 70 75 80
Gln Met Gly Asn Pro Thr Pro Leu
85

<210> 34382
<211> 355
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (313),(340),(342),(343),(352)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34382
Arg Leu Thr Val Val Arg Val Ile Gly Asn Leu Asn Gly Leu Leu Leu
1 5 10 15
Gly Ala Lys Leu Leu His Arg Thr Asp Arg Pro Glu Asp Leu Leu Phe

```
            20                  25                  30
Asp Asn Leu His Val Phe Met His Ile Gly Glu Asn Gly Arg Leu Asp
        35                  40                  45
Val Val Thr Leu Phe Thr Met Ala Arg Ser Thr Ser Asp His Leu Gly
    50                  55                  60
Ala Gly Leu Leu Thr Leu Ile Asp Val Ser His Asp Pro Val Lys Leu
65                  70                  75                  80
His Leu Arg Asp Leu Gly Thr Leu Glu Arg Leu Arg Val Glu Arg Val
                85                  90                  95
Ala Asp Leu Val Phe Leu Arg Ala Leu Leu Glu Glu Arg Gln Glu Leu
            100                 105                 110
Val Ile Asp Gly Phe Val His Gln Asp Thr Arg Ala Gly Gly Thr Ala
        115                 120                 125
Leu Ala Val Val Glu Val Asp Thr Gln Val Asp Val Leu Asp Gly Val
    130                 135                 140
Val Gln Ile Gly Val Gly Lys Asp Asp Val Gly Arg Leu Ala Ala Gln
145                 150                 155                 160
Leu Glu Gly Asp Phe Leu Glu Val Ala Pro Arg Cys Asp Leu Glu Asp
                165                 170                 175
Leu Ala Ala His Gln Arg Arg Ala Gly Lys Gly His Leu Val Asp Ile
            180                 185                 190
His Val Gly Arg Asp Arg Ser Ala Arg His Ala Pro Glu Ser Arg Glu
        195                 200                 205
Asp Val Asp Asp Thr Gly Gly Glu Ala Gly Leu Leu Asp Gln Phe Gly
    210                 215                 220
His Val Gln Ser Gly Lys Arg Arg Leu Leu Arg Arg Phe Glu Asp Asn
225                 230                 235                 240
Gly Val Ala Gly Gly Asn Gly Arg Ser Asp Leu Pro Arg Pro His Glu
                245                 250                 255
Gln Arg Glu Val Pro Trp Asp Asp Leu Ala Thr Asp Ala His Arg Leu
            260                 265                 270
Met Thr Gly Val Arg Gln Thr Ala Arg Val Gly Ile Asp Arg Leu Ala
        275                 280                 285
Asp Asp Leu Val Arg Pro Ala Thr Val Val Pro Asp Ala Val Cys Arg
    290                 295                 300
Glu Gly Asn Val Ala Leu Gly Asp Xaa Glu Ser Leu Ala Val Val Glu
305                 310                 315                 320
Arg Leu Asp Gly Gly Asp Gly Ile Gln Val Ala Leu Glu Glu Val Arg
                325                 330                 335
Lys Ala Ser Xaa Glu Xaa Xaa Ala Leu Pro Arg Asp Asp Val Pro Xaa
            340                 345                 350
Asn Thr Phe
        355

<210> 34383
<211> 138
<212> PRT
<213> A.fumigatus

<400> 34383
Ile Pro Arg Leu Thr Tyr Leu Met Ala Ser Ser Arg Ser Ala Ser Gly
1               5                   10                  15
Lys Thr Met Leu Gly Asp Leu Pro Pro Ser Ser Arg Val Thr Phe Leu
            20                  25                  30
Arg Leu Leu Leu Ala Ala Thr Trp Arg Ile Trp Arg Pro Thr Ser Val
        35                  40                  45
```

```
Glu Pro Val Lys Ala Thr Leu Ser Ile Ser Met Trp Ala Ala Ile Ala
    50                  55                  60
Ala Pro Ala Thr Arg Pro Asn Pro Glu Arg Met Leu Met Thr Pro Gly
65                  70                  75                  80
Gly Lys Pro Ala Ser Leu Thr Ser Leu Ala Thr Tyr Lys Ala Glu Ser
                85                  90                  95
Gly Val Cys Ser Ala Val Leu Arg Thr Thr Val Leu Pro Val Glu Met
            100                 105                 110
Ala Gly Pro Ile Phe His Ala His Met Ser Ser Gly Lys Phe His Gly
        115                 120                 125
Met Ile Trp Pro Gln Thr Pro Thr Gly Ser
    130                 135
```

<210> 34384
<211> 79
<212> PRT
<213> A.fumigatus

<400> 34384

```
Leu Tyr Val His Ile Ala His Trp Gln Glu Ile Val Cys Gly Val Leu
1               5                   10                  15
Thr Ile Ile Leu Pro Ile Leu Ile Asp Thr His Lys Ser Arg Asn Leu
            20                  25                  30
Arg Asp Pro Asn Tyr Ser Tyr Arg Asp Phe Ser Asn Ala Ile His Thr
        35                  40                  45
Cys Gln Thr Ser Met Leu Leu Ser Pro Val Cys Leu Thr Ser Arg Gly
    50                  55                  60
Gln Ser His Gln Cys Trp Phe His Val Cys Ala Ile Glu Cys Lys
65                  70                  75
```

<210> 34385
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34385

```
Tyr Gly Cys Leu Ile Leu Lys Val Val Tyr Ala Leu Gln Arg Val Ser
1               5                   10                  15
Phe Thr Tyr Pro Gln Lys Phe Ser Val Pro Asn Leu Cys Tyr Tyr Arg
            20                  25                  30
Trp Gly Lys Arg Cys Thr Gly Ser Lys Cys Arg Val Thr Val Trp Ala
        35                  40                  45
Glu Thr Leu Arg Asn Pro Thr Leu Glu Asp Ile Met Thr Lys Glu
    50                  55                  60
```

<210> 34386
<211> 153
<212> PRT
<213> A.fumigatus

<400> 34386

```
Gln Leu Leu Asn Gln Tyr Glu Cys Ser Ala His Ile Ile Asp Val Trp
1               5                   10                  15
Val Glu Thr Val Ala Gln Gly Arg Ser Asn Val Ala Pro Gln Lys Leu
            20                  25                  30
Pro Trp Glu Met Met Arg Thr Leu Ile Thr Glu Thr Tyr Gly Gly Lys
```

```
        35                  40                  45
Ile Asp Asn Ala Glu Asp Phe Gln Val Leu Asp Asn Leu Val Asn Ser
    50                  55                  60
Phe Leu Thr Pro Ala Ala Phe Glu Val Asp Tyr Lys Leu Val Ser Gly
65                  70                  75                  80
Val Glu Lys Asp Glu Cys Leu Ala Leu Pro Gly Glu Thr Ser Ile Arg
                85                  90                  95
Asp Phe Val Glu Trp Val Lys Arg Leu Pro Glu Arg Glu Pro Pro Thr
            100                 105                 110
Tyr Leu Gly Leu Pro Ala Asn Ala Glu Lys Leu Leu Leu Val Gly His
        115                 120                 125
Gly Asn Lys Met Ile Ser Asp Leu Ser Lys Ile Thr Thr Leu Leu Asp
    130                 135                 140
Glu Gly Glu Gln Leu Met Ile Asp Gly
145                 150
```

<210> 34387
<211> 267
<212> PRT
<213> A.fumigatus

<400> 34387

```
Thr Cys Gly Ile Ser Pro Leu Cys Lys Asp Ile Val Pro Ala Ala Glu
1               5                   10                  15
Arg Phe Ile Glu Ala Val Phe Gly Arg Glu Phe Phe Glu Gly Ser Ser
            20                  25                  30
Asp Leu Lys Asp Val Val Glu Gln Val Ala Ala Thr Thr Pro Ile Ser
        35                  40                  45
Leu Ser Ser Ser Pro Gly Phe Asp Ala Ser Tyr Lys Val Asp Ala Leu
    50                  55                  60
Val Glu Arg Met His Ala Thr Cys Ala Asn Ile Ala Met Gly Ser Asn
65                  70                  75                  80
Glu Gly Leu Glu Ser Ala Asp Lys Ala Ile Ser Asn Ala Ala Thr Ala
                85                  90                  95
Gly Thr Trp Val Leu Val Lys Asn Val His Leu Ala Pro Ser Trp Leu
            100                 105                 110
Gln Ser Leu Glu Lys Arg Leu Glu Ser Leu Lys Pro His Lys Asp Phe
        115                 120                 125
Arg Leu Phe Leu Ser Met Glu Ser Ser Pro Lys Ile Pro Val Asn Leu
    130                 135                 140
Ile Arg Ala Ser Arg Val Leu Met Tyr Glu Gln Pro Ala Gly Ile Arg
145                 150                 155                 160
Ala Asn Met Arg Asp Ser Leu Ser Thr Leu Met Glu Arg Ala Gly Lys
                165                 170                 175
Pro Pro Val Glu Lys Ala Arg Val Tyr Leu Leu Leu Cys Phe Leu His
            180                 185                 190
Ala Val Val Gln Glu Arg Leu Arg Tyr Ala Pro Ser Leu Gly Trp Lys
        195                 200                 205
Gly Phe Trp Glu Phe Asn Asp Ser Asp Val Ser Glu His His Lys Gly
    210                 215                 220
Ile His His Cys Asp Pro Thr Asn Asn Phe Leu Ile Ser Thr Asn Ala
225                 230                 235                 240
Arg Leu Ile Ser Ser Met Ser Gly Trp Arg Gln Leu Pro Arg Val Asp
                245                 250                 255
Pro Met Leu Arg Leu Arg Asn Ser Leu Gly Lys
            260                 265
```

<210> 34388
<211> 217
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (211)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34388
Gly Gln Pro Ser Thr Ser Ala Pro Ala Lys Gly Lys Cys Ser Lys Pro
1 5 10 15
His Asp Pro Lys Lys Pro Leu Ile Gln Tyr Ala Leu Met Ile Asp Ala
20 25 30
Gly Ser Gln Gly Ser Arg Ile His Val Tyr Arg Phe Asn Asn Cys Gly
35 40 45
Pro Ser Pro Glu Leu Glu Asp Glu Val Phe Phe Gln Thr Glu Pro Lys
50 55 60
Lys Gly Gly Ser Gly Leu Ser Ser Tyr Lys Glu Asp Ala Glu Gly Ala
65 70 75 80
Ala Lys Ser Leu Asp Pro Leu Met Glu Val Ala Met Lys Asn Val Pro
85 90 95
Asp Glu Tyr Lys Ser Cys Ser Pro Ile Ala Val Lys Ala Thr Ala Gly
100 105 110
Leu Arg Met Leu Gly Pro Glu Leu Ser Gln Lys Ile Leu Asp Ala Val
115 120 125
Arg Asn Arg Leu Glu Thr Val Tyr Pro Phe Pro Val Val Ser Lys Glu
130 135 140
Lys Gly Gly Val Glu Ile Met Asp Gly Ser Asp Glu Gly Val Tyr Ala
145 150 155 160
Trp Ile Thr Thr Asn Tyr Leu Leu Gly Lys Ile Gly Gly Pro Asp Glu
165 170 175
Thr Pro Thr Ala Ala Val Phe Asp Leu Gly Gly Gly Ser Thr Gln Ile
180 185 190
Val Phe Gln Pro Thr Phe Pro Asn Ser Lys Ser Gly Gly Met Ser Ser
195 200 205
His Thr Xaa Ala Gly Arg Ile Arg Thr
210 215

<210> 34389
<211> 345
<212> PRT
<213> A.fumigatus

<400> 34389
Asn Lys Ile Asp Val Arg Asn Met Ala Glu Ser Gln Gly Arg Lys Val
1 5 10 15
Gln Asp Gly Asp Lys Thr Leu Glu Thr Met Val Leu Asp Pro His Ala
20 25 30
Val Ala Val Val Pro His Leu Leu Trp Leu Gly Phe Leu His Ala Ser
35 40 45
Ser Val Trp Asp Arg Pro Val Val Gly Leu Thr Thr Ser Leu Trp Ser
50 55 60
Lys Ala Leu Leu Ile Tyr Thr Asn Arg Phe Gln Leu Ser Pro Leu Asn

```
65                  70                  75                  80
Gln Glu Lys Ser Phe Ile Leu Phe Ile Cys Phe Val His Thr Asn Ser
                85                  90                  95
Gly Tyr Leu Cys Tyr Ser Phe Ala Ser Cys His Arg Thr Arg Phe Ala
            100                 105                 110
Arg Arg Pro Ile Leu Asp Met Lys His Ile Arg Gly Leu Ile Ser Ile
        115                 120                 125
Thr Gln Ala Leu Arg Leu Thr Phe Leu Pro Pro Phe Gln Thr Thr His
    130                 135                 140
Val Gln Ser Leu Arg Tyr Asn Asn Ala Leu Arg Gly Thr Gln Leu Arg
145                 150                 155                 160
Phe Leu Gln Ser Ser Arg Arg Leu Pro Ser Gln Gln Pro Arg Gln Thr
                165                 170                 175
Gln Ile Arg Asp Glu Asp Ile Arg Ser Glu Tyr Ile Gln Ile Val Asn
            180                 185                 190
Glu Asn Gly Asp Leu Glu Pro Ala Met Lys Leu Arg Asp Val Leu Arg
        195                 200                 205
Ser Phe Asp Arg Ser Glu Asn Phe Leu Val Gln Val Ser Pro Ala Leu
    210                 215                 220
Pro Gly Arg Pro Pro Ile Cys Lys Ile Met Asn Lys Met Ala Met Arg
225                 230                 235                 240
Glu His Glu Arg Ala Lys Ala Lys Ala Ala His Ala Thr Lys Thr Ala
                245                 250                 255
Val Lys Gln Ile Glu Leu Asn Trp Ala Ile Asp Ser His Asp Leu Ala
            260                 265                 270
His Arg Leu Lys Gln Leu Thr Asn Phe Leu Glu Lys Gly Arg Arg Val
        275                 280                 285
Glu Ile Ile Leu Thr Arg Lys Lys Gly Lys Arg Ala Pro Thr Val Glu
    290                 295                 300
Glu Ile Lys Asn Val Met Asp Ser Val Leu Gln Ala Thr Lys Glu Ala
305                 310                 315                 320
Asn Ala Met Gln Ile Lys Pro Met Glu Gly Glu Pro Gly Lys His Val
                325                 330                 335
Thr Leu Tyr Val Lys Lys Lys Asp Ala
            340                 345
```

<210> 34390
<211> 173
<212> PRT
<213> A.fumigatus

<400> 34390

```
Asn Pro Thr Asn Asp Val Asn Val Thr Asp Asn Glu Ile Gly Leu Glu
1                   5                   10                  15
Tyr Gly Lys Cys Tyr Arg Ile Gln Asn Val Cys Gly Glu Arg Leu Gly
            20                  25                  30
Tyr Gln Gln Gly Ala Ser Tyr Gln Tyr Gly Asn Pro Asp His Gln Val
        35                  40                  45
Phe Gln Val Cys Leu Thr Ala Thr Gly Asn Cys Leu Arg Glu Gly Lys
    50                  55                  60
Ala Asp Gln Lys Val Glu Ser Arg Asn Leu Phe Tyr Leu Tyr Asp Thr
65                  70                  75                  80
Arg Gly Ser Ser Trp Ser Lys Gly Pro Thr Asn Ile Gly Phe Tyr Gly
                85                  90                  95
Leu Tyr Leu Tyr Pro Asn Ile Tyr Pro Asn Arg Pro Asp Leu Met Ala
            100                 105                 110
```

```
Arg Phe Gln Ala Trp Lys Asp Cys Asp Glu Val Asp Glu Gly Glu Pro
        115                 120                 125
Cys Pro Leu Ala Val Asn Leu Lys Gly Ala Tyr Asn Asn Trp Asn Gly
    130                 135                 140
Leu Ala Asn Thr Pro Ala Tyr Gly Tyr Val Met Gln Val Ala Asn Ala
145                 150                 155                 160
Tyr Glu Thr Val His Trp Val Phe Lys Glu Val Lys Asn
                165                 170
```

<210> 34391
<211> 71
<212> PRT
<213> A.fumigatus

<400> 34391

```
Trp Ser Ile Ile Ser Ile Val Gln Arg Pro His Lys Pro Arg Leu Ile
1               5                   10                  15
Thr Ala Val Gln Pro Ala Gln Ser Thr Lys Gln Ala Arg Glu Ala Thr
            20                  25                  30
Pro Leu Ala Ala Phe Gln Trp Ser Thr Phe Ile Phe Thr Cys Ala Ile
        35                  40                  45
Ile Ala Leu Gly Thr Phe Ala Ile Ala Glu Thr Cys Asp Glu Leu Ser
    50                  55                  60
Thr Val Arg Ser Ile Thr Ala
65                  70
```

<210> 34392
<211> 740
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (740)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34392

```
Ala Lys Lys Leu Leu Val Leu Ser Pro Leu Val Phe Ala Ile Glu His
1               5                   10                  15
Tyr Leu Thr Gly Pro Thr Leu Thr Arg Leu Ala Phe Cys Gln Leu Cys
            20                  25                  30
Ala Val Ser Thr Val Gly Ile Ala Ala Thr Gly Phe Ala Leu Gly Arg
        35                  40                  45
Ile Asp Arg Pro Ser Ser Lys Gln Gly Arg Phe Arg Arg Lys Thr Leu
    50                  55                  60
Leu Arg Asp Asn His Ala Pro Thr Ala Asn Asn Thr Val Ser Pro Ala
65                  70                  75                  80
Phe Ser Thr Thr Ser Pro Asp Ser Pro Ser Phe Pro Ser Thr Val Cys
                85                  90                  95
Asp Val Asn Thr His His Ile Thr Asp Pro Ser Gln Pro His Ser Asn
            100                 105                 110
Val Ala Ser Pro Glu Leu Asn Ser Gly Asp Ser Gln Ser Arg Arg Lys
        115                 120                 125
Ser Ser Phe Ala Gly Val Ile Arg Arg Arg Arg Gly His Thr Met Thr
    130                 135                 140
Ser Pro Pro Ser His Leu Lys Glu Glu Asn Asp Thr Pro Ser His Ser
```

```
145                 150                 155                 160
Arg Arg Pro Ser Ser Ser Trp Leu Arg Arg Leu Ser Ile Gln Pro Gln
                165                 170                 175
Glu Ser Arg Leu Ser Asn Asn Gly Pro Leu Ser Pro Ser Ser Asn Asp
            180                 185                 190
Pro Thr Ser Pro Gly Leu Ser Arg Pro Ser Ser Gln Arg Arg Val Pro
        195                 200                 205
Asn Lys Leu Val Lys Arg Pro Pro Ser Gln His Ser Ser Gly Leu Pro
    210                 215                 220
Leu Ser Ser His Ala Pro Ser Ser Pro Trp Ala Pro Ser Gln Leu Arg
225                 230                 235                 240
Arg Pro Ala Thr Ser Tyr Gln Arg Ser Glu Val Leu Arg His Arg Ala
                245                 250                 255
Thr His Ser Leu Asn Phe Glu Pro Ser Ser Ile Thr Gly Pro Ala Ser
            260                 265                 270
His Ser Val Glu Ala Gly Ala Ser Ile Asp Ile Glu Glu Gly Ala Trp
        275                 280                 285
Gln Pro Tyr Leu Arg Pro Ser Leu Glu Gly Val Thr Glu Arg Leu Ala
    290                 295                 300
Arg Arg Leu Ser Thr Val Thr Arg Pro Lys Glu Gln Thr Leu Arg Arg
305                 310                 315                 320
Ile Leu Pro Ser Pro Asp Ala Leu Pro Ala Leu Leu Leu Ala Thr Ser
                325                 330                 335
Ile Thr Val Lys Glu Pro Ala Ile Asn Ile Thr Ser Asn Glu Phe Ala
            340                 345                 350
Pro Ala Ser Pro Val Gln Phe Arg Asp Pro Phe Lys Leu Asp Asp Pro
        355                 360                 365
Pro His Ala Arg Asp Ala Pro Ser Val Val Glu Ser Asn Ser Gly Pro
    370                 375                 380
Ser Ser Ile Val Leu Glu Ala Asp Pro Arg Ser Pro Glu Lys Gly Ser
385                 390                 395                 400
Ser Ala Ala Ala Ser Lys Gln Ser Asn Ser Gly Pro Pro Val Trp Ser
                405                 410                 415
Arg Arg Arg Ala Ala Ser Thr Ser Phe Ser Glu Leu Pro Asn Ser Lys
            420                 425                 430
Ala Ala Thr Ser Val Ser Arg Arg Leu His Gly Lys Arg Asn Ile Thr
        435                 440                 445
Asp Pro Asn Ile Phe Arg Arg Pro Pro Asp Thr Phe Lys Ala Gly Tyr
    450                 455                 460
Pro Asn Phe Leu Thr Ala Lys Ile Met Arg Ser Arg Arg Ser Val Thr
465                 470                 475                 480
Pro Ser Tyr Leu Arg Glu Tyr Arg Ala Glu Leu Gly Arg Cys Arg Asp
                485                 490                 495
Tyr Gly Asn Arg Pro Leu Thr Ser Asp Ala Ile Ala Leu Ser Ala Ser
            500                 505                 510
Gln Asn Ala Phe Phe Arg Ala Ser Asp Leu Thr Phe Leu Trp Ser Val
        515                 520                 525
Arg Gln Arg Pro Arg Arg His Ser Ile Ala Ala Ser Asp Pro Ala Ser
    530                 535                 540
Ser Ala Ile Gly Ser Glu Asp Thr Arg Ile Phe Thr Ser Gly Asp Glu
545                 550                 555                 560
Asp Glu Ser Asp Phe Leu Thr Asp Thr Ala Phe Asp Ser Ile Arg Thr
                565                 570                 575
His Phe Thr Ile Gly Ser Ile Ser Gly Ser Arg Gly Leu Arg Ile Glu
            580                 585                 590
Thr Met Phe Asp Lys Asn Ser Val Glu Ser Leu Ala Asn His Glu Ile
```

595 600 605
Thr Ile Glu Ala Leu Glu Pro Arg Gly Pro Arg Met Pro Asp Gly Leu
610 615 620
Thr Ser Ala Lys Cys Asp Met Gly Ile Asp Ser Asp Ala Val Ser Gly
625 630 635 640
Ser Thr Pro Arg Thr Arg Glu Ile Ala Glu Leu Asp Asp Ser Glu Asp
645 650 655
Asn Arg Ile Ser Phe Pro Ser Asp Leu Ser Glu Asp Glu Asp Ala Arg
660 665 670
Ser Thr Val Ala Ala Leu Pro Gly Glu Thr Asn Ser Pro Phe Ile Phe
675 680 685
Pro Arg Ser Pro Leu Val Ala Ser Asn Phe Tyr Pro Glu Gly Asn Asp
690 695 700
Ile Arg Ala His Val His Ser Asn Ser Ser His Ala Ser Asp Glu Ser
705 710 715 720
Ser Pro Arg Gly Trp Lys Asp Pro Ser Gly Cys Tyr Gln Lys Thr Pro
725 730 735
Pro Pro Pro Xaa
740

<210> 34393
<211> 397
<212> PRT
<213> A.fumigatus

<400> 34393
Pro Val Gln Ser Gly Ser Leu Glu Gly Lys Gln Lys Gln Ile Pro Leu
1 5 10 15
Ser Val Leu Tyr Lys Arg Pro Asp Leu Arg His Ile Gly Ser Ile Gln
20 25 30
Asn Pro Thr Ser Asp Leu Phe Val Thr Val Gln Leu Trp Ser Asp Ser
35 40 45
Lys Gln Leu Gly Val Pro Met Gln Thr Ser Tyr Lys Ser Phe Lys Ser
50 55 60
Val Arg Ala Trp Asn Glu Trp Leu Gln Met Pro Ile Ser Ile Lys Asp
65 70 75 80
Ala Pro Leu Arg Cys Gln Leu Ala Ile Thr Ile Trp Asp Leu Ser Pro
85 90 95
Phe Gly Gly Gln Gly Ala Asp Gly His Tyr Ile Pro Phe Gly Gly Thr
100 105 110
Thr Val Pro Leu Phe Asp Glu Asp Gly Lys Leu Lys Thr Gly Arg Gln
115 120 125
Lys Cys Lys Val Tyr Arg His Lys Thr Ala Asp Gly Phe Ser Ser Thr
130 135 140
Thr Thr Pro Ser Thr Pro Pro Pro Gln Ala Thr Pro Arg Thr Met Pro
145 150 155 160
Arg Thr Leu Leu Ala Pro Ser Val Asp Glu Met Glu Leu Glu Arg Val
165 170 175
Glu Val Leu Ile Lys Lys His Glu Met Gly Glu Leu Pro Arg Ile Asp
180 185 190
Trp Met Asp Gln Met Val Phe Arg Gln Leu Glu Lys Leu Lys Leu Asn
195 200 205
Ala Glu Glu Ala Ala Arg Lys Arg Ala Ile Arg Leu Lys Ala Ala Lys
210 215 220
Asn Lys Ala Pro Glu Thr Pro Gly Ala Asp Gly Val Asn Ser Asp Glu
225 230 235 240

```
Glu Glu Ile Asp Asp Glu Asn Phe Val Leu Tyr Ile Glu Phe Pro Arg
                245                 250                 255
Phe Asp His Pro Ile Val Trp Thr Asp His Gln Tyr Pro Pro Pro Pro
            260                 265                 270
Val Ser Ser Tyr Ser Gln Asn Ala Ser Ala Asn Pro Asn Ala Thr Leu
        275                 280                 285
Lys Pro Val Pro Glu Val Arg Phe Gly Pro Gly Ile Glu Gly Ala Asp
    290                 295                 300
Gly Asp Gly Val Ile Arg Ile Tyr Asp Pro Glu Val Gly Gln Thr Gly
305                 310                 315                 320
Asn Pro Cys Glu Asp Lys His Arg Arg Leu Ile Arg Ser His Arg Thr
                325                 330                 335
Gly Ile Met Asp Arg Asp Leu Lys Pro Asn Pro Lys Ile Arg Asp Glu
            340                 345                 350
Leu Asn Val Ile Val Ser Tyr Glu Pro Thr Gln Asp Leu Thr Ala Glu
        355                 360                 365
Glu Lys Asp Leu Val Trp Arg Phe Arg Tyr Tyr Leu Thr Arg Glu Lys
    370                 375                 380
Arg Ala Leu Thr Ile Phe Val Arg Ser Val Asn Trp Arg
385                 390                 395
```

<210> 34394
<211> 140
<212> PRT
<213> A.fumigatus

<400> 34394

```
Val Thr Thr Phe Asp Asn Gly Thr Tyr Ala Thr Lys Asn Thr Ala Pro
1               5                   10                  15
Glu Phe Ser Val Thr Trp Gln Phe Asn Pro Gly Pro Ala Thr Gln Pro
            20                  25                  30
Val His Ala Phe Ser Asn Val Met Ile Asp Asp Gly Leu Pro Ile Ser
        35                  40                  45
Leu Glu Lys Ile Gln His Leu Asn Val Asp Phe His Trp Thr Tyr Gly
    50                  55                  60
Val Gly Asn Thr Pro Ala Glu Ala Thr Asn Glu Ala Glu Leu Thr Ala
65                  70                  75                  80
Ala Ser Val Asn Thr Asn Val Ala Ile Asp Met Phe Met Ser Gln Glu
                85                  90                  95
Glu Lys Val Lys Asp Ser Ala Asp Tyr Thr His Glu Val Met Val Trp
            100                 105                 110
Phe Ala Lys Phe Gly Pro Ala Ala Tyr Val Ile Gly Gln Asp Asp Gly
        115                 120                 125
Ile Val Ala Thr Lys Glu Val Asn Gly Thr Ile Leu
    130                 135                 140
```

<210> 34395
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34395

```
Thr Asn Phe Ile Thr Asn Gln Leu His Leu Leu Ser Gly Thr Ile Pro
1               5                   10                  15
Val Lys His Met Thr Ser Leu Leu Trp Ser Leu Ile Ser Leu Ser Lys
            20                  25                  30
```

```
Asn Ser Asn Tyr Glu Asn Asn Ser Ile Leu Phe Pro Cys Thr Leu His
        35                  40                  45
Leu Pro Tyr Val Tyr Arg Tyr Pro Lys Val Asn Val Cys
    50                  55                  60

<210> 34396
<211> 146
<212> PRT
<213> A.fumigatus

<400> 34396
Arg Val Val Pro Phe Pro Val Leu Ala Tyr Tyr Val Cys Thr Ile Ser
1               5                   10                  15
Gln Thr Val Tyr Asp Met Ser Thr Leu Gln Ile Ser Glu Asp Asn Pro
            20                  25                  30
Phe Leu Thr Leu Ile Thr Glu Thr Asn Asn Asp Ala Val Ser Asn Ile
        35                  40                  45
Gln Arg Phe Val Ile Arg Asp Tyr Val Lys Pro Leu Tyr Gln Asp Gln
    50                  55                  60
Leu Gln Ser Arg Tyr Glu Asn His Arg Val Asn Arg Asn Ala Gln Gln
65                  70                  75                  80
Ala Ala Lys Ile Leu Ala Pro Asp Phe Ala Gly Trp Asp Leu Asp Glu
                85                  90                  95
Ile Leu Met Arg Leu Asp Gly Pro Thr Lys Glu Glu Gly Phe Val Asp
            100                 105                 110
Pro Arg Asn Cys Leu Val Ile Trp Ala Arg Pro Pro Ser Pro Ile Arg
        115                 120                 125
Asp Leu Val Glu Phe Val Gln Ser Glu Leu Arg Arg Val Ala Pro Ser
    130                 135                 140
Lys Phe
145

<210> 34397
<211> 78
<212> PRT
<213> A.fumigatus

<400> 34397
Arg Arg Trp Asn Thr Glu Gly Glu Ser Leu Gln Lys Gln Thr Asp Gly
1               5                   10                  15
Glu Asn Gly Tyr Ala Val Gln Ser Gly Gly Pro Ala Gly Ile Asn Met
            20                  25                  30
Cys Ile Gln Ala Val Met Glu Tyr Lys Tyr Pro Met Cys Phe Trp Asn
        35                  40                  45
Asp Ser Cys Glu Phe Leu Ser Ser Gly Leu Thr Gln Leu Val Ser Met
    50                  55                  60
Lys Tyr Ile Leu Arg Arg Gly Glu Gly Arg Thr Leu Pro Thr
65                  70                  75

<210> 34398
<211> 231
<212> PRT
<213> A.fumigatus

<400> 34398
Pro Gly Thr Arg Thr Cys Ser Leu Val Arg Pro Tyr Ala His Val Leu
```

```
1               5                   10                  15
Val Gly Gln Ser Leu Met Lys Ser Ser Glu Arg Asp Gly Arg Asp His
            20                  25                  30
Val Arg Gly Pro Glu Ala Arg Ala Ser Gln Phe Leu Tyr Gly Thr Ser
        35                  40                  45
Thr Gln Pro Gln Ser Gln Gln Phe Ala Asn Asn Ser Asn Glu Val Gln
    50                  55                  60
Val Ser Ala Gly Glu Glu Gly Ile Ser Val Gly Ser Ala Ala Ala Leu
65                  70                  75                  80
Thr Pro Asp Asp Val Val Phe Ala Gln Tyr Arg Glu Ala Gly Val Phe
                85                  90                  95
Gln Gln Arg Gly Phe Thr Leu Arg Asp Phe Met Ser Gln Leu Phe Ala
            100                 105                 110
Asn Arg Asn Asp Tyr Gly Arg Gly Arg Asn Met Pro Val His Tyr Gly
        115                 120                 125
Ser Asn Tyr Pro Arg Thr Val Ser Thr Arg Pro Pro Leu Glu Leu Val
    130                 135                 140
Val Asn Pro Gly Ser Tyr Leu Thr Gln His Ala Ser Thr Pro Ser Pro
145                 150                 155                 160
Pro His Ser Gln Pro Arg Phe Pro Lys Pro Pro Ala Pro Ala Thr Pro
                165                 170                 175
Arg Ser Ser Lys Pro Ser Lys Thr Pro Ile Pro Arg Pro Ala Ser Val
            180                 185                 190
Pro Gly Thr Ser Ala Lys Ala Pro Pro Pro Lys Ala Thr Ser Ser Pro
        195                 200                 205
Gly Leu Lys Leu Arg Arg Pro Arg Gly Ser Gly Pro Val Leu Leu His
    210                 215                 220
Leu Ala Glu Thr Thr Gly Leu
225                 230
```

<210> 34399
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34399

```
Thr Val Ser Ile Leu Glu Ser Thr Pro Lys Pro Leu Arg Leu Ile Phe
1               5                   10                  15
Lys Cys Asn Asp Asn Ser Gly Arg Arg Gly Trp Thr Glu Ser Arg Asp
            20                  25                  30
Cys Cys His Arg Leu Ser Cys Ala Tyr Val Trp Lys Asp Tyr Ser Ala
        35                  40                  45
Gly Trp Leu Ser Gly Arg Val Asn Asp Ser Ile Tyr Ile Asn Gly Ser
    50                  55                  60
Gly Ser Ile Gln Asp Ala His Lys Ser Leu
65                  70
```

<210> 34400
<211> 88
<212> PRT
<213> A.fumigatus

<400> 34400

```
His Asp Val Gly Pro Asp Ala Asn Arg Val Leu Arg Ile Ser Pro Arg
1               5                   10                  15
Ile Ile Arg Asn Gln His Leu Ser Ala Pro Ala Pro Lys Lys Gly Thr
```

```
            20                  25                  30
Val Ile Leu Pro Ser Ile Ser Ile Asn Glu Ile Leu Leu Asp Cys Lys
        35                  40                  45
Asn Phe Ser His Val Val Lys Ile Tyr Gly Pro Leu Thr Ala Ala Gly
    50                  55                  60
Ala Gln Pro Ala Asp Ser Pro Pro Phe Arg Gln Ala Met Gly Gln Leu
65                  70                  75                  80
His Leu Ser Ala Ala Arg Ile Gly
                85
```

<210> 34401
<211> 84
<212> PRT
<213> A.fumigatus

<400> 34401

```
Arg Lys Tyr Gly Asn Arg Val Arg Phe Pro Gly Ala Val Asn Ser Lys
1               5                   10                  15
Phe Thr Thr Glu Met Ser Phe Ile Asn Pro Ala Glu Thr Ser Ser Ile
            20                  25                  30
Pro Thr Tyr Arg Val Met Asn Ser Asp Gly Val Met Leu Glu Lys Asp
        35                  40                  45
Arg Lys Ser Leu Asp Val Ser Asn Glu Glu Ile Leu Thr Trp Tyr Lys
    50                  55                  60
Asn Met Leu Thr Gly Glu Thr Leu Cys Ser Cys Thr Gly Trp Thr Ile
65                  70                  75                  80
Thr Asp Glu Lys
```

<210> 34402
<211> 110
<212> PRT
<213> A.fumigatus

<400> 34402

```
His Ala Gly Ser Leu Arg Leu Gln Leu Pro Pro His Ser Lys Tyr Pro
1               5                   10                  15
Pro Ala Pro Arg Thr Gly Gly Gln Pro Gly Ile Ile Ser Asp Thr Thr
            20                  25                  30
Cys Lys His Thr Ile Ser Ser Pro Leu Ala Thr Gln Ile Pro Gln Ala
        35                  40                  45
Ser Gly Ala Arg Tyr Ala Pro Lys Leu Gln Ala Leu Gln Asn Pro Asp
    50                  55                  60
Thr Pro Pro Arg Ile Arg Thr Trp Tyr Phe Arg Glu Gly Ala Ala Thr
65                  70                  75                  80
Glu Ser Asp Phe Leu Ala Arg Pro Glu Thr Ser Pro Pro Thr Arg Val
                85                  90                  95
Arg Pro Arg Pro Ser Ser Ser Gly Arg Asn Asn Arg Val Thr
            100                 105                 110
```

<210> 34403
<211> 94
<212> PRT
<213> A.fumigatus

<400> 34403

```
Cys Phe Asp Ser Leu Glu Asp Phe Glu Ser Thr Trp Leu Val Phe Asp
1               5                  10                  15
Gly Leu Asp Thr Phe Ala Thr Ile Thr Phe Cys Asp Gln His Val Gly
            20                  25                  30
Ser Thr Asp Asn Gln Phe Arg Gln His His Phe Asp Val Ser Gln Ile
        35                  40                  45
Leu Lys Glu Cys Lys Gln Asp Pro Val Leu Arg Ile Asn Phe Gly Ser
    50                  55                  60
Ala Pro Asn Ile Ala Asn Thr Ile Ala Lys Ser Pro Asp Ala Glu Gly
65                  70                  75                  80
Gln Gly Thr Arg His His Ser Cys His Pro Glu Leu Val His
                85                  90
```

<210> 34404
<211> 407
<212> PRT
<213> A.fumigatus

<400> 34404

```
Arg Phe Gly Asn Ser Ala Ala Arg Ser Leu Asn Gly Cys Trp Thr Cys
1               5                  10                  15
Arg Val Arg Lys Lys Lys Cys Asp Glu Thr Arg Pro Val Cys Arg Ser
            20                  25                  30
Cys Ser Tyr Phe Gly Leu Glu Cys His Gly Tyr Gly Pro Lys Pro Glu
        35                  40                  45
Trp Met Asp Asn Gly Arg Gln Gln Lys Glu Gln Ala Ala Lys Phe Lys
    50                  55                  60
Arg Ile Val Ser Gln Arg Lys Ala Ser Asn Arg Lys Asp Arg Gln Ser
65                  70                  75                  80
Arg Glu Val Arg Ser Ser Leu Asp Cys Asn Gln Ser Leu Gly Pro Val
                85                  90                  95
Ser Thr Gly Asp Val Pro Thr His Ile Ala Ser Ser Ala Thr Ser Ala
            100                 105                 110
Pro Leu Pro Phe His Asp Cys Asn Asp Val Gly Gly His Gly Pro Phe
        115                 120                 125
Phe Asp Thr Ile Leu Ser Ser Phe Met Asp Pro Thr Trp Gly Pro Leu
    130                 135                 140
Pro Asn Tyr Asp Tyr Val Ala Thr Ala Ala Gln Ser Leu Met Lys Glu
145                 150                 155                 160
Glu His His Gln His Pro Ser Ala Phe Phe Arg Asn Met Asp Ser Thr
                165                 170                 175
Gln Ser Ser Leu Ser Pro Gly Ser Ser Gly Asp Val Ser Trp Leu Ala
            180                 185                 190
Pro Asp Met Met Gly Leu His Glu Val Lys Ala Val Arg Ser Ala Ile
        195                 200                 205
Val Gln His Asp Glu Lys Gly His Ser Thr Asn Glu Arg Pro Phe Ser
    210                 215                 220
Met Gly Asn Glu Trp Ala Trp Asp Ser Ser Ser Asn Gly Asn Gly Phe
225                 230                 235                 240
Ser Ser His Ala Ser Val Ser Asp Tyr Ala Ala Gly Lys Pro Thr Ala
                245                 250                 255
Pro Gly Gln Phe Val Ala Ser Gly Asp Asp Gln Lys His Arg Ala Pro
            260                 265                 270
Pro Glu Ala Leu Ile Glu Pro Leu Arg Gln Arg Gly Ala Glu Asp Thr
        275                 280                 285
Leu Phe Met His Tyr Leu Asp Arg Val Phe Tyr Ile Gln Phe Pro Phe
```

```
    290                 295                 300
Tyr Leu Ser Arg Asn Pro Arg Gly Arg Ala Cys Leu Phe Ser Ile Ile
305                 310                 315                 320
Arg Met Val Lys Pro Ala Tyr Leu Ala Thr Leu Ala Leu Gly Glu Arg
                325                 330                 335
Asp Leu Leu Ser Phe His Pro Gln Gln Gly Asp Val Ala Ile Ser Leu
            340                 345                 350
Thr Gln Leu Arg Ala Asn Gly Gly Tyr His Asp Leu Ala Ala Gln Ala
        355                 360                 365
Thr Gln Arg Leu Leu Gln Glu Ser His Thr Trp Asn Arg Ser Ala Tyr
    370                 375                 380
Met Val His Asn Ile Glu Ser Leu Ala Ser Ile Leu Gln Leu Leu Phe
385                 390                 395                 400
Trp Glu Val Cys His Leu His
                405
```

<210> 34405
<211> 142
<212> PRT
<213> A.fumigatus

<400> 34405

```
Thr Gln Asn Lys Arg Gly Gln Gly Arg Ser Gly Ser Asn Ser Ser Asn
1               5                   10                  15
Asn Ala Ser Gly Met Ser Phe Met Glu Ala Ile Phe Leu Asp Asp Gly
            20                  25                  30
Leu Ser Glu Glu Asp Lys Lys Val Lys Ser Glu Ala Ala Glu Ile Leu
        35                  40                  45
Thr Gly Leu Val Gly Asn Ser Ala Val Val Tyr Asp Leu Thr Ser Ala
    50                  55                  60
Ser Thr Pro Thr Ala Ser Ser Ala Ser Ile Thr Ser Met Lys Met Glu
65                  70                  75                  80
Asp Ala Ala Glu Ser Phe Ser Ser Ala Phe Gly Asp Ala Val Ile Gln
                85                  90                  95
Glu Gly Arg Gly Ile Gly His Val Thr Asn Gly Asp Ile Asp Val Pro
            100                 105                 110
Ala Ile Glu His Asp Gly Phe Asp Met Ala Gly Leu Tyr Phe His Gly
        115                 120                 125
His Gly Gly Tyr Gly Met Asp Asp Ile Tyr Gly Gly Ala Ala
    130                 135                 140
```

<210> 34406
<211> 254
<212> PRT
<213> A.fumigatus

<400> 34406

```
Ser Ser Ser Val Leu Gly Gly Phe Leu His Ala Leu Met Leu Ser Ala
1               5                   10                  15
Ala Lys Lys Phe Ile Glu Thr Glu Leu Gly Asp Gly Arg Phe Pro Asp
            20                  25                  30
Pro Val His Ala Phe Val Gln Phe Leu Ser Met Val Pro Pro Gly Pro
        35                  40                  45
Val Ser Ile Thr Cys Lys Phe Leu Arg Val Ser Lys Arg Gln Cys Val
    50                  55                  60
Val Asn Val Glu Leu Val Arg Ser Ser Ala Ala Leu Trp Lys Lys Pro
```

65 70 75 80
Glu Leu Pro Ala Thr Val Gly Ile Phe Thr Tyr Gly Asp Leu Ser Lys
85 90 95
Glu Arg Gly Leu Ser Gln Ala Ser Asp Pro Ala Leu Arg Ile Pro Val
100 105 110
Pro Pro Arg Glu Thr Glu Cys Val Thr Ile Asp Asp Pro Val Val Asp
115 120 125
Ser Thr Pro Val Thr Arg Lys Leu His Trp Leu Ala Pro Arg Ser Ala
130 135 140
Asn Gly Leu Trp Gly His Arg Leu Gly Gly His Asn Arg Glu Val Trp
145 150 155 160
Ile Ser Phe Arg Asp Gly Ser Lys Ile Ser Asp Cys Leu His Leu Ala
165 170 175
Leu Leu Ser Asp Met Val Ser Pro His Gly Ile Tyr His Pro Val Leu
180 185 190
Lys Ala Asp Gln Leu Thr Gln Thr Ala Ala Ser Ala Cys Arg Asn Pro
195 200 205
Pro Thr Arg Leu Leu Gln Pro Leu Arg Thr Ile His Ala Leu His Phe
210 215 220
Arg Gly Val Gln Ala Thr Ala Arg Pro Val His Thr Val Gly Asp Asp
225 230 235 240
Pro Val Glu Phe Ala His Gly Val Gln Trp Pro Leu Arg Cys
245 250

<210> 34407
<211> 450
<212> PRT
<213> A.fumigatus

<400> 34407
Ala Gly Pro Ser Ser Pro Val Val Lys Thr Leu Gly Gln Ser Val Ser
1 5 10 15
Val Asp Ser Ile Arg Gln Arg Ala Tyr Met Ala Val Gly Asn Ala Leu
20 25 30
Asn Glu Val Asp Leu Glu Thr Leu Gln Val Ile Ser Gln Gln Arg Tyr
35 40 45
Pro Trp Ser Ile Phe Ala Leu Ser Gln Glu Thr Asp Tyr Ser Val Pro
50 55 60
Leu Thr Val Ala Thr Thr Leu Ser Ile His Ile His Asp Ser Arg Leu
65 70 75 80
Ser Ala Ser Glu Glu Glu Ala Ala Ile Asn Leu Arg Cys Glu Glu Pro
85 90 95
Val Thr Ala Leu Val Pro Asp Ser Gln Val Tyr Ala Arg Pro Asp Ser
100 105 110
Pro Leu Leu Gln Leu Gln Pro Asp Gly Arg Pro Pro Tyr Arg Ile Arg
115 120 125
Ser Pro Asp Pro Ser Gln Lys Gly Ala Asp Tyr Ala Pro Leu Phe Gln
130 135 140
Pro Gly Pro Leu Ser Leu Leu His Pro Pro Ala Pro His Val Asn Thr
145 150 155 160
Ile Leu Leu Ala Gly Arg Phe Pro Ser Ile Leu Gln Tyr Asp Arg Arg
165 170 175
Phe Phe Pro Arg Leu Gln Asn Thr Val His Ser Gly Gly Arg Leu Cys
180 185 190
Gly Leu Thr Ser Met Pro Ala Pro His Phe Pro Val Ser Ser Gly Ser
195 200 205

```
Thr Tyr Pro His Ser His Lys Val Val Ala Cys Gly Glu Tyr Asn Gly
    210                 215                 220
Lys Gly Ser Leu Glu Leu Tyr Glu Leu Thr Pro Ser Ser Leu Asn Ser
225                 230                 235                 240
Gly Asp Ser Pro Ser Glu Val Thr Ser Asn Met Asn Ser Val Cys Gln
                245                 250                 255
Asn Arg Gln Ser Ala Ala Lys Ser Lys Val Leu Ser Val Glu Ser His
            260                 265                 270
Gly Thr Arg Ile Ala Tyr Ser Asp Ala Glu Gly Asn Ile Lys Trp Val
        275                 280                 285
Glu Arg Asp Gly Arg Ile Asp Val Arg Cys Phe Asn Ile Asn Ser Tyr
    290                 295                 300
Leu Gln Gln Ala Arg Ser Gln Asn Asn Arg Gln Ser Ser Leu Gln Thr
305                 310                 315                 320
Ser Asp Ala Phe Ala Gly Asp Gly Asp Glu Glu Gln Glu Glu Glu Gly
                325                 330                 335
Ala Ser Gly Leu Trp Arg Ser Val Phe Arg Ser Gln Thr Asp Gly Glu
            340                 345                 350
Val Ala Arg Lys Ile Leu Pro Thr Gly Gly Asn Leu Thr Gly Asp Glu
        355                 360                 365
Leu Leu Val Trp Thr Gly Glu Gln Val Gly Arg Val Val Leu Ser Thr
    370                 375                 380
Ser Ser Gly Asp Asn Gln Gly Glu Glu Asp Asp Asp Asp Glu Met Ser
385                 390                 395                 400
Ile Asp Gly Asp Leu Asp Asp Ser Thr Arg Glu Glu Leu Arg Ser Arg
                405                 410                 415
Arg Arg Glu His Gln Arg Gln Glu Arg Glu Tyr Ala Arg Arg Met Arg
            420                 425                 430
Arg Ala Leu Glu Arg Gln Ala Asp Glu Val Arg Arg Met Arg Gly Phe
        435                 440                 445
Gly Leu
    450

<210> 34408
<211> 208
<212> PRT
<213> A.fumigatus

<400> 34408
Lys Ile Asp Asp Asp Gln Glu Ser Ser Tyr His Met Glu Gln Ser Arg
1                   5                   10                  15
Ser Ser Pro Lys Pro Val Ala Arg Arg Arg Arg Pro Pro Leu Ser Cys
            20                  25                  30
Thr Val Cys Arg Arg Arg Lys Leu Lys Cys Asp Arg Glu Leu Pro Cys
        35                  40                  45
Gly Gln Cys Thr Lys Ser Lys Thr Pro Asp Gln Cys Ile Tyr Val Gly
    50                  55                  60
Pro Gln Ala Gly Ser Leu Ser Ser Val Arg Arg Ala Glu Ser Arg Asp
65                  70                  75                  80
Thr Thr Ala Asn Asp Arg Thr Arg Ala Ser Thr Asp Cys Gly Ser Pro
                85                  90                  95
Val Tyr Asn Gly Val Tyr Val Phe Asp Ser Lys His Gln Arg Phe Pro
            100                 105                 110
Thr Arg Val Thr Lys Pro Lys Ser His Ser Asp Glu Val Gln Glu Leu
        115                 120                 125
Arg Thr Arg Val Leu Thr Leu Glu Asn Ala Leu Ala Lys Ala Ser Ser
```

```
    130                 135                 140
Ile Gln Thr Pro Asp Thr Leu Gly Thr Val Pro Ser Ile Val Ser Glu
145                 150                 155                 160
Leu Gly Pro Arg Thr Ala Gly Asp Glu His Tyr Ile Ser Glu Asp Ile
                165                 170                 175
Arg Ser Leu Pro Cys Ala Phe Phe Arg Gly Lys Lys Ser Asn Thr Arg
            180                 185                 190
Phe Cys Gly Arg Ser His Ser Phe Leu Ala Leu Ser Phe Val Ser Cys
        195                 200                 205

<210> 34409
<211> 577
<212> PRT
<213> A.fumigatus

<400> 34409
Phe Arg Asp Val Gly Asp Phe Leu Arg Gln Arg Lys Ser Lys His Lys
1               5                   10                  15
Lys Asp Ser Val Tyr Gly Ser Leu Lys Lys Ile Gln Lys Glu Met Trp
            20                  25                  30
Leu Lys Gln Arg Gln Glu Gln Gln Gln Arg Val Arg Gln Glu Leu Val
        35                  40                  45
Ser Ser Phe Val Asp Leu Leu Pro Pro Arg Arg Val Ala Asp Lys Leu
    50                  55                  60
Val Gln Leu Tyr Leu Ser Asn Phe Glu Thr Thr His Arg Ile Leu His
65                  70                  75                  80
Ile Pro Thr Phe Leu Lys Gln Tyr Glu Glu Tyr Trp Ile Ala Pro Gln
                85                  90                  95
His Pro Asp Met Val Phe Leu Ala Lys Leu Leu Leu Leu Met Ala Ala
            100                 105                 110
Ser Ser Cys Phe Tyr Gly Pro Thr Lys Lys Ile Asn Asp Lys Asp Thr
        115                 120                 125
Leu Ala Ser Thr Ala Ile His Trp Ile Glu Ala Val Gln Thr Trp Ser
    130                 135                 140
Ala Thr Thr Ile Gly Thr Arg Asn Thr Asn Phe Asp Met Leu Gln Ile
145                 150                 155                 160
His Cys Leu Leu Leu Ile Ala Arg Gln Ala Ile Ala Ser Asp Gly Asp
                165                 170                 175
Thr Ile Trp Ile Ser Ser Gly Ser Leu Ile Arg Leu Ala Met Ala Met
            180                 185                 190
Gly Leu His Arg Asn Pro Leu Arg Phe Gln Lys Leu Ser Arg Phe Trp
        195                 200                 205
Ala Glu Met Arg Arg Arg Leu Trp Ala Thr Ile Leu Glu Leu Asp Leu
    210                 215                 220
Gln Ser Ser Met Asp Gly Gly Met Pro Pro Ala Ile Asp Leu Glu Glu
225                 230                 235                 240
Tyr Asp Cys Asp Pro Pro Ser Asn Tyr Asp Asp Ala Asp Leu Val Glu
                245                 250                 255
Ser Met Thr Glu Asp Pro Pro Pro Lys Asp Pro Asp Ile Val Thr Arg
            260                 265                 270
Ser Ser Phe Gln Val Leu Leu Ser Arg Ser Leu Pro Val Arg Val His
        275                 280                 285
Ile Ala Lys Leu Val Asn Arg Leu Arg Phe Thr Ile Ser Tyr Asp Glu
    290                 295                 300
Ala Leu Leu Leu Ser Glu Gln Leu Met Arg Ser Leu Asn Asp Ala Leu
305                 310                 315                 320
```

```
Glu Val Phe Pro Ser Asp Gly Tyr Pro Ser His Ile Pro Gly Val Glu
                325                 330                 335
Asn Pro Ala Phe Thr Lys Ser Tyr Phe Ile Phe Leu Ile Arg Arg His
            340                 345                 350
Leu Leu Ala Leu His Arg Pro Phe Cys Leu Ser Ile Met Arg Thr Pro
        355                 360                 365
Lys Phe Ser Tyr Ser Arg Lys Ile Cys Leu Asp Ser Ala Leu Asp Ile
    370                 375                 380
Leu Ser Leu Leu Glu Pro Ser Leu Asp Ile Ala Glu Thr Glu Pro Gln
385                 390                 395                 400
Pro His Leu Gly His Leu Thr Gly Gly Met Phe Arg Glu Glu Leu Leu
                405                 410                 415
Asn Ala Ala Val Met Val Cys Val Glu Leu Val Leu Gln Ala Asp Glu
            420                 425                 430
Tyr Ser Arg Ser Lys Ser Met Leu Pro Gly Gln Ser Ser Val Leu Ser
        435                 440                 445
Ser Leu Asn Asp Met Glu Glu Ser Gln Gln Ala Val Leu Val Arg Ala
    450                 455                 460
Ile Glu Asn Thr Leu Asn Val Phe Gly Ser Arg Ile Ala Pro Gly Gly
465                 470                 475                 480
Arg Gly Cys Lys Pro Tyr Phe Phe Leu Ser Leu Thr Leu Ala Ser Val
                485                 490                 495
Lys Ala Arg Leu Asn Gly Glu Asp Pro Phe Val Ala Met Asp Gln Val
            500                 505                 510
Val Thr Asn Val Ile Arg Asp Tyr His Leu Leu Met Ser Gly Met Pro
        515                 520                 525
Trp Ala Asp Val Arg Lys Gln Asp Glu Asn Ser Thr Lys Asp Val Ser
    530                 535                 540
Asp Cys Arg Phe Ile Thr Gln Arg Leu Phe Thr Asp Thr Gln Leu Asp
545                 550                 555                 560
Gln Tyr Ser Tyr Thr Trp Ala His Cys Arg Tyr Ala Val Arg Ser Ala
                565                 570                 575
Leu
```

<210> 34410
<211> 253
<212> PRT
<213> A.fumigatus

<400> 34410

```
Arg Leu Gln Arg Asp Gly Glu Leu Asp Ala Glu Lys Pro Glu Ala Gly
1               5                   10                  15
Lys Asp Met Leu Ser Arg Trp Met Ala Ile His Leu Ser Asp Pro Glu
            20                  25                  30
Lys Leu Thr Thr Arg Asp Val Ile Val His Leu Ser Thr Asn Val Phe
        35                  40                  45
Ala Gly Ser Asp Thr Thr Ala Ile Ala Leu Arg Ala Val Phe Tyr Phe
    50                  55                  60
Leu Leu Arg Asn Pro Ser Val Leu Ala Lys Leu Asn Ala Glu Ile Asp
65                  70                  75                  80
Asn Ala Asp Arg Glu Gly Lys Leu Ser Thr Pro Ile Ser Tyr Arg Glu
                85                  90                  95
Thr Met Asn His Leu Pro Tyr Leu Gln Ala Val Leu Lys Glu Ser Met
            100                 105                 110
Arg Leu His Pro Ser Val Gly Leu Ile Leu Glu Arg Glu Val Pro Lys
```

```
        115                 120                 125
Gly Gly Val Thr Ile Cys Asp Arg His Phe Pro Gly Gly Thr Ile Val
    130                 135                 140
Gly Ile Asn Ala Trp Val Leu His Arg Asp Ala Arg Val Phe Pro Asp
145                 150                 155                 160
Pro Asp Lys Phe Ile Pro Glu Arg Trp Ile Asp Ser Asp Pro Gln His
                165                 170                 175
Leu Lys Lys Met Asp Gln Ser Phe Phe Ala Phe Gly Ala Gly Ser Arg
            180                 185                 190
Thr Cys Ile Gly Lys Asn Ile Ser Leu Ile Glu Met His Lys Ile Ile
        195                 200                 205
Pro Gln Leu Leu Arg Glu Phe Glu Ile Arg Leu His Ser Pro Glu Lys
    210                 215                 220
Glu Trp Lys Thr Lys Asn Val Trp Phe Val Gln Gln Glu Gly Leu Val
225                 230                 235                 240
Cys Asp Leu Val Cys Arg Arg Asp Ala Lys Cys Tyr His
                245                 250
```

<210> 34411
<211> 83
<212> PRT
<213> A.fumigatus

<400> 34411

```
Leu Leu Tyr Leu Thr Arg Arg Glu Ile Ile Phe Leu Lys Thr Ile Phe
1               5                   10                  15
Ala Phe Cys Leu His Pro Leu Leu Pro Pro Phe Ser Gly Phe Gln Pro
            20                  25                  30
Asn Asn Thr Ser Thr His Ile Ser Ser Asn Asn Ile Ile Gly Asn Thr
        35                  40                  45
Arg Val Pro Leu Ala Gly Val Arg Lys Ile Cys Val Ser Gly Pro Gly
    50                  55                  60
Ser Gln Phe Pro Ser Glu Lys Pro Gly Ile Pro Leu Thr Ser Gly Ser
65                  70                  75                  80
Asn Trp Arg
```

<210> 34412
<211> 147
<212> PRT
<213> A.fumigatus

<400> 34412

```
Phe Leu Glu Gly Ile Phe Ala Val Trp Leu Leu Glu Arg Asp Thr Leu
1               5                   10                  15
Ile Val Val Gly His Ile Gly Thr Ala Ile Leu Leu Arg Glu Gly Ala
            20                  25                  30
Glu Trp Ser Ala Thr Gly Ser Leu Thr Gly Gly His Cys Leu Leu Lys
        35                  40                  45
Cys Ser Ser Cys Ala Thr Ala Lys Ala Ser Thr Ala Ser Glu Thr Ala
    50                  55                  60
Ser Cys Ser Glu Ala Thr Ser Ser Thr Gly Gly Gly Gly Gly Gly Ala
65                  70                  75                  80
Lys Ala Pro Ser Arg Phe Val Ala Glu Gln Ser Thr Thr Ser Cys Ser
                85                  90                  95
Ser Ala Ser Lys Ala Ser Ser Gly Ser Cys Ser Ala Cys Arg Thr Glu
```

```
            100                 105                 110
Ala Thr Lys Ser Ser Thr Ala Arg Gly Gly Ser Ser Ala Ala Glu Glu
        115                 120                 125
Thr Thr Thr Gly Cys Cys Ala Ser Ala Lys Thr Ala Ser Thr Ile Leu
    130                 135                 140
Ala Pro Glu
145
```

<210> 34413
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34413

```
Arg Pro Val Ser Leu Ile Arg Pro Leu Leu Pro Leu Asp Tyr Leu Ile
1               5                   10                  15
Leu Leu Lys Phe Phe Cys Phe Ser Ala Ala Leu Val Ser Ile Gly Cys
            20                  25                  30
Asp Asp Val Thr Arg His Ile Arg His Ala Ser His Pro Ile Tyr Ile
        35                  40                  45
Ala Arg Ala Gly Tyr Ser Arg Ser Ile Phe Pro Gln Gly Asn Lys Lys
    50                  55                  60
Gln Ser His Asn Leu
65
```

<210> 34414
<211> 83
<212> PRT
<213> A.fumigatus

<400> 34414

```
Ile Leu Asn Pro Gln Arg Thr Ser Ser Ile Ile Met Ser Phe Gly Gly
1               5                   10                  15
Phe Gly Gly Phe Gly Gln Asn Thr Gln Gln Ser Ser Gly Phe Gly Ala
            20                  25                  30
Gly Ser Gly Phe Gly Ser Thr Thr Ser Gly Gly Gly Arg Ser Cys Asp
        35                  40                  45
Pro Ser Leu Cys Cys Gly Ile Thr His Ile Pro Pro Val Ile Arg Asp
    50                  55                  60
Leu Leu Val Leu Pro Arg Leu Leu Gly Ile Ser Ile Gln Asp Tyr Ala
65                  70                  75                  80
Gly Ala Ser
```

<210> 34415
<211> 73
<212> PRT
<213> A.fumigatus

<400> 34415

```
Thr Ala Thr Gly Ser Pro Leu Asn Phe Leu Gly Cys Leu Pro Ser His
1               5                   10                  15
Phe Ala Leu Gly Ala Ala Phe Phe Leu Phe Phe Leu Thr Ser Ala Arg
            20                  25                  30
His Ile Phe Pro Ser Ile Pro Phe Pro Pro Gln Leu Leu Ala Ile Phe
        35                  40                  45
```

```
Pro Thr Pro Ile Ala Thr Ile Pro Leu Asp Thr Thr Leu Ser Gly Phe
    50                  55                  60
Asp Gly Leu Leu Gln Ser Val Leu Ser
65                  70
```

<210> 34416
<211> 561
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (330),(339),(345)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34416

```
Tyr Gly Ser Arg Val Leu Ser Cys Pro Gly Ser Leu Leu Pro Arg Ala
1               5                  10                  15
Ser Trp Asp Pro Cys Leu Arg Thr Asp Cys Phe Asn Pro Leu Cys Phe
            20                  25                  30
Ala Asn Phe Phe Phe Phe Phe Phe Phe Phe Phe Gln Lys Ala Ile His
        35                  40                  45
Leu Gln Val Leu Thr Trp Asp Ser Phe Leu Gly Phe Gly Thr Asn Thr
    50                  55                  60
Gln Thr Gln Gln Asn Ser Leu Phe Gly Gly Gln Asn Arg Thr Gly Gly
65                  70                  75                  80
Phe Gly Thr Gly Thr Thr Thr Gly Gly Ser Leu Phe Gly Gly Gly Thr
                85                  90                  95
Ser Thr Thr Gly Gly Thr Gly Phe Gly Gly Phe Gly Ser Thr Gly Thr
            100                 105                 110
Thr Gly Thr Thr Gly Gly Phe Gly Ser Thr Gly Thr Thr Gly Gly Gly
        115                 120                 125
Leu Phe Gly Asn Lys Pro Ala Gly Gly Phe Gly Thr Ser Thr Thr Thr
    130                 135                 140
Thr Gly Thr Thr Gly Gly Phe Gly Thr Gly Gly Gly Phe Gly Gly Gly
145                 150                 155                 160
Thr Gly Phe Gly Gly Gly Thr Gly Thr Ala Phe Gln Gln Ala Val Pro
                165                 170                 175
Pro Cys Glu Gly Thr Gly Ser Thr Pro Phe Ser Pro Phe Thr Glu Lys
            180                 185                 190
Asp Ser Ser Ser Asn Val Thr Asn His Tyr Gln Ser Ile Ser Phe Gln
        195                 200                 205
Gln Pro Tyr Ser Lys Tyr Ser Phe Glu Glu Leu Arg Leu Gly Asp Tyr
    210                 215                 220
Asn Gln Gly Arg Arg Phe Gly Asn Gly Ser Gly Gln Ala Gly Ala Phe
225                 230                 235                 240
Gly Thr Ser Ala Phe Gly Gly Ser Gly Phe Gly Ala Gln Pro Ser Ser
                245                 250                 255
Gly Phe Gly Ser Thr Ser Ser Pro Phe Gly Ala Ser Thr Ser Ala Pro
            260                 265                 270
Ser Gly Phe Gly Thr Thr Gln Thr Thr Gly Gly Phe Gly Ser Thr Ser
        275                 280                 285
Thr Asn Pro Leu Phe Gly Ala Ala Lys Pro Ala Thr Ser Leu Phe Gly
    290                 295                 300
Gly Gly Thr Ser Thr Thr Ser Gln Pro Ser Leu Phe Gly Gly Thr Thr
305                 310                 315                 320
```

```
Ala Thr Thr Gly Gly Phe Gly Ser Thr Xaa Thr Gly Thr Thr Gly Phe
                325                 330                 335
Gly Thr Xaa Thr Gly Thr Gly Gly Xaa Leu Phe Gly Gly Ser Thr Gln
            340                 345                 350
Gln Gln Ala Lys Pro Leu Phe Gly Gly Gly Thr Gly Thr Ala Thr Thr
        355                 360                 365
Gly Thr Gly Thr Gly Phe Arg Gly Phe Gly Thr Gln Asn Thr Ser Thr
    370                 375                 380
Ala Ser Pro Phe Gly Gly Thr Ala Ala Thr Ser Ser Pro Phe Gly Gly
385                 390                 395                 400
Gln Gln Gln Thr Gly Gly Thr Gly Ala Phe Gly Gly Phe Gly Gln Gln
                405                 410                 415
Asn Gln Ala Gln Asn Gln Thr Gln Asn Lys Gly Leu Phe Gly Gly Phe
            420                 425                 430
Gly Thr Thr Thr Gln Gln Gln Pro Ser Ser Gly Thr Gly Leu Phe Gly
        435                 440                 445
Gly Gly Thr Thr Gly Thr Thr Gly Thr Ser Leu Phe Gly Gln Asn Thr
    450                 455                 460
Gln Gln Pro Gln Gln Gln Thr Thr Gly Gly Gly Leu Phe Gly Gly Asn
465                 470                 475                 480
Thr Gln Gln Thr Gly Thr Ser Ser Leu Phe Gly Gly Asn Gln Gln Gln
                485                 490                 495
Gly Gln Lys Ser Leu Phe Gly Gly Gly Thr Thr Gly Thr Gly Thr Gly
            500                 505                 510
Thr Ser Ala Phe Gly Gly Phe Gly Gly Thr Gln Asn Gln Gln Thr Gly
        515                 520                 525
Thr Gly Gly Leu Phe Gly Gly Gly Gln Ala Gln Gln Gln Gln Lys Pro
    530                 535                 540
Ser Leu Phe Gly Gly Ser Thr Val Phe Thr Thr Gly Leu Glu Gly Ala
545                 550                 555                 560
Val
```

<210> 34417
<211> 193
<212> PRT
<213> A.fumigatus

<400> 34417

```
Leu Ile Phe Asn Lys Gly Val Asn Glu Ser Phe Glu Ser Ser Ser Ser
1               5                   10                  15
Gly Val Ala Lys Glu Thr Gly Arg Arg Leu Ala Ser Arg Ser Asp Ser
            20                  25                  30
Ser Leu Val Leu Ala Lys Cys Arg Thr Trp Gly Thr Leu Pro Asp His
        35                  40                  45
Leu Glu Ile Pro Asp Val Ser Ile Pro Val Asp Gly Lys Gly Lys Ser
    50                  55                  60
Ala Leu Ala Asp Ala Val Leu Pro Glu Thr Phe Thr Val Asp Ser Cys
65                  70                  75                  80
Lys Leu Gly Asp Glu Phe Val Asp Thr Ser Ile Ile Pro Gly Leu Arg
                85                  90                  95
Ser Lys Val Ile Gly Lys Gly Val Thr Ala Thr Val Lys Leu Met His
            100                 105                 110
Arg Lys Gly Thr Gly Lys Gln Gln Tyr Tyr Ala Val Lys Glu Phe Arg
        115                 120                 125
Arg Ser Arg Lys Glu Asn Leu Gln Ala Tyr Asp Arg Lys Val Lys Leu
```

```
    130                 135                 140
Glu Phe Ser Ile Ala Lys Asn Leu His His Pro Asn Val Val Glu Thr
145                 150                 155                 160
Ile Arg Leu Cys Ser His Ala Gly Arg Trp Ser His Val Met Glu Tyr
                165                 170                 175
Cys Ser Gln Gly Asp Leu Phe Thr Ile Val Gln Gln Arg Tyr Leu Tyr
            180                 185                 190
Phe
```

<210> 34418
<211> 90
<212> PRT
<213> A.fumigatus

<400> 34418

```
Trp Asn Thr Ala Val Lys Gly Thr Cys Leu Gln Ser Cys Asn Asn Asp
1               5                   10                  15
Ile Phe Thr Phe Glu Ser Gln Leu Cys Leu Phe Lys Gln Leu Phe Gln
            20                  25                  30
Gly Val Ala Tyr Leu His Ser Ile Gly Ile Ala His Arg Asp Ile Lys
        35                  40                  45
Leu Glu Asn Leu Leu Leu Thr Gln Asp Ser His Leu Lys Ile Thr Asp
    50                  55                  60
Phe Gly Cys Ala Lys Phe Phe Ser Glu Leu Arg Arg Asp Leu Arg Ser
65                  70                  75                  80
Ser Gln Arg Pro Gly Arg Ile Arg Met Gly
                85                  90
```

<210> 34419
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34419

```
Gly Arg Thr Ser Arg His His Asp Ile Met Leu Ala Phe Pro His Gln
1               5                   10                  15
Arg Tyr Met Thr Asn Tyr Ser Ala Tyr Ile Asp Pro Met Cys Glu His
            20                  25                  30
Ser Ala Ile Ser Val Ala Val Lys Glu Ala Leu Lys Ser Asp Ile Leu
        35                  40                  45
Leu Pro Asp Ser Met Lys His Gly Val Asp Arg Leu Ser Gln Arg Gly
    50                  55                  60
```

<210> 34420
<211> 109
<212> PRT
<213> A.fumigatus

<400> 34420

```
Gln Leu Leu Ser Ala Phe Asn Ala Ile Val Ser Ala Ser Val Val Leu
1               5                   10                  15
Leu Asp Ile Ala Tyr Gly Met Pro Ile Val Val Asn Cys Leu Arg Gly
            20                  25                  30
Arg Asn Met Leu Pro Glu Arg Pro Phe Val Leu Pro Asn Ile Val Gly
        35                  40                  45
```

```
Trp Ile Ala Asn Ala Val Ser Cys Phe Tyr Gly Ser Phe Arg Asp Glu
    50                  55                  60
Asn Ser Ser Val Ala Leu Gly Leu Pro Cys Leu His Phe Cys His His
65                  70                  75                  80
Cys Ala Leu Leu Val Pro Ser Arg Pro Pro Arg Ile Gly Gln Gln His
                85                  90                  95
Glu Tyr Val Leu Met His Cys Asn Ala Gly Leu Ser Ser
            100                 105
```

<210> 34421
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34421

```
Leu Thr Pro Leu His Leu Asp Tyr Cys Val Ala Ala Phe Gly Ile Ile
1               5                   10                  15
Ile Val Ile Ser Ala Ile Gln Trp Val Ile Asp Gly Arg Lys Asn Phe
            20                  25                  30
Thr Gly Pro Arg Thr Asp Met Asp Ile Leu Thr Gly Gln Leu Pro Val
        35                  40                  45
Gly His Tyr Pro Val Asp Ser Asn Ala Ala His Val Val Pro Gln Gly
    50                  55                  60
Lys
65
```

<210> 34422
<211> 91
<212> PRT
<213> A.fumigatus

<400> 34422

```
Val Pro Pro Gly Leu His Ala Phe Cys Asn His Phe His His Asp Asn
1               5                   10                  15
Lys Gln Pro Tyr Asp Leu Arg Phe Cys Lys Val Ile Thr Asp Gln Thr
            20                  25                  30
Ile Gly Leu Trp Ile Cys Ala Asp Lys Pro Ala Arg Asp Gly Gly Leu
        35                  40                  45
Pro Ala Ser Arg Phe Phe Ser Lys Val His Pro Lys Leu Lys Val Pro
    50                  55                  60
Leu Asn Ser Leu Tyr Leu Asn Leu Ala Leu Val Val Ile Phe Gly Cys
65                  70                  75                  80
Ile Phe Leu Gly Ser Thr Arg Leu Val Ala Ser
                85                  90
```

<210> 34423
<211> 925
<212> PRT
<213> A.fumigatus

<400> 34423

```
Asp Lys Leu Leu Leu Ala Pro Leu Phe Val Ala His Ile Tyr Lys His
1               5                   10                  15
Lys Asp Arg Glu Asp Tyr Ala Glu Asp Val Val Thr Ala Thr Gly Leu
            20                  25                  30
Lys Val Arg Leu Asp Ser Leu Lys Leu Asp Val His Gln Arg Arg Glu
```

```
        35                  40                  45
Gln Ile Lys Thr Val Ala Lys Gly Arg Leu Lys Gln Thr Lys Thr Ser
    50                  55                  60
Ala Met Arg Ile Asn Gln Gly Gln Leu Asp Leu Gln Ala Ala Asp Phe
65                  70                  75                  80
Arg Ala Val Ser Val Ser Ile Glu Gly Thr Asn Leu Asp Asp Ile Gln
                85                  90                  95
Lys Asn Arg Asp Asp Ile Ile Ser Ser Phe Gln Gln Pro Val Pro Ser
            100                 105                 110
Val Asp Leu Ser Arg Phe Thr Ile Pro Asp Gln Asn Leu Asp Trp Val
        115                 120                 125
Asp Met Asp Asp Phe Val Glu Leu Asp Trp Ile Leu Pro Gln Glu Ser
    130                 135                 140
Asn Pro Lys Thr His Ile Leu Pro Leu Ala Phe Thr Pro Arg Phe Thr
145                 150                 155                 160
Tyr Phe Arg Gln Thr Asp His Gly Asp Ile Thr Pro Asp Gln Thr Gly
                165                 170                 175
Tyr Ser Pro Phe Gly His Glu Pro Thr His Asp Cys Val Met Ser Glu
            180                 185                 190
Ser Asn Glu Pro Arg Arg Val Gln Met Glu Leu Ile Arg Asp Arg Leu
        195                 200                 205
Ala Thr Val Glu Ala Gln Ile Arg Asn Phe Asp Arg Gln Ile Gly Glu
    210                 215                 220
Gln Glu Leu Arg Met Ala Lys Asp Val Asp His His Ser Asp Leu Lys
225                 230                 235                 240
Lys Glu His Asp Asp Phe Ile Arg Gln Ala Glu Ser Leu Ala Arg Arg
                245                 250                 255
Arg Ala Phe Leu Val Thr Gly Leu Arg Arg Leu Glu Ala Gln Leu Ser
            260                 265                 270
Arg Glu Glu Lys Thr Pro Met Asp Lys Lys Pro Glu Asn Phe Ala Ser
        275                 280                 285
Asp Ser Ser Phe Arg Leu Gly Ala Asp Ser Asp Ser Thr Asn Asp Gly
    290                 295                 300
Lys Glu Ala Asp Leu Asp Gly Leu Tyr Ser Ser His Asn Asp Glu Tyr
305                 310                 315                 320
Ala Ser Asp Phe Asn Asn Arg Phe Leu Ile His Asn Met Gln Leu Lys
                325                 330                 335
Trp Asn Asn Ser Leu Arg Asn Ile Ile Leu Arg Tyr Ile His Gln Val
            340                 345                 350
Ser Gln Arg Arg Gly Phe Val Tyr Tyr Met Ser Arg Arg Ala Val Lys
        355                 360                 365
Phe Ile Leu Asp Ile Val Glu Glu Gln Asn Lys Asn Asn Gln Arg Arg
    370                 375                 380
Ala Lys Met Phe Lys Asp Ser Ser Arg Arg Pro Ser Asn Ala Asp Thr
385                 390                 395                 400
Asp Glu Asp Ser Val Glu Asp Arg Ile Glu Gln Leu Leu Asn Asp Thr
                405                 410                 415
Lys Arg Phe Val Ser Ala Glu Glu Gln Glu Ser Val Asp Ser Val Thr
            420                 425                 430
Gln Thr Gln Pro Asp Ser Asp Ser Ser Ser Glu Asn Ile Ser Pro Glu
        435                 440                 445
Phe Thr Pro Gln Asn Ser Tyr Tyr Leu Arg Leu Ile Ala Pro Gln Ile
    450                 455                 460
Gln Leu Gln Ser Ala Lys Asn Gln Lys Ser Val Leu Leu Val Ala Ala
465                 470                 475                 480
Ser Gly Met Gln Leu Lys Val Ile Ser Ile Met Asp Lys Glu Arg Val
```

```
                485                 490                 495
Ser Asp Asp Val Ser Gly Leu Val Gln Arg Arg Phe Ser Leu Asp Met
            500                 505                 510
Asp Gly Ala Gln Phe Phe Val Ala Thr Gln Lys Asn Leu Met Asn His
        515                 520                 525
Leu Gln Phe Tyr Ala Gly Asn Lys Tyr Gly Asn Ala Pro Gly Ser Ala
    530                 535                 540
Trp Pro Pro Trp Val Thr Leu Glu Ala Met Phe Asp Phe Glu Leu Asn
545                 550                 555                 560
Pro Phe Gly Phe Ser Arg Ile Ile Gln Lys Thr Ser Ala Ser Leu Arg
                565                 570                 575
Tyr Asp Lys Tyr Asn Asn Leu Arg Leu Lys Tyr Asn Glu Glu Val Ala
            580                 585                 590
Lys Gly Gln Ser Lys His Val Gly Pro Asp Gly Gln Glu Thr Arg Met
        595                 600                 605
Asp His Ile Ser Val Asp Phe Pro His Phe Arg Ala Ile Cys Asp Ser
    610                 615                 620
Ala Glu Tyr Tyr Ser Met Tyr Ile Ile Val Leu Asp Leu Leu Leu Tyr
625                 630                 635                 640
Ser Glu Pro Leu Glu Lys Val Arg Asn Glu Arg Leu Glu Arg Ile Leu
                645                 650                 655
Leu Thr Ser Asp Phe Ser Asp Leu Arg Gly Ala Pro Glu Met Val Phe
            660                 665                 670
Lys Leu Gln Ser Arg Ile Arg Gln Leu Glu Glu Ile Lys Glu His Phe
        675                 680                 685
Gln Ile Asn Ala Lys Tyr Leu Asp Lys His Gly Trp Glu Asp Arg Leu
    690                 695                 700
Val Leu Glu Lys Asp Leu Ala Gln Cys Glu Asp Glu Leu Phe Phe Leu
705                 710                 715                 720
Met Lys Ala Ile Thr Thr Ser Gln Arg Arg Ile Glu Pro Thr Thr Ser
                725                 730                 735
Gly Ala Asn Gly Ile Leu Arg Trp Lys Ile Ser Ala Ser Glu Val Val
            740                 745                 750
Trp His Leu Met Met Asp Gln Cys Gln Pro Leu Val Glu Phe Gln Leu
        755                 760                 765
Arg Asn Ala Glu Tyr Asp Arg Thr Asp Asn Ser Asp Gly Ser Asn His
    770                 775                 780
Asn Leu Val Ala Val Glu Arg Ile Tyr Gly Leu Asn Leu Leu Pro Asp
785                 790                 795                 800
Ala Ile Tyr Pro Gln Ile Ile Val Pro Tyr Leu Asp Gln Ala Lys Asn
                805                 810                 815
Leu Asp Glu Pro Asp Glu Asn Met Ile Arg Val Lys Trp His Met Leu
            820                 825                 830
Glu Ala Val Gly Gly Ile Pro Val Leu Asp Asp Phe Glu Val Ser Leu
        835                 840                 845
Phe Pro Leu Lys Ile Gln Leu Glu Arg Glu Leu Gly Gln Arg Val Phe
    850                 855                 860
Glu Tyr Ile Phe Pro Asn Val Arg Ser Asn Gly Phe Asp Gly Gly Phe
865                 870                 875                 880
Ser Pro Phe Met Ile Lys Asn Met Lys Pro Leu Asp Val Ser Glu Ser
                885                 890                 895
Glu Glu Asp Asn Asp Ser Pro Ser Pro Pro Pro Ser Ala Gln Gly Ala
            900                 905                 910
Ser Asp Ile Pro Thr Glu Val Phe Asn Gly Ala Arg Arg
        915                 920                 925
```

<210> 34424
<211> 465
<212> PRT
<213> A.fumigatus

<400> 34424

```
Arg Ser Trp Arg Gly Arg Ile Gly Gly Ser Thr Leu Asn Asn Gly Asp
1               5                  10                  15
Ser Ser Arg Pro Ala Thr Met Ser Ser Val Thr Asn Pro Lys Pro Lys
            20                  25                  30
Gln Ser Glu Leu Leu Arg Glu Leu Glu Lys Phe Ser Arg Tyr Lys Val
        35                  40                  45
Glu Gln Leu Val Leu Ile Lys Glu Ala Lys Leu Leu Ile Ser Leu Ser
    50                  55                  60
Gly Gly Tyr Val Ser Ile His Asp Leu Gln Thr Tyr Glu Phe Gln Glu
65                  70                  75                  80
Gln Leu Thr Met Thr Arg Gly Ala Thr Thr Phe Ala Val Thr Ser Asn
                85                  90                  95
Ile Val His Asp Pro Glu Thr Gly Val Pro Ser Ile Val Ser Arg Leu
            100                 105                 110
Ala Val Ala Val Lys Arg Lys Ile Leu Leu Trp Thr Trp Arg Asp Met
        115                 120                 125
Glu Leu Glu Asn Asp Thr Ala Glu Met Ser Leu Ala Ser Gly Ile Lys
    130                 135                 140
Thr Leu Thr Trp Val Ser Gly Thr Arg Ile Val Ala Gly Leu Ser Ser
145                 150                 155                 160
Asn Phe Val Met Val Asp Val Glu Thr Thr Asn Val Met Asp Leu Val
                165                 170                 175
Gly Pro Gly Ser Ile Gly Gly Leu Pro Gly Gln Glu Thr Gly Arg Leu
            180                 185                 190
Ala Gly Val Gly Val Ala Ser Met Ser Tyr Ile Gly Ile Gly Gly Thr
        195                 200                 205
Ala Pro Lys Pro Leu Ala Thr Arg Leu Ser Glu Gly Gln Val Leu Leu
    210                 215                 220
Ala Lys Asp Ile Asn Thr Gln Phe Ile Asp Ile Asp Gly Asn Ser Leu
225                 230                 235                 240
Gly Arg Arg Gln Ile Pro Trp Ser His Ala Pro Ser Asp Ile Gly Tyr
                245                 250                 255
Ser Tyr Pro Phe Leu Leu Ala Leu His Asp Ser Ser Lys Gly Val Leu
            260                 265                 270
Glu Val Arg Asn Pro Glu Thr Leu Ser Leu Leu Gln Ser Ile Pro Leu
        275                 280                 285
Pro Ser Ala Ser Leu Leu His Ile Pro Gln Pro Ser Ile Ser Leu Ala
    290                 295                 300
His Ala Gly Lys Gly Phe Leu Val Ala Ser Asp Arg Thr Ile Trp Arg
305                 310                 315                 320
Met Glu Ala Leu Ser Tyr Asp Thr Gln Ile Asp Ala Leu Val Glu Lys
                325                 330                 335
Gly Tyr Leu Asp Glu Ala Ile Ser Leu Ala Asn Met Leu Glu Asp Ala
            340                 345                 350
Leu Leu Thr Asp Lys Tyr Gly Arg Leu Arg Ser Ile Lys Leu Asp Lys
        355                 360                 365
Ala Gln Thr Leu Phe Ser Leu Gln Lys Tyr Leu Glu Ser Met Glu Leu
    370                 375                 380
Phe Thr Glu Ile Ser Ala Pro Pro Glu Thr Val Ile Arg Leu Tyr Pro
385                 390                 395                 400
```

```
Arg Val Ile Ala Gly Asp Leu Ser Ser Ile Pro Glu Glu Gln Glu Gly
                405                 410                 415
Ser Glu Ala Gly Thr Thr Asp Ser Gln Pro Arg Pro Glu Gln Glu Gln
            420                 425                 430
Lys Gln Asp Thr Val Pro Ala Thr Ser Asp Asp Ala Ala Leu Ala Arg
        435                 440                 445
Thr Pro Pro Pro Tyr Thr Leu Gly Glu Val Pro Pro Ser Asn Glu Asp
    450                 455                 460
Arg
465
```

<210> 34425
<211> 395
<212> PRT
<213> A.fumigatus

<400> 34425

```
Arg Ala Ile Phe Arg Pro Phe Gln Lys Ser Lys Lys Asp Arg Arg Pro
1               5                  10                  15
Val Arg Arg Ile Val Ser Gln Asp Pro Asn Arg Ser Lys Ser Lys Thr
            20                  25                  30
Gln Ser Leu Gln Arg Arg Met Thr Leu Leu Leu Pro Glu Arg Pro Arg
        35                  40                  45
His Thr Pro Ser Val Arg Ser Leu Leu Arg Thr Lys Thr Asp Asp Thr
    50                  55                  60
Ser Asp Ala Gly Ser Val Arg Ser Lys Leu Met Glu Asp Ala Arg Ile
65                  70                  75                  80
Asp Lys Arg Leu Glu Gly Lys Asp Leu Lys Leu Ala Val Arg Glu Leu
                85                  90                  95
Gln Ala Tyr Leu Ala Asp Val Arg Arg Arg Phe Gln Arg Phe Leu Asn
            100                 105                 110
Pro Asp Gly Ser Leu Lys Met Glu Pro Thr Ala Asp Ala Val Lys Asp
        115                 120                 125
Glu Phe Thr Glu Ser Val Met Lys Leu Leu Glu Met Asp Lys Asp Gln
    130                 135                 140
Gly Glu Asp Gly Phe Gly Glu Arg Leu Arg Ala Lys Ala Lys Leu Val
145                 150                 155                 160
Asp Thr Thr Leu Phe Arg Val Tyr Met Tyr Ala Thr Pro Ser Leu Ala
                165                 170                 175
Gly Ser Leu Phe Arg Ile Ala Asn Phe Cys Asp Pro Asp Val Val Ile
            180                 185                 190
Glu Lys Leu Glu Glu Ser Gly Arg Gln Asn Asp Leu Ile Asp Phe Leu
        195                 200                 205
Tyr Gly Lys Lys Met His Arg Gln Ala Val Glu Leu Leu Lys Lys Phe
    210                 215                 220
Gly Gln Ala Glu Val Asp Glu Glu Thr Ala Thr Gln Leu Gln Gly Pro
225                 230                 235                 240
Lys Arg Thr Val Gly Tyr Leu Gln Asn Leu Ser Pro Glu His Ile Asp
                245                 250                 255
Leu Ile Ile Glu Phe Ala Glu Trp Pro Val Arg Glu Lys Pro Asp Leu
            260                 265                 270
Gly Met Glu Ile Phe Leu Ala Asp Thr Glu Asn Ala Glu Thr Leu Pro
        275                 280                 285
Arg Asp Gln Val Leu Asn Phe Leu Lys Gly Ile Asp Val Arg Leu Ala
    290                 295                 300
Val Arg Tyr Leu Glu His Val Ile Gly Glu Leu Asn Asp Met Thr Pro
```

305 310 315 320
Asp Leu His Gln Asn Leu Leu Ser Leu Tyr Leu Asp Arg Leu Glu Glu
325 330 335
Gln Lys Asn Lys Glu Trp Glu Phe Ala Ser Glu Glu Asp Arg Ala Asp
340 345 350
Trp Arg Asn Lys Leu Leu Asp Met Leu Arg Thr Ser Ser Gln Tyr Ser
355 360 365
Pro Ala Lys Ile Leu Asp Arg Leu Ser Arg Asp Gly Lys Ser Arg Ala
370 375 380
Gly Lys Pro Leu Ala Lys Ala His Ile Leu Ile
385 390 395

<210> 34426
<211> 167
<212> PRT
<213> A.fumigatus

<400> 34426
Asn Leu Val Arg Arg Tyr Cys Asn His Leu His Lys Ile Glu Asp Ala
1 5 10 15
Thr Ser Thr Glu Thr Thr Ala Ile Gln Asn Ile Ala Leu Pro Asp Phe
20 25 30
Glu Gly Glu Lys Pro Ser Ile Tyr Leu Thr Leu Leu Ser Leu Tyr Leu
35 40 45
Ser Pro Pro His Gly Tyr Lys Pro Arg Tyr Gly Pro Ala Leu Glu Val
50 55 60
Leu Ala Lys His Gly Ser Arg Leu Pro Pro Asn Ser Ala Leu Glu Leu
65 70 75 80
Ile Pro Glu Thr Leu Pro Val Lys Glu Leu Gln Phe Tyr Phe Lys Gly
85 90 95
Arg Met Arg Ala Ala Thr Ser Ile Leu Asn Glu Ser Lys Ile Val Ala
100 105 110
Asn Leu Gln Lys Ser Gln Ser Ile Lys Thr Gln Ala Gln Leu Leu Val
115 120 125
Gly Glu Gly Gly Asp Met Lys Ala Ser Arg Ser Arg His Val Thr Ile
130 135 140
Thr Glu Glu Arg Ile Cys Gly Ile Cys His Lys Arg Leu Gly Gly Ser
145 150 155 160
Val Ile Asp Val Phe Pro Glu
165

<210> 34427
<211> 67
<212> PRT
<213> A.fumigatus

<400> 34427
His Val Gln Gln Leu Val Pro Pro Ile Gly Pro Val Phe Phe Thr Gly
1 5 10 15
Glu Leu Pro Phe Phe Val Leu Leu Phe Leu Gln Ala Ile Gln Ile Lys
20 25 30
Ala Glu Lys Val Leu Met Glu Ile Arg Ser His Val Ile Gln Phe Ser
35 40 45
Asn Asp Met Leu Lys Ile Pro Asn Ser Gln Thr Asp Ile Asn Pro Phe
50 55 60
Gln Lys Ile

65

<210> 34428
<211> 109
<212> PRT
<213> A.fumigatus

<400> 34428
His Phe Tyr Arg Arg Ser Pro His Leu Asn Arg Arg Leu Pro Tyr Pro
1 5 10 15
Ser Leu Arg Thr Pro Leu Trp Ser Cys Gly Ser Glu Arg Tyr Arg Lys
20 25 30
Val Tyr Ser Leu Ala Cys Pro Glu Ser Pro Arg Gly Ser His Ser Gln
35 40 45
Pro His Leu Asn Ser Thr Arg Arg Ala Arg Gly Ala Leu Met Lys Gln
50 55 60
Thr Leu Pro Leu Ala Val Val Ala Asp Ile Ser Phe Gln Ile Thr Gly
65 70 75 80
Asp Asp Thr Pro Ala Ile Gln Ala Val Leu Asp Ala Asp Val Trp Arg
85 90 95
Lys Arg Leu Leu Ala Glu Gln Glu Val Gly Leu Ala Leu
100 105

<210> 34429
<211> 160
<212> PRT
<213> A.fumigatus

<400> 34429
Ala Ser Trp Pro Lys Pro Ile Pro Glu Arg Gln Met Lys Ser Ile Asp
1 5 10 15
Gly Ile Trp Glu Arg Glu Phe Asp Pro Asn Asn Leu Leu Ile Ser Pro
20 25 30
Lys Ser Val Thr Arg Arg Leu Met Phe Val Phe Ser Phe Gly Ile Thr
35 40 45
Gly Thr Thr Gly Leu Gln Arg Met Glu Leu Leu Ser Gly Gly Gln Lys
50 55 60
Ser Arg Val Ala Phe Ala Cys Leu Ser Leu Thr Asn Pro His Ile Leu
65 70 75 80
Val Leu Asp Glu Pro Ser Asn His Leu Asp Ile Glu Gly Met Asp Ala
85 90 95
Leu Ser Glu Ala Leu Gln Arg Phe Glu Gly Gly Val Val Met Val Ser
100 105 110
His Asp Val Thr Met Leu Arg Asn Val Cys Thr Ser Phe Trp Leu Cys
115 120 125
Asp Lys Gly Thr Val His Lys Phe Asp Gly Thr Val Asp Ala Tyr Lys
130 135 140
Lys Met Ile Ser Ser Gln Ala Asn Glu Ala Gly Val Val Ala Gln His
145 150 155 160

<210> 34430
<211> 261
<212> PRT
<213> A.fumigatus

<400> 34430

```
Ile Ala Cys Asn Arg Ala Leu Cys His Ser Cys Ser Asn Thr Asn Gln
1               5                  10                  15
Gly Tyr Leu Thr His Ala Ser Asn Ala Tyr Val Glu Asp Ala Asn Ala
            20                  25                  30
Pro Ser Pro Leu Ser Glu Ala Ala Asp Met Val Thr Glu Leu Leu Val
        35                  40                  45
Ser Ala Ser Gly Asp Phe Ser Glu His Asn Glu Lys Ala Ile Arg Asn
    50                  55                  60
Leu Val Glu Lys Phe Ile Ser Ser Leu Ser Ser Ser Asp Gly Val Asp
65                  70                  75                  80
Ala Glu Arg Arg Gln Met Pro Phe Thr Ala Lys Lys Leu Asp Gln Ala
                85                  90                  95
Ile His Val Gly Ser Gln Arg Asn Met Ser Ser Thr Leu Gly Leu Ala
            100                 105                 110
Gly Gly Asn Val Asp Leu Glu Ser Ala Asn Ser Arg Lys Val Glu Ser
        115                 120                 125
Arg Val Asp Arg Lys Lys Leu Glu Lys Ala Glu Arg Lys Ile Arg Ala
    130                 135                 140
Lys Gln Glu Lys Lys Gln Met Lys Thr Val Gln Tyr Glu Ala Ser Arg
145                 150                 155                 160
Leu Leu Asn Gln Pro Glu Ser Thr Leu Ser Tyr Glu Glu Phe Phe Met
                165                 170                 175
Ala Val Asn Pro Leu Gln Leu Gly Ser Asp Ser Gln Ser Lys Ser Lys
            180                 185                 190
Asp Ile Lys Val Asp Ser Ile Asp Ile Ser Ile Gly Gly His Arg Ile
        195                 200                 205
Leu Thr Asp Ala Ser Leu Thr Leu Ala Tyr Gly Arg Arg Tyr Gly Leu
    210                 215                 220
Val Gly Gln Asn Gly Ile Gly Lys Ser Thr Leu Leu Arg Ala Leu Ser
225                 230                 235                 240
Arg Arg Glu Val Ala Ile Pro Ser His Ile Ser Ile Leu His Val Glu
                245                 250                 255
Gln Glu Val Arg Leu
            260
```

<210> 34431
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34431

```
Ser Asp Thr Glu Pro Ser Asn Met Leu Asp Val Pro Ser Ile Thr Phe
1               5                  10                  15
Leu Ser Asn Tyr Leu Gln Ser Tyr Pro Ser Thr Ile Leu Val Val Ser
            20                  25                  30
His Asp Arg Ala Phe Leu Asn Glu Val Ala Thr Asp Ile Val His Gln
        35                  40                  45
His Ser Glu Arg Leu Asp Tyr Tyr Lys Gly Ala Asn Phe Gly Lys Asp
    50                  55                  60
His Ser Leu Val Leu
65
```

<210> 34432
<211> 156
<212> PRT
<213> A.fumigatus

<400> 34432
Tyr Pro Gly Asn Ser Gly Cys Ser Arg Arg Arg Arg Leu Ala Glu Thr
1 5 10 15
Ser Ser Cys Arg Ala Arg Gly Gly Pro Arg Ser Met Thr Ser Ser Val
20 25 30
Glu Ser Glu Leu Ala Asp Asp Leu Gln Lys Ile Ser Lys Gln Leu Ala
35 40 45
Ala Ile Glu Ala Glu Arg Ser Ser Met Ala Asp Thr Ser Lys Asp Ala
50 55 60
Ala Arg Leu Asp His Glu Arg Glu Gly Leu Asp Ile Thr Leu Asn Asp
65 70 75 80
Ile His Ser Lys Leu Ala Glu Met Glu Ser Asp Lys Ala Glu Ser Arg
85 90 95
Ala Ala Ser Ile Leu Ala Gly Leu Gly Phe Ser Pro Glu Arg Gln Gln
100 105 110
Tyr Pro Thr Lys Thr Phe Ser Gly Gly Trp Arg Met Arg Leu Ala Leu
115 120 125
Ala Arg Ala Leu Phe Cys Glu Pro Asp Leu Leu Leu Leu Asp Gly Lys
130 135 140
Leu Arg Ala Ser Gln Phe Arg Ile Lys His Gln Tyr
145 150 155

<210> 34433
<211> 161
<212> PRT
<213> A.fumigatus

<400> 34433
Arg Gln Thr Pro Ala Phe Ile Asp Lys Phe Arg Tyr Asn Ala Ala Lys
1 5 10 15
Ser Ser Glu Ala Gln Ser Arg Ile Lys Lys Leu Glu Arg Met Pro Val
20 25 30
Leu Glu Pro Pro Glu Ser Asp Tyr Val Val His Phe Lys Cys Pro Asp
35 40 45
Val Glu Lys Leu Ser Pro Pro Ile Val Gln Met Ser Asp Val Ser Phe
50 55 60
Gly Tyr Ser Lys Asp Gln Leu Leu Leu Arg Asn Val Glu Leu Asp Val
65 70 75 80
Gln Leu Asp Ser Arg Ile Gly Asn Gly Gly Pro Asn Gly Ala Gly Lys
85 90 95
Thr Thr Val Leu Lys Leu Leu Thr Gly Gln Leu Gln Pro Thr Ser Gly
100 105 110
Leu Ile Ser Thr His Ala Arg Leu Arg Ile Gly Tyr Phe Ala Gln His
115 120 125
His Val Asp Ala Leu Asp Leu Thr Thr Ser Ala Val Ser Phe Met Ala
130 135 140
Lys Thr Tyr Pro Gly Lys Thr Asp Glu Glu Tyr Arg Arg His Leu Gly
145 150 155 160
Ala

<210> 34434
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34434
Met Ala Val Glu Leu Arg Asn Arg Asp Phe Gln Gln Lys Ser Phe Phe
1 5 10 15
Pro Leu Tyr Asn Asn Asn Val Leu Phe Lys Ala Tyr Ser Gln Leu Leu
20 25 30
Thr Gln Asp Gly Asn Ser Gln Cys Arg Leu Pro Thr Val Thr Asp Thr
35 40 45
Gln Pro Asn Gln Asn Thr Pro Trp Ser Val Phe Pro Ala Arg Leu Thr
50 55 60

<210> 34435
<211> 1055
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (904)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34435
Asp Leu Pro Phe Ala Leu Arg His Asn Gly Trp Lys Glu Glu Phe Ser
1 5 10 15
Phe Leu Phe Gln Lys Arg Arg Phe Leu Tyr Tyr Pro Glu Arg Gln Cys
20 25 30
Phe Ala Pro Leu Ser Tyr Val Leu Asp Ala Glu Pro Lys Pro Pro Val
35 40 45
Lys Val Phe Gln Gln Ala Gln Gly Leu Thr Ser Lys Glu Glu Ile Asp
50 55 60
Arg Ile Gln His His Tyr Gly Asp Asn Thr Phe Asp Ile Pro Val Pro
65 70 75 80
Thr Phe Met Glu Leu Phe Lys Glu His Ala Val Ala Pro Phe Phe Val
85 90 95
Phe Gln Val Phe Cys Val Gly Leu Trp Met Leu Asp Glu Tyr Trp Tyr
100 105 110
Tyr Ser Leu Phe Thr Leu Phe Met Leu Val Val Phe Glu Ser Thr Val
115 120 125
Val Trp Gln Arg Gln Arg Thr Leu Asn Glu Phe Arg Gly Met Asn Ile
130 135 140
Lys Pro Tyr Asp Val Trp Val Tyr Arg Gln Lys Lys Trp Gln Glu Leu
145 150 155 160
Thr Ser Asp Lys Leu Leu Pro Gly Asp Leu Met Ser Val Asn Arg Thr
165 170 175
Lys Glu Asp Ser Gly Val Ala Cys Asp Ile Leu Leu Ile Glu Gly Ser
180 185 190
Ala Ile Val Asn Glu Ala Met Leu Ser Gly Glu Ser Thr Pro Leu Leu
195 200 205
Lys Glu Ser Ile Gln Leu Arg Pro Gly Asp Asp Leu Ile Asp Pro Asp
210 215 220
Gly Leu Asp Lys Asn Ala Phe Val His Gly Gly Thr Lys Val Leu Gln
225 230 235 240
Ile Thr His His Asn Ser Asn Gly Glu Asp Gly Ser Glu Lys Ala Arg
245 250 255
Lys Leu Ser Ser Gly Val Pro Leu Pro Pro Asp Asn Gly Ala Val Gly
260 265 270

```
Val Val Val Lys Thr Gly Phe Glu Thr Ser Gln Gly Ser Leu Val Arg
        275                 280                 285
Thr Met Ile Tyr Ser Thr Glu Arg Val Ser Ala Asn Asn Val Glu Ala
    290                 295                 300
Leu Leu Phe Ile Leu Phe Leu Leu Ile Phe Ala Ile Ala Ala Ala Trp
305                 310                 315                 320
Tyr Val Trp Gln Glu Gly Val Ala Lys Asp Arg Lys Arg Ser Lys Leu
                325                 330                 335
Leu Leu Asp Cys Val Leu Ile Val Thr Ser Val Val Pro Pro Glu Leu
            340                 345                 350
Pro Met Glu Leu Ser Leu Ala Val Asn Thr Ser Leu Ala Ala Leu Ser
        355                 360                 365
Lys Phe Ala Ile Phe Cys Thr Glu Pro Phe Arg Ile Pro Phe Ala Gly
    370                 375                 380
Arg Val Asp Val Ala Cys Phe Asp Lys Thr Gly Thr Leu Thr Gly Glu
385                 390                 395                 400
Asp Leu Val Val Asp Gly Ile Ala Gly Leu Thr Leu Gly His Glu Gly
                405                 410                 415
Ala Asp Val Gly Lys Asp Gly Ala His Thr Glu Leu Ala Lys Ser Ala
            420                 425                 430
Asn Val Pro Leu Asp Thr Thr Leu Val Leu Ala Ser Ala His Ala Leu
        435                 440                 445
Val Lys Leu Asp Glu Arg Glu Val Val Gly Asp Pro Met Asp Lys Ala
    450                 455                 460
Thr Leu Gln Trp Leu Gly Trp Thr Leu Gly Arg Asn Asp Thr Leu Met
465                 470                 475                 480
Ser Lys Ala Ala Ala Leu Ala Gly Pro Arg Thr Val Glu Ser Val Gln
                485                 490                 495
Ile Lys Arg Arg Phe Gln Phe Ser Ser Ala Leu Lys Arg Gln Ser Thr
            500                 505                 510
Ile Ala Thr Val Val Thr Ala Asp Arg Lys Thr Ser Lys Lys Asn Lys
        515                 520                 525
Ala Thr Phe Val Gly Val Lys Gly Ala Pro Glu Thr Ile Arg Thr Met
    530                 535                 540
Leu Val Asn Thr Pro Pro His Tyr Glu Glu Thr Phe Lys Tyr Phe Thr
545                 550                 555                 560
Gln Asn Gly Ala Arg Val Leu Ala Leu Ala Tyr Lys Tyr Leu Ser Glu
                565                 570                 575
Glu Ser Glu Leu Ser Gln Gly Arg Ile Asn Gly Tyr Ile Arg Glu Glu
            580                 585                 590
Ile Glu Ala Asp Val Ile Phe Ala Gly Phe Leu Ser Leu Gln Cys Pro
        595                 600                 605
Leu Lys Glu Asp Ala Ile Lys Ala Val Arg Met Leu Asn Glu Ser Ser
    610                 615                 620
His Arg Val Val Met Ile Thr Gly Asp Asn Pro Leu Thr Ala Val His
625                 630                 635                 640
Val Ala Arg Lys Val Glu Ile Val Asp Arg Asp Val Leu Ile Leu Asp
                645                 650                 655
Ala Pro Glu Asp Asp Met Ser Gly Thr Arg Leu Val Trp Arg Ser Ile
            660                 665                 670
Asp Asp Lys Phe Asn Arg Asp Val Asp Pro Thr Gln Asp Leu Asp Pro
        675                 680                 685
Glu Ile Ile Glu Thr Lys Asp Ile Cys Ile Thr Gly Tyr Ala Leu Ala
    690                 695                 700
Lys Phe Lys Gly Gln Lys Ala Phe Ser Thr Leu Leu Arg His Thr Trp
705                 710                 715                 720
```

```
Val Tyr Ala Arg Val Ser Pro Lys Gln Lys Glu Asp Ile Leu Val Gly
                725                 730                 735
Leu Lys Asp Ala Gly Tyr Thr Thr Leu Met Cys Gly Asp Gly Thr Asn
            740                 745                 750
Asp Val Gly Ala Leu Lys Gln Ala His Val Gly Val Ala Leu Leu Asn
        755                 760                 765
Gly Ser Pro Glu Asp Leu Ala Lys Ile Ala Glu His Tyr Arg Thr Thr
    770                 775                 780
Lys Met Lys Glu Ile Tyr Glu Lys Gln Val Ser Met Met Gln Arg Phe
785                 790                 795                 800
Asn Gln Pro Pro Pro Pro Val Pro Val Gln Ile Ala His Leu Tyr Pro
                805                 810                 815
Pro Gly Pro Arg Asn Pro His Tyr Gln Lys Ala Met Glu Arg Glu Ala
            820                 825                 830
Gln Arg Lys Gly Ala Ala Thr Leu Ala Thr Ala Gly Asn Gln Thr Glu
        835                 840                 845
His Ile Pro Thr Ile Thr Ser Pro Gly Ala Gln Ala Leu Gln Gln Ser
    850                 855                 860
Asn Ala Asn Leu Thr Pro Gln Gln Gln Arg Gln Gln Gln Ala Ser Ile
865                 870                 875                 880
Ala Ala Ala Gly Phe Ala Asp Lys Leu Thr Ser Ser Met Leu Glu Gln
                885                 890                 895
Glu Leu Asp Asp Ser Glu Pro Xaa Thr Ile Lys Leu Gly Asp Ala Ser
            900                 905                 910
Val Ala Ala Pro Phe Thr Ser Lys Leu Ala Asn Val Ile Ala Ile Pro
        915                 920                 925
Asn Ile Leu Arg Gln Gly Arg Cys Thr Leu Val Ala Thr Ile Gln Met
    930                 935                 940
Tyr Lys Ile Leu Ala Leu Asn Cys Leu Ile Ser Ala Tyr Ser Leu Ser
945                 950                 955                 960
Val Ile Tyr Leu Asp Gly Ile Lys Phe Gly Asp Gly Gln Val Thr Ile
                965                 970                 975
Ser Gly Met Leu Met Ser Val Cys Phe Leu Ser Ile Ser Arg Ala Lys
            980                 985                 990
Val Ser Tyr Val Met Arg His Leu Leu Leu Gly Asp Leu Val Leu Thr
        995                 1000                1005
Leu Val Pro Val Arg Gly Gly Phe Val Gln Gly Ala Ala Pro Ala Glu
    1010                1015                1020
His Phe Gln Cys Val His His Trp Leu Arg Ser Arg Pro Val Arg His
1025                1030                1035                1040
Pro Tyr Arg Tyr Ser Asp Leu Pro Val Glu Leu Cys Leu Phe His
                1045                1050                1055
```

<210> 34436
<211> 160
<212> PRT
<213> A.fumigatus

<400> 34436

```
Phe Met Leu Leu Thr Leu Thr Arg Arg Lys Ser Asp Ile Asp Leu Glu
1               5                   10                  15
Gly Glu Phe Glu Pro Ser Leu Leu Asn Ser Ala Ile Tyr Leu Leu Gln
            20                  25                  30
Leu Ile Gln Gln Ile Ser Thr Phe Ser Ile Asn Tyr Gln Gly Arg Thr
        35                  40                  45
Phe Arg Glu Ser Ile Arg Glu Asn Lys Ala Met Tyr Trp Gly Leu Val
```

```
    50                  55                  60
Ala Ala Ser Gly Val Ala Phe Ser Cys Ala Thr Glu Phe His Pro Glu
65                  70                  75                  80
Leu Asn Glu Lys Met Arg Leu Val Pro Phe Ser Thr Glu Phe Lys Val
                85                  90                  95
Thr Leu Thr Val Leu Met Ile Ile Asp Tyr Ala Gly Cys Trp Ile Ile
            100                 105                 110
Glu Asn Val Leu Lys Asn Leu Phe Ser Asp Phe Arg Pro Lys Asp Ile
        115                 120                 125
Ala Val Arg Arg Pro Asp Gln Leu Gln Arg Glu Met Glu Arg Lys Lys
    130                 135                 140
Gln Glu Glu Leu Glu Thr Gln Ala Glu Lys Glu Arg Gln Arg Lys Val
145                 150                 155                 160
```

<210> 34437
<211> 204
<212> PRT
<213> A.fumigatus

<400> 34437

```
Ile Leu Trp Asp Met Leu Leu Thr Pro Met Thr Val Arg Asn Ser Met
1               5                   10                  15
Leu Trp Thr Phe Pro Arg Val Ala Ala Arg His Gly Gly Ile Pro Asp
            20                  25                  30
Leu Phe Leu Lys Asp Phe Met Lys Arg His Lys Phe Pro Thr Ala Ala
        35                  40                  45
Tyr Gln Asn Phe Tyr Glu Tyr Glu Pro Ala Arg Gln Tyr Leu Asp Ser
    50                  55                  60
Val Asn His Asn Val Val Ile Lys Ala Asp Gly Leu Ala Ala Gly Lys
65                  70                  75                  80
Gly Val Ile Ile Pro Gln Thr Lys Glu Glu Ala His Lys Ala Leu Arg
                85                  90                  95
Glu Met Met Leu Asp His His Phe Gly Asp Ala Gly Asn Glu Val Val
            100                 105                 110
Ile Glu Glu Tyr Leu Glu Gly Asp Glu Leu Ser Ile Leu Thr Phe Ser
        115                 120                 125
Asp Gly Tyr Thr Ile Arg Ser Leu Pro Pro Ala Gln Asp His Lys Arg
    130                 135                 140
Ile Phe Asp Gly Asp Gln Gly Pro Asn Thr Gly Gly Met Gly Cys Tyr
145                 150                 155                 160
Ala Pro Thr Pro Ile Ser Ser Lys Glu Val Leu Glu Glu Ile Asp Arg
                165                 170                 175
Thr Ile Val Gln Pro Thr Ile Asp Gly Met Arg Lys Asp Gly Ser Ser
            180                 185                 190
Glu Ser Asn Lys Phe Arg Ala Leu Ser Asp Gly Cys
        195                 200
```

<210> 34438
<211> 177
<212> PRT
<213> A.fumigatus

<400> 34438

```
Cys Asp Ser Tyr Leu Ser Gly Leu Leu Glu Lys Thr Ala Ser Lys Met
1               5                   10                  15
Ala Gln Glu Gln Leu Arg Val Leu Val Val Gly Asn Gly Gly Arg Glu
```

```
            20                  25                  30
His Ala Tyr Ala Trp Lys Leu Ser Gln Ser Pro Leu Val Asp Val Val
        35                  40                  45
Tyr Val Ala Pro Gly Asn Gly Gly Thr Ala Gln Gly Ala Ser Ser Lys
    50                  55                  60
Ile Thr Asn Ala Asn Val Lys Gly Asp Asp Tyr Pro Ala Leu Val Glu
65                  70                  75                  80
Phe Ala Gln Lys Asn Gly Val Asn Leu Val Val Pro Gly Pro Glu Ala
                85                  90                  95
Pro Leu Val Asp Gly Ile Gln Gly Tyr Leu His Ala Ser Gly Trp Phe
            100                 105                 110
Val Pro Cys Trp Asn Leu Leu Asn Ile Leu Asn Pro Met Gly His Ala
        115                 120                 125
Ile Asp Thr His Asp Ser Ser Glu Phe His Ala Leu Asp Phe Pro Lys
    130                 135                 140
Gly Cys Ser Pro Ala Trp Arg Asp Pro Arg Pro Phe Ser Lys Gly Leu
145                 150                 155                 160
His Glu Ala Pro Gln Ile Pro His Arg Arg Val Ser Glu Leu Leu Arg
                165                 170                 175
Ile
```

<210> 34439
<211> 566
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (429)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34439

```
Ile Gln Gln Ile Ser Ser Phe Ile Gly Arg Met Leu Ile Ser Ser Val
1               5                   10                  15
Lys Ser Gly Phe Pro Phe Val Gly Ile Leu Phe Thr Gly Leu Met Met
            20                  25                  30
Thr Lys Asp Gly Pro Lys Val Leu Glu Tyr Asn Val Arg Gly Gly Asp
        35                  40                  45
Pro Glu Thr Gln Thr Leu Leu Pro Leu Leu Ser Ala Asp Thr Asp Leu
    50                  55                  60
Ala Gln Ile Met Val Ala Cys Thr Glu His Trp Leu Asp Gly Val Asp
65                  70                  75                  80
Ile Lys Ile Glu Pro Lys Phe Ser Thr Thr Val Ile Ala Val Ala Gly
                85                  90                  95
Gly Tyr Pro Gly Ser Tyr Ala Lys Gly Lys Ala Ile Thr Leu Asp Pro
            100                 105                 110
Ala Pro Glu Asp Thr Leu Ile Phe His Ala Gly Thr Lys Leu Phe Gly
        115                 120                 125
Asn Glu Leu Gln Thr Asn Gly Gly Arg Val Ile Ala Ser Thr Ala Thr
    130                 135                 140
Ala Ser Thr Leu Glu Glu Ala Leu Arg Lys Ser Tyr Ala Gly Ile Ser
145                 150                 155                 160
Ala Ile His Phe Glu Asp Met Phe Tyr Arg Lys Asp Ile Ala His Arg
                165                 170                 175
Ala Phe Arg Gln Arg Asp Ala Ala Ala Ser Gln Gln Gln Gln Ser Leu
```

```
            180                 185                 190
Thr Tyr Ala Ser Ala Gly Val Ser Ile Asp Ala Gly Asn Asp Leu Val
        195                 200                 205
Asn Lys Ile Lys Ser Cys Val Ala Arg Thr Lys Arg Pro Gly Thr Asp
    210                 215                 220
Ala Val Ile Gly Gly Phe Gly Gly Leu Phe Ser Leu Ala Ala Ala Asn
225                 230                 235                 240
Ser Ala Tyr His Pro Glu Ser Pro Thr Leu Ile Gly Ala Ile Asp Gly
                245                 250                 255
Val Gly Thr Lys Leu Lys Ile Ala His Thr Val Gly Val His Asn Thr
            260                 265                 270
Val Gly Ile Asp Leu Val Ala Met Asn Val Asn Asp Leu Val Val Gln
        275                 280                 285
Gly Ala Glu Pro Leu Phe Phe Leu Asp Cys Tyr Ser Cys Gly Lys Leu
    290                 295                 300
Asp Val Glu Thr Ala Ala Ala Phe Val Ala Gly Val Ala Asp Gly Cys
305                 310                 315                 320
Val Gln Ala Gly Cys Ala Leu Ile Gly Gly Glu Thr Ala Glu Met Pro
                325                 330                 335
Gly Leu Phe Val Asp Glu Thr Tyr Asp Ala Val Gly Ala Ala Val Gly
            340                 345                 350
Ala Ile Asn Thr Thr Gly Lys Asn Ala Lys Ser Ile Leu Pro Ala Asn
        355                 360                 365
Ser Ala Met Gln Ala Gly Asp Val Leu Leu Ala Leu Ala Ser Ser Gly
    370                 375                 380
Pro His Ser Asn Gly Tyr Ser Leu Val Arg Lys Ile Val Glu Arg Ser
385                 390                 395                 400
Gly Ile Ser Tyr Asp Asp Pro Ala Pro Phe Thr Met Pro Ser Ser Ser
                405                 410                 415
Ser Glu Ser Leu Thr Leu Gly Arg Ala Leu Leu Thr Xaa Thr Arg Ile
            420                 425                 430
Tyr Val Lys Pro Ile Leu Lys Ala Leu Ser Ile Pro Pro Ser Asn Ser
        435                 440                 445
Ser Ser Gly Ser Ser Ala Ile Lys Gly Leu Ala His Ile Thr Gly Gly
    450                 455                 460
Gly Leu Val Glu Asn Val Pro Arg Met Leu Pro Ser Thr Leu Ser Ala
465                 470                 475                 480
His Ile Asp Val Ser Ala Trp Gln Leu Pro Pro Val Phe Ser Trp Leu
                485                 490                 495
Lys Lys Thr Gly Asn Val Thr Ala Pro Glu Met Ala Arg Ala Phe Asn
            500                 505                 510
Cys Gly Val Gly Met Val Ile Val Val Glu Lys Gly Ser Glu Ala Ala
        515                 520                 525
Val Lys Glu Leu Phe Glu Lys Glu Gly Glu Val Val Tyr Gln Val Gly
    530                 535                 540
Glu Leu Lys Pro Arg Gln Asp Gly Glu Glu Gly Cys Val Leu Gly Gly
545                 550                 555                 560
Leu Gln Thr Trp Asp Ala
                565
```

<210> 34440
<211> 93
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (29)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34440
Phe Phe Phe Lys Lys Gly Ala Gln Phe Phe Phe Leu Leu Pro Ser Ser
1 5 10 15
Arg Val Gly Pro Thr Met Tyr Pro Gly Ile Leu Arg Xaa Val Cys Arg
20 25 30
Arg Lys Ser Leu Pro Leu Leu Pro Ser Ser Met Lys Val Lys Ile Ile
35 40 45
Ala Pro Pro Glu Arg Lys Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu
50 55 60
Ala Ser Leu Ser Thr Phe Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr
65 70 75 80
Asp Glu Ser Gly Pro Ser Ile Val His Arg Lys Cys Phe
85 90

<210> 34441
<211> 281
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34441
Gln Ser Leu Gln Asp Gly Leu Asp Val Asn Ala Gly Xaa Gly Glu Glu
1 5 10 15
Gly Ala Thr Gln Gly Gln Arg Phe Gly Gly Arg Gly Arg His Gly Glu
20 25 30
Gly Gly Arg Val Val Val Ala Tyr Ser Gly Ser Leu Asp Asp Leu Ala
35 40 45
Asp Gln Arg Val Ser Val Gly Val Arg Ala Arg Gly Arg Gln Cys Glu
50 55 60
Gln Asn Ile Thr Gly Leu His Gly Arg Val Gly Arg Gln Asp Gly Leu
65 70 75 80
Gly Val Leu Thr Gly Gly Val Asp Gly Thr His Gly Gly Thr His Gly
85 90 95
Val Val Gly Leu Val Asp Glu Glu Thr Trp His Leu Arg Gly Phe Thr
100 105 110
Ala Asp Gln Gly Thr Ala Arg Leu Asp Ala Ala Val Arg Asp Ala Gly
115 120 125
His Glu Ser Gly Ser Gly Leu Asp Ile Gln Leu Ala Ala Arg Val Ala
130 135 140
Val Lys Glu Glu Glu Gly Leu Gly Thr Leu Asp Asn Gln Val Val Asp
145 150 155 160
Val His Gly His Gln Ile Asp Ser Tyr Gly Val Val His Thr His Ser
165 170 175
Val Gly Asn Leu Gln Leu Gly Ser Asp Ala Ile Asn Arg Ser Asp Gln
180 185 190
Ser Gly Arg Leu Arg Val Val Gly Arg Val Gly Gly Gly Lys Gly Glu
195 200 205
Glu Ser Ser Glu Ala Thr Asn His Cys Ile Arg Ala Arg Ala Leu Arg

```
    210                 215                 220
Thr Ser Asp Thr Ala Leu Asn Leu Val Asp Glu Ile Ile Thr Arg Val
225                 230                 235                 240
Asp Gly His Thr Ser Arg Gly Ile Gly Glu Arg Leu Leu Leu Leu Gly
                245                 250                 255
Ser Ser Cys Val Ser Leu Ser Glu Gly Thr Met Arg Asn Ile Leu Ala
            260                 265                 270
Val Glu His Val Phe Lys Val Asn Cys
        275                 280
```

<210> 34442
<211> 549
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (415),(422)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34442

```
Tyr Leu Leu Asp Asn Asp Val Glu Tyr Tyr Asn Glu Ala Glu Pro Val
1               5                   10                  15
Thr Leu Leu Cys Pro Leu Leu Pro Gly Gln Pro Leu Asn Val Leu Gln
            20                  25                  30
Val Pro Ile Ile Leu Pro Asp Thr Arg Pro Thr His Thr Phe Gln Asp
        35                  40                  45
Gly Ser Ser Ser Arg Gln Pro Asp Val Arg Thr Met Asn Pro Glu Asp
    50                  55                  60
Lys Tyr Met Asn Pro Arg Arg Pro Pro Lys Pro Lys Leu Pro Arg Leu
65                  70                  75                  80
Arg Thr Ser Pro Pro Leu Leu Gln Ala Pro Thr Pro Ala Trp Ser Phe
                85                  90                  95
Ser Thr Ser Pro Leu Gly Ala Leu Thr Asn Arg Ala Thr Ser Gln Pro
            100                 105                 110
Ser Ser Ser Val Asn Lys Thr Pro Arg Ser Ser Ser Ser Lys Ala Ala
        115                 120                 125
Arg Ser Val Ser Pro Pro Arg Ser Arg Gly Leu Arg Ala Ala Val Arg
    130                 135                 140
Tyr Leu Asn Ala Ser Ser Pro Asp Leu Ser Asn Thr His His Ser Asp
145                 150                 155                 160
Arg Glu Leu Asp Ser Lys Gly Glu Asp Ala Ala Gly Val Cys Arg Thr
                165                 170                 175
Gly Ser Ser Gly Lys Gly Arg Phe Asp Phe Pro Glu Gln Ser Cys His
            180                 185                 190
Ala Phe Ala Pro Ala Ser Thr Ala Lys His Tyr Glu His Ser Leu His
        195                 200                 205
Pro Glu Asp Leu Leu Phe Arg Arg Pro Val Ser Ala Asp His Glu Asn
    210                 215                 220
Pro Leu Thr Met Ser Ile Gln Asp Arg Arg Ala Leu Asn Ile Lys Ser
225                 230                 235                 240
Ile Glu His Leu Ser Cys Lys Ser Pro Leu Thr Val Glu Thr Gln Pro
                245                 250                 255
Asp Asp Thr Ser Ala Ser Glu Glu Tyr Ser Ser Lys Thr Phe Ser Tyr
            260                 265                 270
Met Ala Ala Glu Leu Leu Ala Ala Leu Glu Ser Pro Ser Phe Leu Arg
```

```
        275                 280                 285
Thr Ala Thr Ile Pro Asp Ala Thr Thr Pro Thr Pro Phe Thr Tyr Lys
    290                 295                 300
Glu Lys Arg Leu Pro Thr Leu Pro Asn Ser Pro Ser Ser Val Met Asp
305                 310                 315                 320
Glu Ala Leu Arg Asp Ile Asp Ala Arg Glu Arg Glu Leu Asp Thr Glu
                325                 330                 335
Asn Leu Gly Ser Arg Phe Ser Asp Phe Thr Glu Thr Glu Gly Ser Val
            340                 345                 350
Val Gly Ser Ser Tyr Cys Glu Arg Ser His Phe Ser Glu Trp Ser Thr
        355                 360                 365
Asp Thr Glu Ile Ile Ser Pro Glu Ser Met Thr Ser Ser Ser Thr Phe
    370                 375                 380
Asn Asn Glu Thr Gln Leu Ser His Asn Pro Gly Asp Ala Glu Ser Ala
385                 390                 395                 400
Asp Arg Ile Val Pro Phe Leu Gly Ser Asp Thr Ser Asp Pro Xaa Thr
                405                 410                 415
Pro His Leu Thr Val Xaa Ser Lys Leu Ser Pro Ala Thr Ser Val Ala
            420                 425                 430
Ser Asp Ser Pro Arg Phe Asn Phe Pro Leu Pro Arg Leu Thr Val Ser
        435                 440                 445
Phe Ser Pro Ser Asp Leu Asp Met Ala Gly Leu Gly Ile Glu Asp Met
    450                 455                 460
Cys Asn Val Glu Arg Asp Pro Lys Arg His Ala Ala Phe Phe Gly Ala
465                 470                 475                 480
Met Asn Ala Phe Glu Thr Leu Gly Leu Val Lys Ser Pro Asp Ala Ser
                485                 490                 495
Thr Thr Glu Phe Pro Asp Gly Val Gln Asn Asp Thr Ala Ser Leu Ile
            500                 505                 510
Asp Asn Arg Asp Val Ser Asn Arg Leu Ser Cys Ala Ser Thr Ser Met
        515                 520                 525
Leu Asp Met Met Asp Glu Leu Ala Tyr Leu Arg Asn Val Ile Gln Ser
    530                 535                 540
Gly Thr Ala Glu Glu
545
```

<210> 34443
<211> 119
<212> PRT
<213> A.fumigatus

<400> 34443

```
Ser Ala Cys Ile Leu Trp Ala Thr Lys Pro Gly Pro Pro Cys His Thr
1               5                   10                  15
Thr Ala Ile Thr Glu Ile Leu His Ala Ser Gly Glu Ala Glu Lys Leu
            20                  25                  30
Tyr Glu Leu Leu His Asp Leu Gly Ala Ile Gly Cys Leu Ala Ser Asp
        35                  40                  45
Asp Ser Thr Asp Leu Gln Asn Leu Leu Ser Leu Val Arg Val His Trp
    50                  55                  60
Gly Leu Thr Ile Arg Ser Arg Asn Ala Asn Asp Gly Gln Ser Val Gly
65                  70                  75                  80
Ala Leu Gln Ile Leu Gly Ile Val Thr Ile Arg His Glu Val Gly Ile
                85                  90                  95
Gly Tyr Ile Glu Ile Gln Ser Lys Cys Tyr Asp Ile Val Glu Thr Ser
            100                 105                 110
```

Ala Val Thr Arg Met Thr Thr
115

<210> 34444
<211> 98
<212> PRT
<213> A.fumigatus

<400> 34444
Leu Asp Thr Gly Ala Thr Asp Ile Leu Trp Ile Ser Thr Gly Thr Ile
1 5 10 15
Leu His Gly Thr Ile Thr Ala Val Ser Pro Gln Met Asn Thr Ser Leu
20 25 30
Arg Thr Val Lys Met Thr Pro Lys Gly Arg Asp Pro Ile Ser Leu Asp
35 40 45
Thr Ile Asn Ile Arg Gly Ser Thr Ile Arg Tyr Tyr Ile Leu Pro Asp
50 55 60
Ser Leu Pro Leu Asp Thr Leu Leu Val Asp Asp Gln Pro Lys Pro Lys
65 70 75 80
Asn Lys Ala Arg Lys Glu Thr Asp Arg Gly Arg Gly Arg Gly Gly Ala
85 90 95
Arg Gly

<210> 34445
<211> 245
<212> PRT
<213> A.fumigatus

<400> 34445
Ala Leu Leu Cys Ser Ala Gly Ala Gly Pro Leu Leu Ile Ile Gln Phe
1 5 10 15
Val Thr Val Ala Ser Ala Leu Ala Leu Ala Pro Thr Ala Val Val Ala
20 25 30
Arg Gln Gly Ala Ala Ala Phe Val Thr Val Asn Ser Ile Asp Val Cys
35 40 45
Pro Lys Lys Val Ala Gln Glu Ile Ile Asn Pro Gly Pro Lys Val Val
50 55 60
Thr Thr Pro Tyr Thr Cys Asp Gln Val Lys Leu Gly His Gly Leu Asp
65 70 75 80
Val Ser Tyr Tyr Asn Phe Asp Ile Glu Pro Leu Thr Lys Asp Thr Phe
85 90 95
Pro Tyr Cys Lys Ala Leu Lys Val Phe Asp Asn Glu Gly Cys Leu Gly
100 105 110
Phe Pro Thr Leu Trp Ile Pro Leu Glu Ser Pro Leu Glu Asp Lys Cys
115 120 125
Ile Pro Glu His Tyr Phe Ser Asp Glu Val Lys Ser Ile Ser Phe Gln
130 135 140
Leu Asp Cys Arg Glu Asp Ala Pro Val Lys Lys Glu Pro Tyr Gly Pro
145 150 155 160
Lys Glu Gly Ala Glu Gln Ser Ala Pro Gln Ala Glu His Ser Thr Lys
165 170 175
Gln Asp Ala Gln Gln Gly Ser His Gln Gly Gln Glu Val Gln Asn Ser
180 185 190
Pro Lys Gln Glu Ala Arg Gln Gly Ser Arg Pro Ala Glu Ala Ala Pro
195 200 205

```
Lys Gln Glu Gln Glu Ala Glu Gln Ala Ser Glu Ala Ala Pro Glu Lys
    210                 215                 220
Lys Ala Ser Asn Pro Ala Asp Ser Leu Gly Leu Gly Glu Leu Thr Lys
225                 230                 235                 240
Val Leu Gly Phe Arg
                245
```

<210> 34446
<211> 256
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (231),(232),(235),(245)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34446

```
Gly Ile Thr Pro Gln Cys Lys Lys Ser Ser Leu Phe Leu Arg Thr Ile
1               5                   10                  15
Thr Ala Met His Phe Lys Asn Val Arg Gln Thr Cys Thr Tyr Ile Met
            20                  25                  30
His Asp Thr Asn Ser Asp Ser Ile Ala Leu Gln His Leu Ser Phe Leu
        35                  40                  45
Leu Ile Leu Thr Pro Ala Leu Ala Ser Thr Thr Ala Arg Ile Trp Ala
    50                  55                  60
Glu Phe Leu Pro Ser Cys Pro Ile Asn Arg Ile His Pro Ala Ser Ala
65                  70                  75                  80
Ala Pro Asp His Leu Pro His Glu Glu Phe Ile Ser Ala Leu Asn Ile
                85                  90                  95
Ser Pro Gly Thr Cys Thr Asn Ile Phe Val Pro Leu Ser Tyr Gly His
            100                 105                 110
Glu Val Thr His Met Ser Phe Asp Ala Glu Val Glu Val Val Gly Thr
        115                 120                 125
Arg Pro Glu Lys Cys Arg Ile Ser Ile Tyr Glu Val Pro Gly Cys Val
    130                 135                 140
Gly Gln Pro Leu Leu Asp Glu Glu Val Lys His Gly Phe Ala Ser Ser
145                 150                 155                 160
Asp Cys Val Ala Arg Asn Phe Ala Ser Tyr Asn Gln Val Trp Ala Met
                165                 170                 175
Leu Asp Cys Lys Glu Gln Asp Ala Asp Glu Lys Val Gln Ser Thr Gly
            180                 185                 190
Gln Pro Ala His Ser His Lys Pro Leu Leu His Asp His Pro Tyr Leu
        195                 200                 205
His Val Asn Asn Ser Thr Asp Leu Ala Asn Gln Asn Ala Pro Leu Cys
    210                 215                 220
Glu Met Gly Pro Gly Pro Xaa Xaa Cys Ala Xaa Ala Gly Leu Pro Ser
225                 230                 235                 240
Gly Arg Ala Leu Xaa Tyr Thr Ala Gly Arg Gly Ile Leu Pro Leu Gly
                245                 250                 255
```

<210> 34447
<211> 178
<212> PRT
<213> A.fumigatus

<400> 34447
Thr Leu Leu Ser Ser Leu Gly Ile Arg Thr Gln Gln Glu Ala His Ala
1 5 10 15
Lys Ala Asp Pro Ile Cys Ser Arg Arg Ala Val Ala Arg Ala Val Ile
20 25 30
Arg Val Thr Ser Gly Ile Phe Leu Ala Met Ala Ser Ser Arg Lys Leu
35 40 45
Ser Thr Pro Ser Asp Tyr Ala Glu Leu Leu Cys Arg Tyr Asp Thr Trp
50 55 60
Leu Phe Asp Cys Asp Gly Val Ile Trp Ser Gly Asp His Ala Thr Glu
65 70 75 80
Gly Ala Ser Lys Ala Ile Asp Phe Leu Arg Asp His Gly Lys Arg Val
85 90 95
Val Phe Val Thr Asn Asn Ala Ala Arg Ser Arg Lys Met Leu Lys Thr
100 105 110
Lys Phe Asp Arg Leu Arg Ile Ala Ala Ser Glu Val Arg Ala Lys Cys
115 120 125
Leu Glu Asp Gly Pro Pro Thr Asp Ile Ser Gln Pro Gly Arg Asp Cys
130 135 140
Ile Gln Phe Leu Arg Ser Ser Cys Val Ser Gln Gly Ser Ala Gln Val
145 150 155 160
Ser Cys Arg Ser Glu Gly Val Cys His Gly Asn Gly Arg Gly Arg Ser
165 170 175
Gly Thr

<210> 34448
<211> 118
<212> PRT
<213> A.fumigatus

<400> 34448
Pro Gln Leu Val Gly Ala Gly Ser Leu Val Thr Pro Leu Ile Ala Ser
1 5 10 15
Thr Lys Arg Asn Pro Ile Val Ile Gly Lys Pro His Ala Pro Met Leu
20 25 30
Asp Thr Val Lys Ser Leu Tyr Asn Ile Asp Pro Thr Arg Thr Ile Phe
35 40 45
Val Gly Asp Asn Leu Tyr Thr Asp Ile Leu Phe Ala Arg Lys Gly Arg
50 55 60
Val Asp Ser Leu Leu Val Leu Thr Gly Val Thr Lys Glu Glu Asp Cys
65 70 75 80
Gln Thr Glu Gly Ile Trp Pro Thr Phe Ile Ala Pro Ser Ile Ser Asn
85 90 95
Ile Val Ala Ala Glu Ser Gly Pro Ser Ile Ile Ala Asp Gly Thr Ser
100 105 110
Thr Ile His Ala Ser Leu
115

<210> 34449
<211> 182
<212> PRT
<213> A.fumigatus

<400> 34449
Arg Pro Ser Leu Thr Asp Cys Glu Ser Gln Pro Val Arg Tyr Gly Pro

```
1               5                   10                  15
Ser Val Trp Arg Met Gly His Gln Leu Thr Tyr Pro Asn Gln Asp Glu
            20                  25                  30
Ile Val Ser Ser Ser Phe Ala Ala Ala Val Tyr Leu Lys Glu Val Leu
        35                  40                  45
Lys Phe Pro Ala Asp Arg Lys Val Phe Val Met Gly Met Glu Gly Val
    50                  55                  60
Glu Ala Glu Leu Asp Ala Val His Ile Lys Arg Cys Gly Gly Thr Gly
65                  70                  75                  80
Pro Glu Asp Asn Lys Phe Leu Ala Ala Asn Asp Tyr Ser Ser Leu Ala
                85                  90                  95
Gly Glu Glu Ala Ile Asp Pro Ser Val Gly Ala Val Val Cys Gly Phe
            100                 105                 110
Asp Met His Met Asn Tyr Gly Lys Leu Cys Lys Ala Phe Lys Tyr Leu
        115                 120                 125
Thr Arg Asp Gly Ala Gln Gly Pro Val Leu Ala Gly Glu Thr Gly Gly
    130                 135                 140
Gly Cys His Phe Ile Leu Thr Asn Asp Asp Lys Val Val Pro Ala Leu
145                 150                 155                 160
Gly Glu Leu Trp Pro Gly Ser Asp Pro Val Pro Thr Lys Thr Arg Ala
                165                 170                 175
Val Ala Asp Arg Ser Leu
            180
```

<210> 34450
<211> 94
<212> PRT
<213> A.fumigatus

```
<400> 34450
Gln Leu Ala Ser Glu Leu Val His Leu Lys Val Glu Asn Glu Glu Leu
1               5                   10                  15
Ser Asp Ile Asn Asp Ala Leu Lys Leu Gln Val Ser Glu Leu Lys Ile
            20                  25                  30
Val Val Asp Lys Gln Pro Ala Glu Val Glu Glu Lys Leu Arg Thr Glu
        35                  40                  45
Met Asp Arg Ile Met Lys Arg Asn Met Glu Val Gln Asn Glu Asn Arg
    50                  55                  60
Ser Leu Ser Glu Gln Met Ala Glu Met Glu Arg Glu Leu Val Glu Ala
65                  70                  75                  80
Lys Met Gln Trp Ala Glu Val Ser Ile Gln Arg Leu Leu Arg
                85                  90
```

<210> 34451
<211> 76
<212> PRT
<213> A.fumigatus

```
<400> 34451
Gln Asp Ala Phe Glu Gln Asp Gly Lys Pro Tyr Ile Leu Ser Ala Ala
1               5                   10                  15
Ala Gly Glu Ser Phe Pro Asp Pro Arg Asn Lys Gly Phe Asn Ile Ser
            20                  25                  30
Val Lys Thr Thr Phe Ala Ser Leu Glu Asp Met Glu Tyr Tyr Asp Lys
        35                  40                  45
Glu Cys Glu Ala His Lys Ala Leu Arg Ala Val Ala Gly Pro Val Lys
```

```
    50                  55                  60
Glu Asp Val Leu Thr Thr Tyr Phe Glu Ser Val Leu
65                  70                  75

<210> 34452
<211> 98
<212> PRT
<213> A.fumigatus

<400> 34452
Arg Gly Val Ser Phe Leu Glu Val Pro Gly Ala His Tyr Ser Asp Leu
1               5                   10                  15
Arg Gln Arg Leu Ser His Thr Gly Leu Thr Leu Glu Glu Asp Ile Ala
            20                  25                  30
Val Leu Glu Lys Leu His Ile Leu Val Asp Phe Asp Glu Lys Gly Tyr
        35                  40                  45
Leu Leu Gln Ile Phe Ser Lys His Val Leu Asp Arg Pro Thr Val Phe
    50                  55                  60
Ile Glu Val Ile Gln Arg Asn Asn Phe Asp Gly Phe Gly Ala Gly Asn
65                  70                  75                  80
Phe Lys Ser Leu Phe Glu Ala Phe Glu Arg Glu Gln Ala Arg Arg Gly
                85                  90                  95
Asn Leu


<210> 34453
<211> 747
<212> PRT
<213> A.fumigatus

<400> 34453
Ser Met Pro Lys Ser Tyr Pro Glu Leu Ala Asn Thr Pro Gln Tyr Thr
1               5                   10                  15
Ser Arg Ala Arg Ile Ile Ser Val Phe Phe Lys Ser Leu Tyr Ser Arg
            20                  25                  30
Ser His Asp Val Ile Glu Ala Ala Asn Ala Gly Leu Arg Asp Val Leu
        35                  40                  45
Thr Gln Thr Asn Lys Leu Pro Lys Asp Leu Leu Gln Asn Gly Leu Arg
    50                  55                  60
Pro Ile Leu Met Asn Leu Gln Asp Pro Lys Arg Leu Ser Val Ala Gly
65                  70                  75                  80
Leu Asp Gly Leu Ala Arg Leu Leu Thr Leu Leu Thr Asn Tyr Phe Lys
                85                  90                  95
Val Glu Ile Gly Ala Arg Leu Leu Asp His Met Lys Val Ile Ala Asp
            100                 105                 110
Asp Ala Val Leu Gln Lys Val Ser Phe Ser Leu Val Glu Gln Asn Gln
        115                 120                 125
Thr Ile Lys Ile Val Thr Ala Ile Phe Asn Ile Phe His Leu Leu Pro
    130                 135                 140
Pro Ala Ala Thr Ser Phe Met Glu His Leu Val Asn Lys Val Leu Glu
145                 150                 155                 160
Leu Glu Glu Lys Leu Arg Arg Thr Ser Asn Ser Pro Phe Arg Lys Pro
                165                 170                 175
Leu Val Lys Tyr Leu Asn Arg Tyr Pro Lys Glu Ser Leu Ala Phe Phe
            180                 185                 190
Gln Ala Arg Phe Lys Glu Glu Arg Phe Gly Arg Phe Phe Gly Gln Ile
```

```
        195                 200                 205
Leu Ala Asp Pro Glu Ser Glu Ala Leu Arg Ala Ala Val Val Ala Asp
    210                 215                 220
Thr Glu Gly Phe Lys Ser Ala Val Phe Gly Gln Asp Ser Ser Asp Gly
225                 230                 235                 240
Arg Asn Thr Ala Ala Ile Asn Gly Ile Tyr Val Val His Ser Val Cys
                245                 250                 255
Ser Tyr Glu Ala Thr Lys Arg Trp Leu Val Ser His Gly Asp Leu Lys
            260                 265                 270
Thr Met Leu Leu Asn Ala Gly Arg Asp Leu Glu Lys Lys Leu Arg Ser
        275                 280                 285
Asp Arg Leu Pro Ala Asn Glu Arg Leu Arg Val Glu Gln Ala Glu Asp
    290                 295                 300
Gln Leu Met Asp Ile Phe Thr Ile Tyr Leu Ser Glu Ser Val Gln Asp
305                 310                 315                 320
Leu Asp Phe Leu Phe Asp Leu Ile Asp Gly Leu Ser Ser Glu Glu Leu
                325                 330                 335
Lys Arg Thr Leu Ala Phe Pro Lys Phe Ile Tyr Arg His Ile Ile Thr
            340                 345                 350
Asn Glu Ser Ile Asp Tyr Arg Arg Ser Val Ile Met Arg Cys Leu Asp
        355                 360                 365
Leu Tyr Gly Gln Arg Thr Cys Ser Gln Lys Met Lys Thr Tyr Ala Phe
    370                 375                 380
His Asn Leu Val Asn Pro Ile Phe Ala Met Asp Val Gln Thr Thr Trp
385                 390                 395                 400
Asn Ser Pro Ser Asn Ser Pro Lys Leu Met Asp Lys Ser Met Thr Glu
                405                 410                 415
Ser Ile Gln Ser Arg Leu Trp Arg Pro Gln Leu Ala Asp Leu Ser Glu
            420                 425                 430
Glu Ser Thr Gln Ala Gly Val Asp His Ser Arg Met Glu Leu Leu Gln
        435                 440                 445
Leu Ser Ala Leu Leu Ile Lys Tyr His His Gln Thr Val Gln Asp Ser
    450                 455                 460
Arg Arg Asp Ile Ile Lys Phe Ala Trp Asn Tyr Ile Arg Leu Glu Asp
465                 470                 475                 480
Ile Ile Asn Lys Tyr Gly Ala Tyr Val Leu Ile Ser Tyr Phe Ile Ala
                485                 490                 495
His Tyr Glu Thr Pro Phe Lys Ile Val Val Gln Val Tyr Val Ala Leu
            500                 505                 510
Leu Arg Ala His Gln Asn Glu Gly Lys Ala Leu Val Thr Gln Ala Leu
        515                 520                 525
Asp Val Leu Ala Pro Val Leu Pro Ser Arg Ile Met Ser Ala Thr Ser
    530                 535                 540
Asn Ala Gln Ala Pro Asp Thr Arg Tyr Pro Leu Trp Ala Lys Trp Pro
545                 550                 555                 560
Arg Arg Ile Leu Ala Glu Glu Thr Ala Asn Leu Gln Gln Val Met Ser
                565                 570                 575
Ile Phe Gln Phe Leu Val Arg His Pro Asn Leu Phe Tyr Glu Ser Arg
            580                 585                 590
Glu His Phe Val Pro Leu Ile Val Pro Ser Leu Ile Lys Ile Ala Ala
        595                 600                 605
Pro Pro Asn Ser Asn Asn Glu Ser Lys Lys Leu Ala Leu Asn Leu Ile
    610                 615                 620
Gly Leu Ile Trp Gln Trp Glu Gln Arg Arg Val Thr Ser Ser Arg Thr
625                 630                 635                 640
Ala Met Thr Asn Gly Ile Leu Glu Ser Pro Asn Ala Arg Lys Arg Lys
```

```
                645                 650                 655
Leu Asp Asp Thr Gln Gly Thr Tyr Ser Pro Ser Ala Ala Leu Gly Pro
            660                 665                 670
Pro Ser Ser His Glu Arg Thr Glu Tyr Ile Ile Pro Ser Asp Leu Arg
        675                 680                 685
Ala Ala Met Thr Lys Tyr Leu Ile Thr Phe Ile Thr Thr Val Pro Glu
    690                 695                 700
Arg Phe Pro Val Pro Ala Ala Arg Phe Arg Glu Leu Pro Ser Ser Lys
705                 710                 715                 720
Pro Gln Pro Gln Gln Pro Pro Ile Leu Thr Gly Asp Met Ile Lys Lys
                725                 730                 735
Ala Val Phe Leu Leu Arg Asn Leu Leu Ser Thr
            740                 745
```

<210> 34454
<211> 662
<212> PRT
<213> A.fumigatus

<400> 34454

```
Ser Arg Lys Pro Tyr Ser Cys Ser Gly Ile Phe Ser Gln Pro Glu Tyr
1               5                   10                  15
Trp Gly Asp Leu Asp Ile Glu Leu Tyr Gln Lys Ile Thr Glu Pro Ile
            20                  25                  30
Leu Ala Gly Glu Lys Ala Asp Lys Pro Asp Glu Lys His Ile Thr Ser
        35                  40                  45
Met Ile Asn Ala Leu Gln Val Val Arg Val Leu Leu Ala Val Lys Pro
    50                  55                  60
Asp Glu Trp Ile Thr Ala Arg Leu Pro Leu Val Gln Lys Leu Phe Glu
65                  70                  75                  80
Lys Pro Leu Arg Ser Asp Asn Pro Glu Ile Gln Asp Ser Leu His Gly
                85                  90                  95
Val Glu Asp Ser Met Asp Ile Ser Pro Lys Leu Pro Pro Pro Val Arg
            100                 105                 110
Arg Val Leu Asp Ala Leu Pro Glu Asp Gln Pro Glu Glu Glu Asp Ala
        115                 120                 125
Met Asp Val Glu Asn Ser Pro Ser Glu Phe Val Thr Tyr Leu Ser Ala
    130                 135                 140
Ile Ala Thr Glu Thr Leu Ser Ala Asn Asn Tyr Ile Ser Ser Leu Asn
145                 150                 155                 160
Thr Leu Trp Thr Leu Ser Lys Asn Lys Pro Ala Glu Met Asp Thr His
                165                 170                 175
Ile Leu Pro Val Met Lys Ala Phe Ser Gln Lys Leu Ala Lys Glu His
            180                 185                 190
Val Ala Ala Ser Thr Asn Asn Gln Gln Ala Gln Tyr Pro Pro Gly Ala
        195                 200                 205
Ala Lys Pro Ala Glu Asn Leu Pro Asp Gln Gln Glu Tyr Glu Ile Gly
    210                 215                 220
Val Asp Leu Ile Leu Lys Thr Ile Glu Leu Ile Ser Val Arg Met Ser
225                 230                 235                 240
His Leu Gly Glu Gln Arg Arg Pro Phe Leu Ser Val Leu Ala Gln Leu
                245                 250                 255
Val Glu Arg Ser Gln Asn Glu Ala Leu Cys Thr Lys Ile Leu Asn Met
            260                 265                 270
Val Glu Thr Trp Ile Phe His Ser Thr Glu Ser Trp Pro Thr Leu Lys
        275                 280                 285
```

```
Glu Lys Thr Ala Val Leu His Lys Met Leu Leu Phe Glu Thr Arg Ala
    290                 295                 300
Asp Gln Lys Met Leu Lys Lys Phe Leu Asp Leu Val Ile Arg Ile Tyr
305                 310                 315                 320
Glu Asp Ser Lys Ile Thr Arg Thr Glu Leu Thr Val Arg Leu Glu His
                325                 330                 335
Ala Phe Leu Ile Gly Thr Arg Ala Gln Asp Val Glu Met Arg Asn Arg
            340                 345                 350
Phe Met Asn Ile Phe Asp Arg Ser Leu Thr Arg Leu Ala Ser Ser Arg
        355                 360                 365
Leu Ser Tyr Val Leu Thr Cys Gln Asn Trp Asp Thr Leu Ala Asp Ser
    370                 375                 380
Phe Trp Leu Ala Gln Ala Ser His Leu Ile Leu Gly Cys Val Asp Met
385                 390                 395                 400
Thr Ala Pro Ala Arg Leu His Pro Asp Asp Phe Thr Val Tyr Pro Leu
                405                 410                 415
Ser Phe Leu Leu Ser Asn Ala Glu Lys Asp Ala Arg Lys Ala Asp Ile
            420                 425                 430
Met Val Asp Ile Gln Leu Glu Ala Phe Ile Ser Asp Arg Lys Arg Phe
        435                 440                 445
Ile Ala Asp Ile Gly Asp Val Arg Ile Arg Asp Leu Met Glu Pro Leu
    450                 455                 460
Cys Gln Leu Gln His Thr Asp Pro Arg Val Ala Tyr Ser Leu Trp Thr
465                 470                 475                 480
Thr Leu Phe Pro Ile Phe Trp Ser Thr Leu Ser Arg Glu Asp Arg Ile
                485                 490                 495
Asp Leu Glu Lys Gly Met Val Thr Leu Ile Thr Arg Glu Tyr His Gln
            500                 505                 510
Arg Gln Leu Asp Lys Arg Pro Asn Val Val Gln Ala Leu Leu Glu Gly
        515                 520                 525
Ala Val Arg Ser Lys Pro Arg Phe Lys Val Pro Pro His Val Met Lys
    530                 535                 540
Tyr Leu Ser Arg Thr Tyr Asp Ala Trp Tyr Thr Ala Ala Ser Tyr Leu
545                 550                 555                 560
Glu Glu Ser Ala Ile Ser Pro Ile Ile Asp Thr Pro Thr Val Arg Glu
                565                 570                 575
Ser Asn Leu Asp Ala Leu Val Glu Val Tyr Ala Gly Leu Gln Glu Asp
            580                 585                 590
Asp Phe Phe Tyr Gly Thr Trp Arg Arg Arg Cys Lys Phe Val Glu Thr
        595                 600                 605
Asn Ala Ala Leu Ser Tyr Glu Gln Gln Gly Met Trp Asn Lys Ala Gln
    610                 615                 620
Gln Leu Tyr Glu Asn Ala Gln Ile Lys Ala Arg Ser Gly Ala Met Pro
625                 630                 635                 640
Phe Ser Gln Gly Glu Tyr His Leu Val Phe Thr Ser Ser Ser Pro Glu
                645                 650                 655
Pro His Ile Ala Tyr Arg
            660
```

<210> 34455
<211> 80
<212> PRT
<213> A.fumigatus

<400> 34455
Trp Leu Pro Thr Ser Thr Arg Glu Trp Ile Pro Pro Arg Thr Thr Gly

```
1               5                   10                  15
Thr Pro Ile Arg Glu Ser Lys Phe Ala Cys His Ala Thr Phe Glu Phe
            20                  25                  30
Thr Ser Asn His Cys Ser Arg Tyr Gly Thr Ser Pro His Gly Gly Tyr
        35                  40                  45
Gly Leu Gly Leu Glu Arg Phe Leu Ala Trp Leu Cys Ala Arg Tyr Thr
    50                  55                  60
Val Arg Asp Cys Cys Leu Tyr Pro Arg Phe Thr Gly Arg Cys Thr Pro
65                  70                  75                  80
```

<210> 34456
<211> 417
<212> PRT
<213> A.fumigatus

<400> 34456

```
Thr Glu Asp Pro Ser Leu Pro Lys Pro Val Arg Ile Arg Leu Asp Val
1               5                   10                  15
Thr Asp Pro Ala Ile Val Lys Leu Gly Ser Pro Glu Thr Gln Thr Ala
            20                  25                  30
Gly Thr Arg Val Arg Val Leu Gly Arg Val His Arg Leu Arg Val Gln
        35                  40                  45
Lys Asp Val Ile Phe Leu Thr Leu Ser Asp Gly Tyr Gly Tyr Leu Gln
    50                  55                  60
Cys Val Leu Thr Gly Asn Leu Thr Lys Thr Tyr Asp Ala Met Thr Leu
65                  70                  75                  80
Thr Leu Glu Thr Ser Met Ala Ile His Gly Glu Met Arg Ala Val Pro
                85                  90                  95
Pro Lys Gln His Ala Pro Asn Asp Arg Glu Leu His Ala Asp Phe Phe
            100                 105                 110
Thr Val Ile Gly Arg Ala Ala Gly Asp Lys Glu Ala Ile Thr Thr Arg
        115                 120                 125
Val Ala Lys Asp Ala Asp Pro Gln Thr Leu Tyr Asp Asn Arg His Leu
    130                 135                 140
Val Leu Arg Gly Glu Ile Ser Ser Ala Val Met Lys Val Arg Ala Ala
145                 150                 155                 160
Cys Leu Lys Ala Phe Arg Gln Val Phe Glu Glu Lys Arg Met Leu Glu
                165                 170                 175
Val Thr Pro Pro Ala Met Val Gln Thr Gln Val Glu Gly Gly Ser Thr
            180                 185                 190
Leu Phe Lys Phe Asp Tyr Tyr Gly Glu Asp Ala Tyr Leu Thr Gln Ser
        195                 200                 205
Ser Gln Leu Tyr Val Glu Thr Cys Leu Pro Ser Val Gly Asp Val Phe
    210                 215                 220
Cys Val Cys Pro Ser Phe Arg Ala Glu Lys Ser Leu Thr Arg Arg His
225                 230                 235                 240
Leu Ser Glu Tyr Thr His Ile Glu Ala Glu Leu Asp Phe Ile Thr Phe
                245                 250                 255
Thr Asp Leu Leu Asp His Leu Glu Glu Val Ile Cys Arg Val Ile Glu
            260                 265                 270
Leu Thr Leu Ala Asn Pro Ala Thr Ala Ala Leu Ile Lys Gln Leu Asn
        275                 280                 285
Pro Asp Phe Lys Pro Pro Ser Arg Pro Phe Arg Arg Met Lys Tyr Ala
    290                 295                 300
Asp Ala Ile Gln Trp Leu Val Glu His Asp Ile Pro Asn Glu Glu Gly
305                 310                 315                 320
```

```
Lys Pro His Gln Phe Gly Asp Asp Ile Ala Glu Ala Ala Glu Arg Lys
                325                 330                 335
Met Thr Asp Ile Ile Asn Gln Pro Ile Phe Leu Thr His Phe Pro Ala
            340                 345                 350
Glu Ile Lys Ala Phe Tyr Met Lys Lys Asp Pro Glu Asp Arg Arg Val
        355                 360                 365
Thr Glu Ser Val Asp Val Leu Met Pro Gly Val Gly Glu Ile Val Gly
    370                 375                 380
Gly Ser Met Arg Met Asp Asp Trp Asp Glu Leu Met Ala Ala Tyr Lys
385                 390                 395                 400
His Glu Gly Met Asp Pro Thr Pro Tyr Tyr Trp Tyr Thr Asp Gln Arg
                405                 410                 415
Lys
```

<210> 34457
<211> 96
<212> PRT
<213> A.fumigatus

<400> 34457

```
Met Leu Thr Asp Val Arg Gln Asp Pro Asn Ala Gln Pro Ser Gln Gln
1               5                   10                  15
Leu Glu Leu Glu Ala Ala Phe Pro Gln Ser Gln Pro Gln Asn Gly Arg
            20                  25                  30
Ile Glu Asp Thr Glu Tyr Tyr Thr Asn Phe Leu Glu Gln Leu Leu Gly
        35                  40                  45
Leu Val Pro His Gly Asp Gln Glu Ser Val Ser Arg Met Ile Ser Val
    50                  55                  60
Ile Arg Ser Gly Ala Ser Gln Glu Glu Ile Leu Lys Thr Leu Ser Glu
65                  70                  75                  80
Ile Ser Thr Asn Ile Arg Asn Gly Gln Glu Gly Asn Arg Gly Asn Arg
                85                  90                  95
```

<210> 34458
<211> 219
<212> PRT
<213> A.fumigatus

<400> 34458

```
Leu Asp Val Asn Ser Lys Val Ala Trp Gln Ala Asn Leu Leu Ser Leu
1               5                   10                  15
Ile Gly Val Pro Val Val Arg Gly Gly Ile His Ser Leu Val Leu Val
            20                  25                  30
Gly Ser His Gln Phe Val Pro Val Val His Ser His Thr Ala Ala Asp
        35                  40                  45
Asn Leu Ala Asp Thr Arg His Glu Asp Val Asp Thr Leu Gly Asp Ala
    50                  55                  60
Ala Ile Phe Arg Ile Leu Leu His Val Glu Gly Leu Asp Leu Gly Gly
65                  70                  75                  80
Glu Met Gly Gln Glu Asp Gly Leu Val Asp Asp Val Gly His Leu Ala
                85                  90                  95
Leu Gly Ser Phe Gly Asp Ile Val Thr Glu Leu Val Gly Leu Ala Leu
            100                 105                 110
Leu Ile Gly Asp Val Met Phe His Gln Pro Leu Asn Ser Val Gly Val
        115                 120                 125
```

```
Leu His Ala Thr Glu Gly Ala Thr Gly Gly Phe Glu Val Gly Val Glu
    130                 135                 140
Leu Leu Asp Glu Gly Ser Gly Gly Gly Val Gly Glu Gly Gln Leu Asn
145                 150                 155                 160
Asp Pro Ala Asp Asp Leu Phe Glu Val Val Glu Gln Val Gly Glu Gly
                165                 170                 175
Asp Glu Val Glu Leu Cys Leu Asp Val Gly Val Leu Gly Gln Met Thr
            180                 185                 190
Thr Gly Glu Gly Leu Phe Gly Ala Glu Gly Arg Ala Asp Thr Glu Asn
        195                 200                 205
Val Thr His Arg Gly Gln Ala Gly Phe His Val
    210                 215
```

<210> 34459
<211> 138
<212> PRT
<213> A.fumigatus

<400> 34459

```
Gln Arg Asp Trp Ser Asp Val Ser Arg Asp Arg Phe Lys His Gly Ile
1               5                   10                  15
Lys Val Leu Lys Val Leu Ser Tyr Ala Ala Phe Glu Thr Ser Glu Ser
            20                  25                  30
Ser Thr Arg Ala Ile Leu Cys Ala Leu Met Arg Asp Pro Val Arg Tyr
        35                  40                  45
Arg Asn Leu Gln Gln Glu Ile Arg Ser Asn Phe Ser Ala Ser Lys Pro
    50                  55                  60
Ile Thr Asp Ser Gln Leu Val Gly Leu Pro Tyr Leu Thr Ala Cys Ile
65                  70                  75                  80
Asn Glu Gly Leu Arg Leu Trp Pro Gly Leu Asn Gly Gln Phe Thr Ser
                85                  90                  95
Arg Val Ser Thr Gly Ala Val Val Asp Gly Val Tyr Val Pro Pro Gly
            100                 105                 110
Val Arg Arg Met Ile Pro Leu Pro Ser Tyr Phe Phe Ser Leu Leu Ser
        115                 120                 125
Cys Leu Phe Val Ile Leu Glu Ser Arg Asn
    130                 135
```

<210> 34460
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34460

```
Thr Arg Lys Thr Gln Thr Lys Cys Ala His Ser Gly Arg Phe Pro Gln
1               5                   10                  15
Gly Pro Arg Ser Cys Pro Gly Arg Gln Ile Ala Leu Gln Lys Leu Arg
            20                  25                  30
Leu Thr Leu Ala Lys Phe Met Phe Phe Val Asp Met Gln Val Val Asn
        35                  40                  45
Pro Gln Phe Glu Trp Asp Arg Asn Val Pro Val Gly Pro Leu Val Glu
    50                  55                  60
Leu Gly Arg Gly His Gly Ala Asp Glu Pro
65                  70
```

<210> 34461

<211> 64
<212> PRT
<213> A.fumigatus

<400> 34461
Thr His Glu Ala Leu Arg Ala Thr Pro Leu Val Glu Leu Ser Ser Leu
1 5 10 15
Gln Gln Asp Glu Ala Leu Ile Ser Asn Lys Tyr Pro Val His Ser Met
20 25 30
Leu Ile Thr Ile Thr Gln Thr His Lys Leu Pro Tyr Pro Leu Leu Gln
35 40 45
Arg Gly Met Pro Met Arg Thr Arg Ser Arg Phe Arg Asn Leu Ser Ala
50 55 60

<210> 34462
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34462
Pro Asp Ala Ser Trp Ile Asp Asn Trp Asn Ser Gln Lys Thr His Gln
1 5 10 15
Asn Leu Ile Gly Val Ala Phe Ala Leu Gly Ser Phe Leu Leu Ser Arg
20 25 30
Arg Gly Leu Lys Met Leu Val Asp Ser Phe Gly Pro Phe Trp Ile Pro
35 40 45
Lys Tyr Leu Asp Pro Ala His Leu Ile Asp Val Ala Leu Lys Gln Tyr
50 55 60
Val
65

<210> 34463
<211> 81
<212> PRT
<213> A.fumigatus

<400> 34463
Ile Pro Gln Leu Thr Gly Phe Asp Val Gln Cys Leu Val Ser Ala Asp
1 5 10 15
Leu Tyr Thr Leu Gln Arg His Pro Arg Tyr Trp His Asp Pro Asp Thr
20 25 30
Phe Lys Pro Glu Arg Trp Leu Asp Pro Lys Asn Pro Asp Glu Met Arg
35 40 45
Ala Phe Arg Pro Phe Ser Ala Gly Ala Pro Leu Val Ser Arg Pro Ala
50 55 60
Asp Arg Ala Ala Glu Ala Ser Ala His Ala Arg Gln Ile His Val Leu
65 70 75 80
Cys

<210> 34464
<211> 70
<212> PRT
<213> A.fumigatus

<400> 34464

```
Asn Leu Ile Thr Tyr Arg Thr Ala Tyr Ser Pro Glu Thr Arg Arg Ile
1               5                  10                  15
Gln Ala Ser Leu Arg Val Glu Asn Ala Gln Thr Asp Cys Gln Phe Phe
            20                  25                  30
Pro Phe Lys Pro Thr Leu Leu Pro Pro Leu Val Ser Phe Ser Asp Arg
        35                  40                  45
Gln Gly Val Glu Leu Asn Gly Arg Asn Ile Pro Trp Val Val Phe Gly
    50                  55                  60
Thr His Arg Gly Ile Ile
65                  70
```

<210> 34465
<211> 150
<212> PRT
<213> A.fumigatus

<400> 34465

```
Val Gln Ser Arg Ile Pro Trp Tyr Leu Phe Arg Ser Ser Arg Pro Gly
1               5                  10                  15
Arg Thr Pro Leu Arg Met Glu Ser Val Asp Thr Val Ala Pro Val Leu
            20                  25                  30
Pro Thr Thr Gln Arg Thr Val Ile Ile Glu Ala Gly Asp Arg Val Arg
        35                  40                  45
Val Arg Asp Asp Met Pro Leu Pro Thr Leu Glu Lys His Gln Phe Leu
    50                  55                  60
Ile Arg Thr Glu Ala Val Val Ile Asn Pro Ser Asp Thr Lys Thr Arg
65                  70                  75                  80
Gly Pro Cys Val Thr Pro Gly Gly Val Leu Gly Thr Asp Tyr Thr Ala
                85                  90                  95
Thr Val Val Ala Cys Arg Pro Glu Val Thr Glu Val Lys Val Gly Asp
            100                 105                 110
Arg Val Cys Gly Ala Gln His Ala Met Asn Ala Asn Thr Pro His Arg
        115                 120                 125
Gly Ser Phe Gly Glu His Asp Ile Ser Ser Met Ile Ile Lys Glu Asp
    130                 135                 140
Ala Ala Ser Ser Ser Pro
145                 150
```

<210> 34466
<211> 110
<212> PRT
<213> A.fumigatus

<400> 34466

```
Gln Leu Gly Leu Leu Gln Arg His Arg Ser Ile Pro Ile Asp Ala Ala
1               5                  10                  15
Val Asp Val Asp Leu Ser Leu Ser Gly Lys Leu His Arg Val Ala Asn
            20                  25                  30
Glu Ile Asp Glu Asp Leu Thr Asn Ala Glu Pro Ile Ala Asn Tyr His
        35                  40                  45
Arg Trp His Ile His Ile His Gln Val Ile Glu Leu Glu Ser Leu Val
    50                  55                  60
Glu Ser Ser Arg Arg Asn Gly Ile Tyr Tyr Ile Leu Asn His Arg Pro
65                  70                  75                  80
Asp Met Glu Pro Gly Val Asp Gln Gly His Leu Ser Ser Leu Asn Pro
                85                  90                  95
```

```
Arg Asp Ile Glu Asp Ile Val His Gln Leu Ala Gln Val Gly
            100                 105                 110

<210> 34467
<211> 779
<212> PRT
<213> A.fumigatus

<400> 34467
Gly Lys Cys Trp Tyr Trp Ile Asp Phe Phe Leu Asp Ile His Glu Gln
1               5                  10                  15
His Val Ala Glu Leu Lys Ala Ala Gln Glu Arg Gln Arg Phe Ala Ile
            20                  25                  30
Asp Ala Lys Tyr Arg Ala Phe Ser Asn Ser Ile Pro Gln Val Val Phe
        35                  40                  45
Glu Ala Ile Glu His Arg Gly Leu Ile Phe Val Asn Glu Gln Trp His
    50                  55                  60
Leu Tyr Thr Gly Gln Lys Leu Glu Glu Ala Leu Asp Phe Gly Phe Ala
65                  70                  75                  80
Lys His Val His Pro Asp Asp Leu Glu Lys Cys Gly Ser Leu Ser Val
                85                  90                  95
Tyr Ile Ala Asp Leu Gln Asn Lys Thr Thr Ala Asp Ser Thr Gly Lys
            100                 105                 110
Asp Gly Cys Thr Gly Thr Glu Lys Ala Gly Thr Pro Gly Arg Gln Phe
        115                 120                 125
Ser Gln Gly Val Thr Pro Ala Leu Ala Glu Leu Val Arg Leu Gly Ile
    130                 135                 140
Ala Ser Val Gln Lys Asp Glu Asn Gly Arg Val Phe Tyr Ser Thr Glu
145                 150                 155                 160
Ile Arg Ile Arg Ser Lys Gly Gly Asp Tyr Arg Trp His Leu Val Arg
                165                 170                 175
Leu Val Arg Val Glu Thr Ser Ser Phe Gly Ser Gly Glu Ala Ser Trp
            180                 185                 190
Tyr Gly Thr Cys Thr Asp Ile Asn Asp Arg Lys Asn Leu Glu Arg Glu
        195                 200                 205
Leu Asn Lys Ala Met Gln Gln Leu Asn Asn Gln Met Glu Ser Lys Thr
    210                 215                 220
Lys Phe Phe Ser Asn Met Ser His Glu Ile Arg Thr Pro Leu Asn Gly
225                 230                 235                 240
Ile Leu Gly Thr Ile Pro Phe Ile Leu Asp Thr Gln Leu Asp Thr Asp
                245                 250                 255
Gln Arg Arg Met Leu Asp Thr Ile Gln Asn Ser Ser Thr Asn Leu Arg
            260                 265                 270
Glu Leu Val Asp Asn Ile Leu Asp Val Ser Arg Val Glu Ala Gly Lys
        275                 280                 285
Met Ser Leu Val Asn Ser Trp Phe His Val Arg Ser Val Val Glu Asp
    290                 295                 300
Val Ile Asp Thr Ile Ser Ser Arg Ala Leu Asp Lys Gly Leu Glu Leu
305                 310                 315                 320
Asn Tyr Leu Met Asp Val Asn Val Pro Pro Met Val Ile Gly Asp Arg
                325                 330                 335
Phe Arg Ile Arg Gln Val Leu Ile Asn Leu Val Gly Asn Ala Val Lys
            340                 345                 350
Phe Thr Thr Gln Gly Glu Val His Ile Asn Cys Gly Ile Tyr Arg Asp
        355                 360                 365
Ala Ser Val Pro Leu Lys Glu Thr Glu Leu Leu Leu Asn Phe Asp Val
```

```
    370                 375                 380
Val Asp Thr Gly Lys Gly Phe Ser Ala Arg Asp Ala Glu Arg Leu Met
385                 390                 395                 400
Gln Arg Phe Ser Gln Leu Gly Glu Asn Ala Ser Gln Gln Asn Ala Gly
                405                 410                 415
Ser Gly Leu Gly Leu Phe Leu Ser Lys Gln Leu Val Glu Met His Gly
            420                 425                 430
Gly Arg Leu Thr Pro Ser Ser Lys Glu Gly Gln Gly Ala Thr Phe Ser
        435                 440                 445
Phe Phe Val Lys Val Asp Ala Pro Pro Pro Pro Ser Pro Asp Asp Pro
    450                 455                 460
Arg Leu Val Arg Gln Ser Ser Ser Thr Ser Asp Leu Gly Thr Gln Ser
465                 470                 475                 480
Lys Pro Glu Pro Leu Gln Arg Met Leu Phe Ala Arg Glu Ser Ala Asp
                485                 490                 495
Ser Arg Ser Asp Leu Ala Asp Leu Ser Pro Ala Leu Glu Ser Pro Leu
            500                 505                 510
Ser Gln Pro Ser Ser Ser Val Asp Pro Ser Ala Arg Ala Thr Phe Asn
        515                 520                 525
Asn Phe Ser Glu His Ser Ser Met Ser Ser Ala Met Pro Thr Pro Asp
    530                 535                 540
Ile His Gly Thr Glu Pro Leu Pro Lys Ile Glu Cys Ser Arg His Pro
545                 550                 555                 560
Val Gln Ser Asp Ser Thr Glu Asn Arg Gly Ile Ala Pro Thr Ser Ser
                565                 570                 575
Ser Gln Asp Ala Ser Arg Ser Leu Tyr Arg Pro Ser Glu Ser Gly Leu
            580                 585                 590
Glu Pro Leu Ala Arg Arg Ser Gln Ala Phe Glu Thr Pro Gln Ser Leu
        595                 600                 605
Tyr Ser Ile Val Ile Leu Cys Pro Phe Asp Tyr Ala His Lys Ala Ile
    610                 615                 620
Lys Gln His Ile Glu Gln Val Val Pro His Asp Ile Pro Phe Ser Ile
625                 630                 635                 640
Ala Ser Met Pro Asp Val Glu Asp Trp Arg Asp Ser Met Ser Asp Gly
                645                 650                 655
Ala Thr Pro Gln Pro Thr His Leu Val Leu Asn Leu Pro Ser Val Glu
            660                 665                 670
Glu Val Leu Asp Met Ile Ser Tyr Val Ala Glu Cys Asp Gln Val Thr
        675                 680                 685
Ala Pro Ala Leu Val Ile Ile Cys Asp Leu Val Gln Lys Arg Gln Ile
    690                 695                 700
Asn Ser Ser Leu Lys Asp Leu Ser Ser Ser Gly Lys Arg Val Phe Thr
705                 710                 715                 720
Val Pro Lys Pro Val Lys Pro Ser Ala Phe Ser Ala Ile Phe Asp Pro
                725                 730                 735
Asp Asn Gln Arg Asp Leu Ser Lys Asp Arg Asn Gln Asp Met Ala Arg
            740                 745                 750
Glu Ile Asn Asn Asn Phe Lys Thr Met Ser Lys Met Val Lys Glu Val
        755                 760                 765
Ile Gly Asn Lys Gly Tyr Arg Ile Leu Ala Gly
    770                 775
```

<210> 34468
<211> 104
<212> PRT
<213> A.fumigatus

<400> 34468
His Val Thr Cys Gln Cys Asp Ile Gln Met Pro Val Lys Asn Gly Tyr
1 5 10 15
Glu Thr Cys Arg Glu Ile Arg Arg Trp Glu Met Lys Asn His Tyr Pro
20 25 30
Gln Ile Pro Ile Met Ala Leu Ser Ala Asn Ala Met Thr Asp Gln Ile
35 40 45
Glu Asn Ala Ala Arg Ala Gly Phe Asn Asp Tyr Val Thr Lys Pro Ile
50 55 60
Lys His Asn Glu Leu Gly Lys Met Met Met Gly Leu Leu Ala Pro Asp
65 70 75 80
Arg Pro Leu Leu Leu Arg Asp Arg Leu Lys Pro Asp His Asp Gly His
85 90 95
Leu Ser Asp Ala Ser His Ser Gln
100

<210> 34469
<211> 665
<212> PRT
<213> A.fumigatus

<400> 34469
Leu Asp Asn Leu Tyr Gln Lys Phe Ala His Ala Asn Leu Leu Ser Glu
1 5 10 15
Gly His Ile Asp Asp Pro Leu Thr Ser Leu Pro Trp Leu Pro Val Val
20 25 30
Leu Gln Ser Ala Gly Asn Ser Arg His Leu Ala Ser Trp Thr Pro Glu
35 40 45
Ser Ala Ser Tyr Asp Cys Phe Lys Leu Glu Ile Ala Thr Leu Ala Gln
50 55 60
Arg Glu Thr Val Tyr Lys Glu Ser Ser Thr Ser Pro Gln Leu Leu Glu
65 70 75 80
Phe Gly Lys His Leu Glu Ser Ala His Arg Leu Val Cys Ala Asp Arg
85 90 95
Tyr His Lys Lys Ala Pro Ile Ala Cys Tyr Gln Cys Thr Leu His Cys
100 105 110
Ser Thr Asp Arg Lys Ser Phe Arg Leu Glu Thr Phe Ile Leu Trp Arg
115 120 125
Asp Ser Leu Asp Ile Ile Asp Glu Lys Leu Leu Ser Ala Gly Ala Leu
130 135 140
Asp Thr Phe Ala Lys Tyr Val Leu Gln Arg Asp Ala Glu Val Asp Asn
145 150 155 160
Lys Ala Arg Asp Arg Gly Phe Ala Pro Ala Val Ile Trp Ser Pro Arg
165 170 175
Asp Phe Tyr Asp Asn Val His Val Pro Lys Asp Ala Pro Glu Ser Ser
180 185 190
Ala Glu Ile Lys Ser Asp Leu Ile His Cys Arg Leu Tyr Pro Phe Gln
195 200 205
Arg Arg Ala Val Arg Trp Leu Leu Glu Arg Glu Gly Val Lys Leu Gln
210 215 220
Glu Asn Gly His Val Leu Pro Leu Glu Asp Lys Ser Thr Ser Glu Leu
225 230 235 240
Pro Thr Ser Phe Glu Lys Arg Thr Asp Ala Glu Gly Lys Thr Tyr Tyr
245 250 255
Val Ser Pro Leu Phe Val Thr Val Thr Ser Asp Leu Ser Asn Trp Tyr

```
            260                 265                 270
Ala Pro Ala Asp Tyr Leu Lys Gly Gly Ile Leu Ala Glu Glu Met Gly
        275                 280                 285
Leu Gly Lys Thr Val Glu Met Ile Ser Leu Met Cys Leu His Arg Arg
    290                 295                 300
Pro Leu Gln Pro Asp Met Asp Leu Glu Ile Gly Gly Met Arg Gln Ser
305                 310                 315                 320
Gly Ala Thr Leu Ile Ile Thr Pro Pro Ala Ile Leu Gln Gln Trp Met
                325                 330                 335
Gln Glu Ile Gln Leu His Ala Pro Ala Leu His Val Leu His Tyr Thr
            340                 345                 350
Gly Ile Asn Arg His Gln Lys Leu Ser Asp Arg Glu Leu Val Glu Leu
        355                 360                 365
Leu Ala Asp Gln Asp Val Val Leu Thr Thr Tyr Asp Val Leu Ala Arg
    370                 375                 380
Glu Ile His Tyr Ser Gly Ala Ala Pro Lys Arg Asn Leu Arg His Glu
385                 390                 395                 400
Lys Arg Phe Gln Pro Arg Lys Ser Pro Leu Val Glu Ile Ser Trp Trp
                405                 410                 415
Arg Val Cys Leu Asp Glu Ala Gln Met Ile Glu Ser Gly Val Ser Asn
            420                 425                 430
Ala Ala Lys Val Ala Arg Leu Ile Pro Arg Gln Asn Ala Trp Ala Val
        435                 440                 445
Thr Gly Thr Pro Leu Arg Lys Asp Ile Ser Asp Leu Leu Gly Leu Leu
    450                 455                 460
Leu Tyr Leu His Tyr Glu Pro Phe Cys Gly Phe Val Trp Asn Arg Leu
465                 470                 475                 480
Cys Arg Ser Phe His Ser Val Leu Ser Gly Ile Val Ser Arg Val Ala
                485                 490                 495
Leu Arg His Ser Lys Asp Tyr Val Arg Ser Glu Leu Asp Leu Pro Ser
            500                 505                 510
Gln Lys Arg Phe Val Ile Thr Ile Pro Phe Thr Ala Val Glu Glu Gln
        515                 520                 525
His Tyr Ala Gln Leu Phe Glu Gln Met Ala Glu Asp Cys Gly Leu Asp
    530                 535                 540
Met Ser Gly Ala Pro Leu Lys Asp Asp Trp Asn Pro Glu Asp Gln Ala
545                 550                 555                 560
Val Val Glu Lys Met Arg Ser Trp Leu Met Arg Leu Arg Gln Ala Cys
                565                 570                 575
Leu Tyr Pro Ala Gly Ser Gly Arg Arg Val Leu Gly Phe Gly Gly Gly
            580                 585                 590
Pro Leu Arg Ser Val Ala Glu Val Leu Glu Ile Met Ile Asp Gln Asn
        595                 600                 605
Asp Ala Leu Val His Ala Glu Glu Arg Ala Leu Ile Gln Ser Gln Leu
    610                 615                 620
Arg Arg Gly Gln Leu Leu Glu Asn Ala Leu Arg Arg Pro Gln Ala Leu
625                 630                 635                 640
Glu Leu Trp Thr Lys Ser Tyr Glu Arg Ser Ser Ala Leu Val Lys Glu
                645                 650                 655
Cys Arg Ile Arg Leu Gln Ser Glu Pro
            660                 665
```

<210> 34470
<211> 242
<212> PRT
<213> A.fumigatus

<400> 34470
His Cys Thr Ile His Tyr Asn Met Val Tyr Ser Ala Ala Ala Ile Leu
1 5 10 15
Pro Ile Ser Ile Tyr Leu Gln Ile Ile Thr His Ala Ser Asn Arg Val
20 25 30
Ile Val Cys Ala Cys Val Tyr Arg Leu Ile Arg Asn Asn Val Asp Gln
35 40 45
Tyr Phe Ser Val Arg Ser Arg Gly Tyr Arg Thr Leu Ala Lys Ser Cys
50 55 60
Arg Arg Cys Val Ile Leu Asp Arg Cys Gly Ser Cys Ser Asp Pro Leu
65 70 75 80
Cys Arg Tyr Leu Pro Ala Thr Val Cys Asp Ile Leu Leu Ala His Tyr
85 90 95
Met Met Glu Cys Ser Pro Cys Leu Arg Trp Ser Thr Gln Thr Phe Thr
100 105 110
Ile Ala Gln Met Thr Pro Ile Trp Ile Phe Pro Ala Tyr Pro Met Leu
115 120 125
Ile Ile Gly Pro His Ala Gly Ile Leu Ser Ala Lys Leu Glu Pro Ser
130 135 140
Arg Ala Leu Pro Ile Ile Ile Gly Gly Thr Thr Ile Gln Gly Ile Gly
145 150 155 160
Leu Leu Val Thr Leu Thr Val Tyr Ser Ala Tyr Val Tyr Arg Leu Phe
165 170 175
Ser Gln Lys Leu Pro Arg Glu Asn Val Arg Pro Gly Met Phe Val Ser
180 185 190
Val Gly Pro Ser Ala Phe Thr Val Ser Gly Leu Val Thr Met Ala Ala
195 200 205
His Ala Lys Arg Cys Phe Pro Asp Asp Phe Met Gly Asn Gly Ala Leu
210 215 220
Ala Ala Asn Ile Leu Glu Val Val Val Asn Phe Ala Cys Leu Trp Leu
225 230 235 240
Trp Gly

<210> 34471
<211> 117
<212> PRT
<213> A.fumigatus

<400> 34471
Glu Leu Val Pro Tyr Lys Phe Arg Gly Leu Glu Met Ile Gly Thr Ile
1 5 10 15
Val Phe Leu Phe Asn Ile Val Leu Tyr Ile Thr Ile Trp Cys Ile Leu
20 25 30
Leu Leu Arg Phe Tyr Leu Tyr Pro Tyr Thr Phe Lys Leu Ser Leu Thr
35 40 45
His Pro Thr Glu Ser Leu Phe Val Pro Ala Ser Ile Val Ser Phe Gly
50 55 60
Thr Met Leu Ile Asn Ile Ser Gln Tyr Gly Pro Glu Ala Thr Gly Pro
65 70 75 80
Trp Leu Ser His Ala Val Gly Val Leu Phe Trp Ile Asp Ala Ala Leu
85 90 95
Ala Val Ile Leu Ser Ala Gly Ile Tyr Leu Leu Leu Tyr Val Thr Phe
100 105 110
Phe Leu Leu Thr Ile

115

<210> 34472
<211> 119
<212> PRT
<213> A.fumigatus

<400> 34472
His Leu His Ser Leu Ala Ile Phe Phe Phe Phe Ile Ala Thr Phe Ala
1 5 10 15
His Trp Ser Thr Ile Gly Pro Gly Arg Met Asn Phe Ser Met Ala Trp
20 25 30
Phe Ser Phe Val Phe Pro Asn Thr Ala Leu Ile Thr Ala Thr Phe Ala
35 40 45
Ile Gly Asn Ala Phe Ser Cys Lys Pro Ile Leu Ile Ile Gly Cys Ala
50 55 60
Met Ile Phe Pro Leu Ile Leu Met Tyr Ile Phe Val Phe Tyr Met Met
65 70 75 80
Ile Arg Ala Ile Val Leu Arg Gln Ile Met Trp Pro Gln Lys Gly Glu
85 90 95
Asp Lys Asp Glu Gly Gly Phe Glu Ile Asn Arg Thr Lys Pro Glu Thr
100 105 110
Pro Gly Glu Gln Thr Pro Val
115

<210> 34473
<211> 117
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (69)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34473
Gly Gly Gln Ser Phe Pro Ser Leu Pro Pro Pro Ile Ser Lys Ile Phe
1 5 10 15
Asn Trp Pro Lys Asn Ala Ser Thr Lys Pro Phe Thr Ala Ser Leu Pro
20 25 30
Gln Ser His Val Ala Trp Cys Gln Asn Ser Trp Phe His Pro Ser Val
35 40 45
Ser Ala Ser Ile Arg Cys Gly Asn Thr Thr Ser Asp Thr Gly Leu Phe
50 55 60
Phe Phe Phe Phe Xaa Lys Cys Leu Gly Phe Ser Ser Ser Thr Phe Tyr
65 70 75 80
Trp Ile Pro Lys Gly His Ser Asp Phe Ile Ser His Lys Asn Pro Leu
85 90 95
Glu Ala Val Ala Arg Ser Leu Ile Phe Phe Tyr Arg Glu Phe Thr Leu
100 105 110
Pro Arg Phe Leu Leu
115

<210> 34474
<211> 227
<212> PRT

<213> A.fumigatus

<400> 34474
Val Ser Pro Val Pro Phe Arg Arg Leu Ala Leu Arg Met Thr Gln Gln
1 5 10 15
Arg Lys Thr Ile Ala Val Val Asn Ala Thr Gly Arg Gln Ala Ala Ser
20 25 30
Leu Ile Arg Val Ala Ser Ala Val Gly His Asn Val Arg Ala Gln Ile
35 40 45
His Ser Leu Lys Gly Ile Ile Ala Glu Glu Leu Gln Gly Leu Pro Asn
50 55 60
Val Thr Leu Phe Gln Gly Ser Leu Leu Asn Asn Thr Ala Leu Met Asp
65 70 75 80
Thr Leu Phe Gln Gly Ala Asn Leu Ala Phe Ile Asn Thr Thr Ser Gln
85 90 95
Met Gly Asp Glu Val Ala Ile Gly Lys Ala Leu Ala Asp Ala Ala Lys
100 105 110
Arg Ala Gly Ser Ile Gln His Tyr Val Tyr Ser Ser Met Pro Asp His
115 120 125
Ser Val His Gly Pro Trp Pro Pro Val Pro Leu Trp Ala Pro Lys Phe
130 135 140
Thr Val Glu Asn Tyr Ile Arg Gln Leu Gly Leu Pro Ala Thr Phe Val
145 150 155 160
Tyr Ala Gly Ile Tyr Asn Asn Asn Phe Thr Ser Leu Pro Tyr Pro Leu
165 170 175
Phe Gln Met Glu Leu Met Pro Asp Gly Ser Phe Glu Trp His Ala Pro
180 185 190
Phe Asp Pro Asp Thr Pro Leu Pro Trp Leu Asp Ala Glu His Asp Val
195 200 205
Gly Pro Ala Leu Leu Gln Ile Phe Lys Asp Gly Pro Lys Lys Trp His
210 215 220
Gly His Arg
225

<210> 34475
<211> 91
<212> PRT
<213> A.fumigatus

<400> 34475
Thr Arg Arg Gly Ala Cys Ala Ala Ser Asp Phe Gln Gly Arg Ala Gln
1 5 10 15
Glu Val Ala Arg Ser Ser Val Gly Ser Pro Arg Gly Ile Pro Arg Ser
20 25 30
Trp Lys Thr Val Ala Asp Gly Ser Leu Ser His Arg Ile Ala Leu Thr
35 40 45
Phe Glu Thr Leu Ser Pro Asn Gln Val Cys Ala Ala Phe Ser Arg Ala
50 55 60
Leu Asn Arg Pro Cys Arg Tyr Val His Val Pro Lys Ile Glu Ile Lys
65 70 75 80
Val Asn Ile Pro Ala Gly Tyr Arg Glu Gln Leu
85 90

<210> 34476
<211> 169
<212> PRT

<213> A.fumigatus

<400> 34476
Ser Thr Ser Ser Thr Ala Leu Pro Arg Pro Leu Thr Ser Ser Ser Thr
1 5 10 15
Ser Gln Pro Leu Lys Leu Ser Val Leu Leu Val Ala Thr Val Gln Val
20 25 30
Asn Thr Ser Thr Pro Gly Ala Leu Pro Asn Gly Lys Arg Val Gln Ala
35 40 45
Asn Leu Gly Ala Lys Asn His Ala Ala Val Leu Pro Asn Cys Asn Lys
50 55 60
Asn Gln Thr Leu Asn Ala Ile Val Gly Ala Ala Phe Gly Ala Ala Gly
65 70 75 80
Gln Leu Cys Met Ala Leu Ser Thr Val Val Met Val Gly Glu Thr Lys
85 90 95
Glu Trp Leu Pro Glu Met Ala Glu Arg Ala Lys Ala Leu Asn Val Asn
100 105 110
Gly Gly Phe Glu Lys Gly Ala Asp Leu Gly Pro Val Ile Ser Pro Glu
115 120 125
Ser Lys Lys Arg Ile Glu Asp Leu Ile Ala Ser Ala Glu Gln Glu Gly
130 135 140
Ala Thr Ile Leu Leu Asp Gly Arg Gly Tyr Lys Pro Glu Lys Tyr Pro
145 150 155 160
Asn Gly Asn Phe Val Ser Leu Pro Ser
165

<210> 34477
<211> 144
<212> PRT
<213> A.fumigatus

<400> 34477
Ser Phe Gln Pro Arg Gly Glu His Gly Trp Arg Ala Thr Ser Ile Ile
1 5 10 15
Ala Arg Gln Gln Ile Met Phe Lys Phe Val Asn Leu Ile Arg Ala Asn
20 25 30
Trp Asp Arg Leu Ala Ala Ser Ile Thr Leu Glu Gln Gly Lys Thr Phe
35 40 45
Ala Asp Ala Lys Gly Asp Val Leu Arg Gly Leu Gln Val Ala Glu Thr
50 55 60
Ala Cys Gly Ile Thr Thr Gln Leu Thr Gly Glu Val Leu Glu Val Ala
65 70 75 80
Lys Asp Met Glu Thr Arg Ser Tyr Arg Glu Pro Leu Gly Val Val Ala
85 90 95
Ala Ile Cys Pro Phe Ser Lys Ser Leu Pro Ser Ile Ala Cys Pro Val
100 105 110
Asp Pro Ser Arg Ser Phe Ser Val Thr Asn Arg Ser Thr Arg Arg Leu
115 120 125
Pro Arg Asn Asp Pro Ser Leu Val His Ser Tyr Arg Tyr Asp Tyr Arg
130 135 140

<210> 34478
<211> 121
<212> PRT
<213> A.fumigatus

<400> 34478
Val Gly Pro Thr Ile Ile Thr Asn Val Thr Pro Asp Met Lys Cys Tyr
1 5 10 15
Lys Glu Glu Ile Phe Gly Pro Val Leu Ile Cys Leu Asn Val Pro Thr
20 25 30
Leu Asp Asp Ala Ile Glu Leu Ile Asn Lys Asn Glu Tyr Gly Asn Gly
35 40 45
Ala Ala Val Phe Thr Cys Ser Gly Ser Thr Ala Ser Arg Phe Gln Lys
50 55 60
Asp Ile Glu Ala Gly Gln Val Gly Ile Asn Val Pro Ile Pro Val Pro
65 70 75 80
Leu Pro Met Phe Ser Phe Thr Gly Asn Lys Lys Ser Ile Ala Gly Gly
85 90 95
Gly Ala Gln His Leu Leu Arg Gln Ala Arg Pro Ala Ile Leu His Pro
100 105 110
Ala Glu Asp Arg Asp Gln Pro Val Ala
115 120

<210> 34479
<211> 98
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (43)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34479
Leu Thr Ala Pro Pro Val Asp Phe Pro Ala Met Ile Pro Leu Trp Cys
1 5 10 15
Ile Pro Ile Ala Thr Ile Thr Gly Asn Cys Ile Ile Leu Lys Pro Ser
20 25 30
Glu Arg Asp Pro Gly Ala Ala Met Ile Leu Xaa Glu Leu Ala Arg Glu
35 40 45
Ala Gly Phe Pro Pro Gly Val Ile Asn Ile Val His Gly Ser Ala Lys
50 55 60
Thr Val Asp Phe Ile Leu Asp Glu Pro Ala Ile Lys Ala Ile Ser Phe
65 70 75 80
Val Gly Ser Asn Arg Ala Gly Lys Tyr Ile Tyr Thr Arg Gly Ser Ala
85 90 95
Gln Trp

<210> 34480
<211> 125
<212> PRT
<213> A.fumigatus

<400> 34480
Asn Ala Thr Arg Arg Lys Ser Ser Ala Leu Ser Ser Ser Ala Ser Thr
1 5 10 15
Ser Pro Arg Trp Thr Thr Pro Leu Asn Ser Ser Thr Arg Thr Ser Met
20 25 30
Val Thr Glu Pro Pro Ser Ser Leu Ala Pro Ala Arg Pro Pro Arg Ala
35 40 45

```
Ser Arg Arg Thr Leu Arg Pro Ala Arg Ser Ala Ser Met Ser Pro Ser
    50                  55                  60
Pro Ser Pro Tyr Pro Cys Ser Pro Ser Pro Ala Thr Arg Arg Val Leu
65                  70                  75                  80
Pro Val Ala Val Pro Asn Thr Phe Tyr Gly Lys Pro Gly Leu Gln Phe
                85                  90                  95
Tyr Thr Gln Gln Lys Thr Val Thr Ser Leu Trp Arg Ser Glu Asp Ala
            100                 105                 110
Ile Ser Thr Lys Ala His Val Val Met Pro Thr His Ser
        115                 120                 125
```

<210> 34481
<211> 89
<212> PRT
<213> A.fumigatus

<400> 34481

```
Leu Pro Arg Gln Thr His Glu Ser His Gly Asp His Cys Pro Pro Gly
1               5                   10                  15
Gln Pro Tyr Phe Asn Thr His Ser Ser Pro Ser Ser Lys Cys Gln Lys
            20                  25                  30
Asp Asn Gln Ser Phe Phe Pro Ser Leu Asp Asn Cys Lys Arg Phe Glu
        35                  40                  45
Ser Ile Pro Ile Leu Ser Ser Thr Ile Tyr Tyr Pro Ser Lys Ser Ile
    50                  55                  60
Met Ala Ala Pro Ala Asp Val Thr Ile Lys Asn Leu Ser Gly Glu Trp
65                  70                  75                  80
Thr Met Val Trp Val Val Leu Lys Phe
                85
```

<210> 34482
<211> 143
<212> PRT
<213> A.fumigatus

<400> 34482

```
Ala Tyr Lys Val Ala Val Gly Ile Leu Leu Arg Leu Ile Ala Pro Ala
1               5                   10                  15
Ile Gln Lys Asp Gly Gly Thr Leu Leu Phe Ser Thr Gly Asp Gln Val
            20                  25                  30
Phe Asp Ala Leu Leu Ala Leu Gly Ala Asp Asp Arg Ala Glu Ile Gly
        35                  40                  45
Thr Leu Phe Glu Thr Ala Val Asp Val Glu Ser Leu Gly Ser Leu Arg
    50                  55                  60
His Leu Gly Lys Pro Phe Phe Gly Phe Ser Asn His Asp Asn Cys Ala
65                  70                  75                  80
Gln Gly His Ala Gln Leu Ser Ser Gly Ala Glu Gly Ser Thr Asp Asp
                85                  90                  95
Gly Val Gln Gly Leu Val Leu Val Ala Val Arg Gln His Arg Ser Met
            100                 105                 110
Val Leu Arg Thr Gln Val Gly Leu Asp Thr Leu Thr Ile Gly Gln Ser
        115                 120                 125
Pro Gly Cys Arg Cys Ile Tyr Leu His Gly Cys Tyr Gln Gln Asn
    130                 135                 140
```

<210> 34483

<211> 205
<212> PRT
<213> A.fumigatus

<400> 34483
Ser His Ile Pro Trp Ser Leu Glu Leu His Cys Ile Thr Tyr Leu Gly
1 5 10 15
Ser Phe His Cys His Ser Met Phe Thr Asp Asn Leu Val Gln Gln Gly
20 25 30
Ile Ser Trp Val Thr Arg Lys Ala Ile Ser Tyr Ala Thr Val Thr Leu
35 40 45
Ile Ile Lys Glu Tyr Ala Asp Ser Glu Asp Ala Lys Val Met His Ile
50 55 60
Asp Ile Asp Gln Val Leu Thr Gly Gly Ile Lys Gly Thr Ser Glu Lys
65 70 75 80
Arg His Thr Asp Trp Ala Glu Arg Asp His Lys Asp His Ile Phe Gly
85 90 95
Asn Leu Lys Gly Arg Ser Arg Leu Ile Arg Gly Ser Lys Gly Asp Asp
100 105 110
Gly Lys Val Arg Pro Ala Val Glu Ile Asn Thr Lys Ile Asp Asp Pro
115 120 125
Lys Val Lys Gln Phe Leu Arg Gly Glu Ile Leu Ile Asp Gly Ser Pro
130 135 140
Cys Glu Gly Phe Leu Val Asp Ser Glu Gly Glu Glu Tyr Gly Glu Gly
145 150 155 160
Glu Gly Leu Phe Leu Gln Ser Phe Val Val Asn Gln Asp Asp Gly Ala
165 170 175
Gly Trp Thr Ala Glu Gln Val Arg Ile Phe Asp Ser Leu Pro Gly Gly
180 185 190
Ser Ala Thr Asp Ala Asn Leu Cys Ile Asp Leu Gly Leu
195 200 205

<210> 34484
<211> 166
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (166)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34484
Pro Leu Pro Ser Arg Arg Met Val Ala Pro Ser Cys Ser Ala Leu Ala
1 5 10 15
Ile Lys Ser Ser Met Arg Phe Leu Leu Ser Gly Leu Met Thr Gly Pro
20 25 30
Arg Ser Ala Pro Phe Ser Lys Pro Pro Leu Thr Leu Arg Ala Leu Ala
35 40 45
Arg Ser Ala Ile Ser Gly Ser His Ser Leu Val Ser Pro Thr Met Thr
50 55 60
Thr Val Leu Arg Ala Met His Ser Cys Pro Ala Ala Pro Lys Ala Ala
65 70 75 80
Pro Thr Met Ala Phe Arg Val Trp Phe Leu Leu Gln Phe Gly Ser Thr
85 90 95
Ala Ala Trp Phe Phe Ala Pro Arg Leu Ala Trp Thr Arg Leu Pro Leu

```
            100                 105                 110
Gly Arg Ala Pro Gly Val Asp Val Phe Thr Cys Thr Val Ala Thr Asn
        115                 120                 125
Lys Thr Asp Ser Phe Asn Gly Trp Leu Val Glu Asp Glu Val Asn Gly
    130                 135                 140
Leu Gly Arg Ala Val Asp Asp Val Asp His Thr Arg Arg Lys Ala Gly
145                 150                 155                 160
Leu Pro Gly Gln Leu Xaa
                165
```

<210> 34485
<211> 138
<212> PRT
<213> A.fumigatus

<400> 34485

```
Gly Asp Gly Asp Gly Asp Ile Asp Ala Asp Leu Ala Gly Leu Asn Val
1               5                   10                  15
Leu Leu Glu Ala Arg Gly Gly Arg Ala Gly Ala Ser Glu Asp Gly Gly
            20                  25                  30
Ser Val Thr Ile Leu Val Leu Val Asp Glu Phe Asn Gly Val Val Gln
        35                  40                  45
Arg Gly Asp Val Glu Ala Asp Glu Asp Arg Ala Glu Asp Phe Leu Leu
    50                  55                  60
Val Ala Phe His Val Arg Arg His Val Gly Asp Asp Ser Trp Ala Asp
65                  70                  75                  80
Leu Arg Gly Arg Trp Val Ser Glu Gly Glu Ala Glu Arg Val Arg Arg
                85                  90                  95
Val Ser Leu Gln Ser Cys Arg Trp Asp Thr Ser Gln Ala Tyr Ser Pro
            100                 105                 110
Cys His Pro Glu Gly Trp Trp His Pro Pro Val Gln His Trp Arg Ser
        115                 120                 125
Ser Leu Arg Cys Ala Ser Cys Ser Arg Gly
    130                 135
```

<210> 34486
<211> 210
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (48)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34486

```
Met Tyr Leu Pro Ala Arg Leu Leu Pro Thr Lys Leu Ile Ala Leu Met
1               5                   10                  15
Ala Gly Ser Ser Arg Met Lys Ser Thr Val Leu Ala Glu Pro Trp Thr
            20                  25                  30
Met Leu Ile Thr Pro Gly Gly Lys Pro Ala Ser Arg Ala Ser Ser Xaa
        35                  40                  45
Ser Ile Met Ala Ala Pro Gly Ser Arg Ser Glu Gly Phe Arg Met Met
    50                  55                  60
Gln Leu Pro Val Ile Val Ala Ile Gly Met His Gln Arg Gly Ile Ile
65                  70                  75                  80
```

```
Ala Gly Lys Ser Thr Gly Gly Ala Val Ser His Gly Glu Arg Thr Gly
                85                  90                  95
Gly Ile His Arg Thr Ser Asp Gly Arg Gln Gly Leu Thr Glu Arg Ala
            100                 105                 110
Asn Ser Arg Asn Asp Ser Gln Gly Leu Pro Val Ala Ser Ser Leu His
        115                 120                 125
Ile Leu Gly His Phe Glu Asp Leu Thr Gly Gln Leu Gly Gly Asp Ala
    130                 135                 140
Thr Ser Gly Leu Cys Asn Leu Gln Thr Ala Lys Asp Val Thr Leu Gly
145                 150                 155                 160
Ile Ser Lys Gly Leu Ala Leu Leu Glu Gly Asp Gly Arg Cys Glu Thr
                165                 170                 175
Val Pro Val Gly Thr Asp Glu Val Asp Lys Leu Glu His Asp Leu Leu
            180                 185                 190
Pro Gly Asp Asn Ala Gly Cys Pro Pro Ala Met Leu Thr Thr Arg Leu
        195                 200                 205
Lys Gly
    210
```

<210> 34487
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34487

```
His Ser Leu Ser Ser Trp Ser Thr Val Leu Ser Thr Val Thr Tyr Phe
1               5                   10                  15
Phe Gly Leu Arg Thr Val Leu Gly Ala Gln Pro Arg Ala Gln Leu Tyr
            20                  25                  30
Pro Val Thr Tyr Asn Tyr Asn Thr Ser Ile Pro Ala Leu Leu Ser His
        35                  40                  45
Asn Val Pro Leu Ser Trp Ile Thr Ala Cys Thr Pro Asn Pro Ala Lys
    50                  55                  60
Ile Leu Gln Phe Leu Ser Ser Leu Leu Asp
65                  70
```

<210> 34488
<211> 392
<212> PRT
<213> A.fumigatus

<400> 34488

```
Thr Ser Thr Tyr Leu Leu Pro Ala Val Phe Asn Pro Ser Gly Leu Thr
1               5                   10                  15
His Cys Ser Phe Pro Tyr Phe Glu Glu Glu Pro Ala Arg Phe Thr Ala
            20                  25                  30
Thr Leu Gln Ala Tyr His Ala Phe Lys Val Gln Gly Val Asp Ala Thr
        35                  40                  45
Leu Gly Tyr Ile Pro Asn Thr Leu Val Gln Ser Ile Pro Trp Pro Lys
    50                  55                  60
Glu His Trp Met Ile Asp Ser Arg Ala Ile Val Leu Leu Ser Pro Pro
65                  70                  75                  80
Gly Asn Ala Ala Ser Thr Arg Thr Gln Val Ile His Ser Ala Ile His
                85                  90                  95
Arg Met Ile Glu Ala Gly Tyr Thr Asp Val Leu Lys Gly Trp Arg Asn
            100                 105                 110
```

```
Glu Arg Phe Pro Val Tyr Arg Pro Asp Gly Gly Val Ile Leu Glu Ile
        115                 120                 125
Glu Arg Ser Ala Ser Ala Leu Phe Gly Ile Val Thr Ser Gly Val Gln
    130                 135                 140
Met Leu Cys Tyr Val Lys Asp Ala Lys Asn Gly Ile Arg Leu Trp Ile
145                 150                 155                 160
Ala Lys Arg Ser Met Arg Lys Gln Thr Tyr Pro Gly Met Leu Asp Cys
                165                 170                 175
Thr Ala Ala Gly Ala Leu Ser Ala Gly Glu Ser Pro Gln Ser Ala Met
            180                 185                 190
Ile Leu Glu Ala Thr Asp Glu Ala Ser Leu Ala Arg Glu Ile Ile Glu
        195                 200                 205
Ser Gly Met Lys Tyr Val Gly Thr Ile Ser Tyr Phe His Met Lys Asp
    210                 215                 220
Ser Ser Leu Ala Ser Ser Glu Gly Ser Ser Thr Ala Val Leu Leu Pro
225                 230                 235                 240
Glu Val Glu Tyr Leu Tyr Glu Leu Pro Leu Asp Glu Gly Thr Val Pro
                245                 250                 255
Arg Pro Arg Asp Ser Glu Val Glu Asp Phe Arg Leu Trp Asn Val Asp
            260                 265                 270
Gln Val Val Asp Ala Leu Gly Arg Gly Ser Phe Lys Pro Asn Ser Ala
        275                 280                 285
Val Val Val Ile Asp Phe Phe Ile Arg His Gly Val Ile Thr Pro Glu
    290                 295                 300
Thr Glu Pro Met Tyr Asp Glu Ile Ile Arg Arg Leu His Arg Glu Leu
305                 310                 315                 320
Pro Phe Pro Thr Ala His Trp Cys Thr Gly Ala Cys Gly Arg Gln Ala
                325                 330                 335
Lys Pro Asp Ser Cys Met Pro Ser Arg Ile Leu Cys Pro Leu Arg Trp
            340                 345                 350
Gly His Lys Ser Ile His Leu Gly Asn Ser Leu Pro Gly Leu Cys Thr
        355                 360                 365
Lys Thr Thr Pro Asn Pro Ser Lys Arg Thr Met Phe Asp Arg Leu Thr
    370                 375                 380
Lys Lys Gln Gln Ala His His Ile
385                 390
```

<210> 34489
<211> 74
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34489

```
Ile Leu Gly Arg Xaa Asp Leu Ala Arg Ile Ser Thr Glu Trp Lys Thr
1               5                   10                  15
Arg Gly Trp Asp Gly Ile Val Glu Ala Tyr Ser Phe Ser Leu Asp Pro
            20                  25                  30
Ile Met Gly Leu Leu Leu Ala Phe Phe Val Leu Met Glu Tyr Ser Phe
        35                  40                  45
Ile Tyr Cys Asp Leu Phe Leu Arg Ser Pro His Cys Ile Arg Ser Ser
    50                  55                  60
```

Ala Glu Gly Thr Val Ile Ser Gly Tyr Leu
65 70

<210> 34490
<211> 98
<212> PRT
<213> A.fumigatus

<400> 34490
Ser Ile Asn Arg Arg Ser Phe Arg Ser Ala Arg Cys Pro Ile Met Val
1 5 10 15
Ala Thr Gly Val Ser Ala Arg Gly Leu Asp Ile Lys Asn Val Met His
20 25 30
Val Val Asn Phe Asp Leu Pro Ser Ala Ala His Gly Gly Ile Thr Glu
35 40 45
Tyr Ile His Arg Ile Gly Glu His Ile Gly Tyr Val His Tyr Leu Gly
50 55 60
Leu Pro Ala Asn Gly Pro Gln Asp Val Leu His Ala Leu Ala Thr Lys
65 70 75 80
Ala Leu Gln Pro Pro Phe Thr Met Thr Lys Thr Pro Ile Ser Pro Pro
85 90 95
Thr Ser

<210> 34491
<211> 78
<212> PRT
<213> A.fumigatus

<400> 34491
Arg Ala Ser Ser Pro Ser Gln Glu Arg Lys Leu Leu Pro Ser Leu Val
1 5 10 15
Met Ile Tyr Pro Tyr Ser Val Phe Asp Asp Ser Lys Phe Asp Asp Ala
20 25 30
Gly Leu His Pro Ile Met Arg Glu Asn Ile Arg Leu Cys Asn Tyr Glu
35 40 45
Val Pro Thr Pro Ile Gln Ala Tyr Ala Ile Pro Ala Val Leu Thr Gly
50 55 60
His Asp Leu Ile Ala Ile Ala Gln Thr Gly Glu Tyr Glu Ser
65 70 75

<210> 34492
<211> 134
<212> PRT
<213> A.fumigatus

<400> 34492
Tyr Pro Ser Ser Asn Thr Thr Asn Lys Thr Asn Glu Leu Gly Ser Gly
1 5 10 15
Lys Thr Ala Ala Phe Leu Ile Pro Val Leu Ser Gln Leu Met Gly Lys
20 25 30
Ala Lys Lys Leu Ala Ala Pro Arg Pro Asn Leu Ala Asn Gly Phe Asp
35 40 45
Pro Ser Val Asp Ala Val Arg Ala Glu Pro Leu Val Leu Ile Val Ala
50 55 60
Pro Thr Arg Glu Leu Ser Thr Gln Ile Phe Asp Glu Ala Arg Arg Leu

65 70 75 80
Cys Tyr Arg Ser Met Leu Arg Pro Cys Val Val Tyr Gly Gly Ala Pro
85 90 95
Val Arg Glu Gln Arg Glu Glu Leu Gln Lys Gly Cys Asp Ile Leu Ile
100 105 110
Gly Thr Pro Gly Arg Leu Leu Asp Phe Met Asp Lys Pro His Val Leu
115 120 125
Ser Leu Arg Arg Val Lys
130

<210> 34493
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34493
Ile Ile Tyr Ala Glu Asp His Leu Lys Lys Gln Cys Leu Tyr Asp Leu
1 5 10 15
Leu Leu Ala Met Pro Pro Ser Arg Thr Leu Ile Phe Val Asn Thr Lys
20 25 30
Ile Gln Ala Asp Phe Leu Asp Asp Phe Leu Tyr Asn Met Gly Leu Pro
35 40 45
Ser Thr Ser Ile His Ser Asp Arg Thr Gln Arg Glu Arg Glu Asp Ala
50 55 60
Leu
65

<210> 34494
<211> 97
<212> PRT
<213> A.fumigatus

<400> 34494
Leu Pro Glu Asp Val Asn Glu Asp Ala Asp His Arg Tyr Met Met Phe
1 5 10 15
Ser Ala Thr Phe Asn Arg Glu Cys Arg Arg Leu Ala Arg Lys Phe Leu
20 25 30
Ala Glu Asp His Val Arg Ile Arg Ile Gly Arg Pro Gly Ser Thr His
35 40 45
Ile Asn Val Asp Gln Thr Val Ser Lys Leu Lys Ala Gln Ser Glu Pro
50 55 60
Glu Ala Ile Leu Lys Met Tyr Arg Ser Ser Met Pro Arg Ile Thr Leu
65 70 75 80
Lys Ser Asn Ala Phe Thr Thr Phe Phe Trp Gln Cys Arg His Arg Gly
85 90 95
Pro

<210> 34495
<211> 102
<212> PRT
<213> A.fumigatus

<400> 34495
Arg Ser Thr Gly Arg Thr Ala Arg Ile Gly Asn Glu Gly Leu Ala Thr
1 5 10 15

```
Ser Phe Tyr Asn Asp Lys Asn Ser Asp Ile Ala Pro Asp Leu Val Lys
            20                  25                  30
Ile Leu Ile Glu Thr Gly Gln Lys Val Pro Asp Phe Leu Glu Ser Tyr
        35                  40                  45
Lys Pro Ala Asp Asp Val Val Lys Phe Asp Asp Asp Thr Asp Asp Glu
    50                  55                  60
Ala Ala Asp Gly Asp Asp Asn Val Ile Thr Asn Asn Asp Asp Ala Gly
65                  70                  75                  80
Thr Val Trp Ser Gly Ile Pro Met Glu Ser Ser Ser Asp Asp Ala Pro
                85                  90                  95
Val Ser Thr Asp Trp Glu
            100
```

<210> 34496
<211> 214
<212> PRT
<213> A.fumigatus

```
<400> 34496
Phe Ser Tyr Tyr Ser His Thr Ser Gln Asp Ser Tyr Thr Thr Phe Met
1               5                   10                  15
Leu Thr Gln Lys Glu Met Arg Asn Asp Gly Ala Ser Arg Ala Ser Ile
            20                  25                  30
Leu Met Lys Thr Gly Ala Cys Val Gly Gly Thr Ile Ile Gly Tyr Leu
        35                  40                  45
Ser Gln Phe Val Gly Arg Arg Arg Ala Ile Ile Ile Ser Ala Leu Cys
    50                  55                  60
Ser Gly Ile Leu Ile Pro Ala Trp Ile Leu Pro Gln Gly Glu Arg Ala
65                  70                  75                  80
Leu Ser Ala Thr Gly Phe Phe Met Gln Phe Phe Val Gln Gly Ala Trp
                85                  90                  95
Gly Val Ile Pro Ile His Leu Asn Glu Leu Ser Pro Pro Ala Phe Arg
            100                 105                 110
Ser Ser Phe Pro Gly Leu Tyr Leu Val Pro Tyr Arg Ser Trp Arg Ile
        115                 120                 125
Leu Thr Asn Val Gln Arg Tyr His Ile Pro Ser Arg Lys His Asp Leu
    130                 135                 140
Leu Ala Leu Arg Pro Asp Cys Gln Arg His Cys Arg Glu Asn His Asp
145                 150                 155                 160
His Arg Ser Ile Trp Ser Ala Gly Ser Cys Val Trp Pro Cys His Gly
                165                 170                 175
Ser Cys His Gly His His Cys Asp Gly Tyr Arg Gly Tyr Tyr Gly Ile
            180                 185                 190
Trp Thr Gly Glu Ala Trp Ser Ser Val Arg Asp Cys Arg Cys Gly Pro
        195                 200                 205
Pro Val Ser Gln Val Arg
    210
```

<210> 34497
<211> 135
<212> PRT
<213> A.fumigatus

```
<400> 34497
Met Ser Phe Leu His Pro Arg Ser Val Leu Pro Ser Gln Val Cys Thr
1               5                   10                  15
```

```
Ser Tyr His Thr Asp Arg Gly Glu Ser Ser Leu Thr Cys Lys Gly Ile
            20                  25                  30
Thr Tyr Gln Val Gly Asn Met Ile Ser Ser Pro Ser Ala Gln Ile Val
        35                  40                  45
Asn Ala Ile Ala Glu Lys Thr Met Ile Thr Ala Pro Ser Gly Gln Arg
    50                  55                  60
Val Pro Ala Tyr Gly Pro Val Met Gly Val Ala Thr Ala Ile Ile Ala
65                  70                  75                  80
Met Gly Ile Val Val Thr Thr Ala Phe Gly Pro Glu Lys Arg Gly Arg
                85                  90                  95
Arg Phe Glu Thr Ala Val Ala Gly Leu Gln Ser Ala Arg Ser Asp Lys
            100                 105                 110
Glu Ile Asp Leu Glu Glu Gly Leu Asp Asp Lys Ala Ala Glu Arg Arg
        115                 120                 125
Val Glu Glu Val Gly Lys Leu
    130                 135

<210> 34498
<211> 104
<212> PRT
<213> A.fumigatus

<400> 34498
Val Glu Ile Ser Glu Ile Thr Ser His Leu Ser Ser Phe Tyr Gln Asn
1               5                   10                  15
Ser Lys Ile Leu Pro Gly Gln Thr Thr Asn Met Asp Ala Lys Thr Thr
            20                  25                  30
Ile Ile Ile Arg Ala Val Val Ile Pro Leu Ala Phe Leu Ile Phe Ile
        35                  40                  45
Leu Thr Ile Ile Ala Ile Phe Ile Leu Lys Cys Arg Met Asp Arg Lys
    50                  55                  60
Lys Asp Glu Arg Glu Asn Leu Asn Tyr Ser Phe Ala Ser Tyr Glu Gln
65                  70                  75                  80
Trp Gln Thr Pro Asn Gln Pro His Asn Gln Lys Met Asp Ala Ala Gln
                85                  90                  95
His Ser His Asn Ser Met Ala Arg
            100

<210> 34499
<211> 96
<212> PRT
<213> A.fumigatus

<400> 34499
Tyr Gly Ser Thr Cys Gln Phe Thr Ala Pro Lys Thr Met Ile Pro Pro
1               5                   10                  15
Ile Arg Leu Ser Val Arg Arg Cys Asp Ser Leu Lys Gly Ser Ser Ile
            20                  25                  30
Ser Ser Gln Val Met His Pro Leu Gln Val Leu Thr Pro Asn Gly Ser
        35                  40                  45
Ala Pro Pro Asn Cys Asn Glu Thr Val Glu Thr Cys Met Gln Trp Val
    50                  55                  60
Gly Ile Phe Gly Tyr Lys Tyr Asp Ala Leu Lys Ser Val Val Glu Asn
65                  70                  75                  80
Thr Pro Asp Asp Lys Tyr Glu Asn His Leu Arg Val Thr Ser Cys Lys
                85                  90                  95
```

<210> 34500
<211> 73
<212> PRT
<213> A.fumigatus

<400> 34500
Gly Leu Ile His Tyr Leu Lys Glu Ile Gly Leu Arg Thr Asn Ser Ser
1 5 10 15
Phe Leu Ala Thr Ile Leu Ala Val Val His Gly Ser Asn Gly Arg Arg
20 25 30
Lys Gly Gly Arg Ile Leu His Met Ile Asp Gly Tyr Gly Phe Asp Asn
35 40 45
Asn Lys Ala Gln Pro Met Gln Val Ser Ala Gly Ser Ala Thr Thr Lys
50 55 60
Leu Asn Met Leu Leu Arg Thr Arg Phe
65 70

<210> 34501
<211> 254
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (218),(244)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34501
Val Ala Asn Ala Ile Asn Phe Thr Gln Glu Thr Trp Ala Asn Asp Ile
1 5 10 15
Ala Ala Ala Gln Ala Ala His Ile Asp Ala Phe Ala Leu Asn Leu Gly
20 25 30
Tyr Gly Leu His Asn Tyr Asp Leu Ile Leu Asn Asp Ala Phe Thr Val
35 40 45
Ala His Arg His Asn Phe Lys Met Phe Leu Ser Phe Asp Met Gly Gln
50 55 60
Gly Pro Gln Trp Pro Val Asp Glu Ile Val His Leu Ile Asp Asn Tyr
65 70 75 80
Ala Thr Gly Gly Ala Tyr Phe Lys His His Asp Asp Lys Pro Leu Val
85 90 95
Ser Thr Phe Glu Gly Gly Gln Asn Ala Asp Val Trp Lys Asp Val Arg
100 105 110
His Asn Ala Gln Ser Asp Phe Phe Phe Ile Pro Asp Trp Ser Ser Leu
115 120 125
Gly Ile Glu Ala Ala Ser Ser Ser Pro Val Val Asp Gly Leu Met Ser
130 135 140
Trp His Ala Trp Pro Ala Gly Ala His Asp Met Asn Thr Thr Leu Asp
145 150 155 160
Glu Glu Tyr Ile Ala Ala Leu Asp Gly Arg Pro Tyr Ile Met Pro Val
165 170 175
Ser Pro Trp Phe Tyr Thr Asn Leu Pro Val Phe His Lys Asn Trp Ala
180 185 190
Trp Arg Gly Asp Asn Leu Trp Phe Asp Arg Trp Gln Gln Val Leu Glu
195 200 205
Leu Ala Pro Glu Tyr Val Glu Ile Ile Xaa Trp Asn Asp Tyr Gly Glu

```
    210                 215                 220
Ser His Tyr Ile Gly Pro Met His Gln Glu Asp Leu Gly Ile Phe Ala
225                 230                 235                 240
Val Gly Glu Xaa Pro Phe Asn Tyr Ala Glu Gly Asp Ala Ala
                245                 250
```

<210> 34502
<211> 138
<212> PRT
<213> A.fumigatus

<400> 34502

```
Tyr Gln Leu Ile Arg Leu Gly Arg His Gly Tyr Arg Ser Ile Met Gln
1               5                   10                  15
Asn Leu Thr Arg Thr Ala Asp His Leu Ala Thr Glu Leu Gln Lys Leu
            20                  25                  30
Asn Phe Thr Ile Met Ser Asp Gly Ala Gly Ser Gly Leu Pro Leu Val
        35                  40                  45
Ala Tyr Arg Leu Pro Pro Asp Glu Asn Arg Leu Trp Asp Glu Tyr Ala
    50                  55                  60
Leu Ala His Val Leu Arg Gln Arg Gly Trp Val Ile Pro Ala Tyr Thr
65                  70                  75                  80
Met Ala Pro His Ser Asn Arg Leu Lys Met Met Arg Ile Val Leu Arg
                85                  90                  95
Glu Asp Phe Ser Met Asp Arg Cys Asp Val Leu Ile Glu Asp Met Lys
            100                 105                 110
Met Ala Met Lys Ser Leu Glu Glu Met Asp Arg Ala Met Ile Glu Gln
        115                 120                 125
Tyr Ile Arg Tyr Gly Leu Leu Leu Thr Asp
    130                 135
```

<210> 34503
<211> 244
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (3)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34503

```
Ser Glu Xaa Ser Arg Gly Ile Asn Met Ile Ala Asp Leu Phe His Ala
1               5                   10                  15
Pro Thr Ala Asp Gly Ala Gly Val Gln Asp Ala Ile Gly Thr Ser Thr
            20                  25                  30
Val Gly Ser Ser Glu Gly Ile Met Leu Ala Met Leu Ala Met Lys Lys
        35                  40                  45
Arg Trp Gln Asn Arg Arg Arg Ala Glu Gly Lys Asp Ser Thr His Pro
    50                  55                  60
Asn Ile Val Met Asn Ser Ala Val Gln Val Cys Trp Glu Lys Ala Ala
65                  70                  75                  80
Arg Tyr Phe Asp Val Glu Glu Lys Tyr Val Tyr Cys Thr Glu Thr Arg
                85                  90                  95
Tyr Val Ile Asp Pro Glu Glu Ala Val Asp Leu Val Asp Glu Asn Thr
            100                 105                 110
```

```
Ile Gly Ile Cys Ala Ile Leu Gly Thr Thr Tyr Thr Gly Gln Tyr Glu
        115                 120                 125
Asp Val Lys Ala Ile Asn Asp Leu Leu Ile His Lys Lys Ile Asp Cys
    130                 135                 140
Pro Ile His Val Asp Ala Ala Ser Gly Gly Phe Val Ala Pro Phe Val
145                 150                 155                 160
Asn Pro Asp Leu Lys Trp Asp Phe Gln Leu Pro Lys Val Val Ser Ile
                165                 170                 175
Asn Val Ser Gly His Lys Tyr Gly Leu Val Gly Thr Thr Pro Glu Ser
            180                 185                 190
Pro Asp Val Pro Asn Arg Pro Arg Ser Thr Pro Ala Ser Ala Gly Tyr
        195                 200                 205
Ser Gly Ala Gln Pro Ser Thr Ser Leu Lys Asn Ser Ser Ser Thr Ser
    210                 215                 220
Thr Thr Ser Ala Pro Ser Lys Gln Arg Leu Arg Ser Thr Ser Pro Arg
225                 230                 235                 240
Ala Pro Pro Thr
```

<210> 34504
<211> 291
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (182),(223),(264)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34504

```
Ala Ile Asp Ile Ser Asp Ala Ala Cys Asp Ile Trp Thr Ala Thr Asp
1               5                   10                  15
Phe Arg Pro Gly Met Pro Trp Asn Asp Gln Leu Leu Thr Val Ala Ala
            20                  25                  30
Gly Arg Ser Leu Gln Ser Arg Pro Arg Asp Arg Leu Arg Leu His Gly
        35                  40                  45
Ser Asp His Leu Pro Arg Val Asp Val Leu Val Pro Cys Cys Gly Glu
    50                  55                  60
Pro Thr Asp Val Val Leu Asp Thr Val Arg Ala Ala Cys Thr Met Asp
65                  70                  75                  80
Tyr Pro Val Thr His Phe Arg Val Leu Leu Leu Asp Asp Gly Ala Ser
                85                  90                  95
Pro Ala Leu Arg Asp Ala Val Ala Gly Leu Arg Ser Gln Trp Pro His
            100                 105                 110
Leu Ser Tyr His Thr Arg Gly Gln His Ser Gly Arg Val Phe Ala Lys
        115                 120                 125
Ala Gly Asn Leu Asn Tyr Ala Leu Phe Ser Leu Gln Asn Glu Val Gln
    130                 135                 140
Pro Glu Phe Cys Ala Val Leu Asp Ala Asp Cys Met Pro Ala Pro Asp
145                 150                 155                 160
Phe Leu Arg Ala Thr Leu Pro His Leu Leu Lys Asp Pro Gln Ala Ala
                165                 170                 175
Leu Leu Thr Thr Arg Xaa Tyr Tyr Tyr Asn Leu Pro Asp Gly Asp Pro
            180                 185                 190
Leu Gln Gln Ser Arg Val His Phe Tyr Thr Trp His Asn Ser Glu Leu
        195                 200                 205
```

```
Asp Arg Met Gly Ala Cys Ile Asp Ala Gly Ser Gly Ala Val Xaa Pro
    210                 215                 220
Ala Glu Gly Asn Arg Arg Cys Gly Ala Leu Ser Pro Pro Phe Pro Ser
225                 230                 235                 240
Ser Glu Asn Gly Asn Ser Ser Trp Met Phe Arg Ala Phe Gly Phe Pro
                245                 250                 255
Thr Ile Thr Gly Ser Glu Thr Xaa Ala Ile Gly Gly Arg Ser Pro Leu
            260                 265                 270
Pro Trp Lys Glu Leu Ser Pro Gln Pro Asn Arg Arg Ala Ile Gly Pro
        275                 280                 285
Ser Gln Thr
    290
```

<210> 34505
<211> 354
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (248),(269)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34505

```
Asn Phe Ile His Phe Leu Ser Leu Leu Val Ser Arg Val Leu Ala His
1               5                   10                  15
Ser Ile Cys Thr Met Tyr Phe Thr Thr Leu Leu Ser Ala Leu Ser Leu
            20                  25                  30
Met Ala Ala Ala Ala Ser Ala Leu Pro His Gln Leu Ser Ser Arg Ala
        35                  40                  45
Ser Gly Ala Gln Asn Val Val Tyr Trp Gly Gln Asn Gly Gly Gly Thr
    50                  55                  60
Val Glu Asn Asn Asp Leu Ala Ser Tyr Cys Thr Ser Thr Ser Gly Ile
65                  70                  75                  80
Asp Ile Ile Val Leu Ser Phe Leu Tyr Gln Tyr Gly Asn Gly Asn Thr
                85                  90                  95
Ile Ala Ser Gly Thr Ile Gly Gln Ser Cys Tyr Ile Ser Pro Ser Gly
            100                 105                 110
Gln Pro Gln Asn Cys Asp Ala Leu Ala Ser Ala Ile Lys Thr Cys Gln
        115                 120                 125
Ser Arg Gly Val Lys Val Ile Leu Ser Leu Gly Gly Ala Val Gly Ala
    130                 135                 140
Tyr Ser Leu Ser Ser Gln Ala Glu Ala Glu Thr Ile Gly Gln Asn Leu
145                 150                 155                 160
Trp Glu Ala Tyr Gly Asn Thr Gln Gly Asn Gly Asn Val Pro Arg Pro
                165                 170                 175
Phe Gly Ser Thr Phe Val Asn Gly Trp Asp Phe Asp Ile Glu Ser Tyr
            180                 185                 190
Ser Gly Asn Glu Tyr Tyr Gln Tyr Leu Ile Asn Lys Leu Arg Ser Asn
        195                 200                 205
Phe Ala Ser Asp Pro Ser Asn Gln Tyr Tyr Ile Thr Gly Ala Pro Gln
    210                 215                 220
Cys Pro Ile Pro Glu Pro Asn Met Gln Val Ile Val Thr Lys Ala Gln
225                 230                 235                 240
Phe Asp Tyr Leu Trp Val Gln Xaa Tyr Asn Asn Pro Gly Cys Ser Val
                245                 250                 255
```

```
Asn Gly Pro Ile Asn Tyr Asp Gln Trp Val Ser Asn Xaa Ala Asn Thr
            260                 265                 270
Pro Ser Ala Asn Ala Lys Ile Phe Ile Gly Val Pro Ala Ser Pro Leu
        275                 280                 285
Gly Ala Thr Gly Thr Ser Ser Gly Ala Gln Tyr Tyr Leu Gln Pro Ser
    290                 295                 300
Ala Leu Ala Ser Leu Val Ala Glu Tyr Lys Asp Asn Pro Ala Phe Gly
305                 310                 315                 320
Gly Val Met Met Trp Ser Ala Gly Phe Ser Asp Ala Asn Val Asn Asn
                325                 330                 335
Gly Cys Thr Tyr Ala Gln Glu Ala Lys Arg Ile Leu Thr Thr Gly Ser
            340                 345                 350
Pro Cys
```

<210> 34506
<211> 86
<212> PRT
<213> A.fumigatus

```
<400> 34506
Asn Leu Thr Arg Gln Ser Lys Leu Ala Phe Ile Asn Thr Glu Tyr Ile
1               5                   10                  15
Leu Thr Leu Asp Thr Ala Asn Cys Ser Lys Arg Arg Leu Arg Asp Lys
            20                  25                  30
Gln Cys Cys Arg Thr Tyr Ala Asp Ser Lys Leu Asn Trp Trp Thr Gly
        35                  40                  45
Ser Arg Tyr Glu Pro Val Pro Ser Arg Ile Thr Asn Thr Thr Ala His
    50                  55                  60
Thr Lys Gln Gly Ser Gln Glu Leu Ser Tyr Leu His Ile Lys Ala Lys
65                  70                  75                  80
Gly Arg Lys Pro Asp Ser
                85
```

<210> 34507
<211> 124
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (55),(90),(115)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 34507
Arg Glu Phe Phe Pro Ala Gln Ile Thr Leu Pro Gln Ile Asp Arg Val
1               5                   10                  15
Cys Ser Val Asn Asn Met Ser Met Lys Val Phe Phe Arg Arg Gly Ala
            20                  25                  30
Leu Ser Thr Leu Ala Arg Arg Ala Pro Val Thr Leu Arg Ser Leu Pro
        35                  40                  45
Arg Lys Gly Leu Thr Thr Xaa Gln Glu Glu Ile Val Lys Ser Thr Ile
    50                  55                  60
Pro Ala Leu Gln Glu His Gly Val Thr Ile Thr Thr Leu Phe Tyr Lys
65                  70                  75                  80
Arg Leu Leu Asp Ala His Pro Glu Leu Xaa Asn Ile Phe Asn Thr Gly
```

```
                85                  90                  95
His His Ala Thr Gly Glu Pro Pro Gly Asn Pro Gly Ala Cys Cys Val
            100                 105                 110
Gly Val Xaa Ile Pro Asn Arg Thr Thr Arg Cys Pro
        115                 120
```

<210> 34508
<211> 182
<212> PRT
<213> A.fumigatus

<400> 34508

```
Arg Ser Ser Cys Pro Val Ser Leu Ala Phe Phe Asn Gly Val Ala Ser
1               5                   10                  15
Val Thr Arg Leu Lys Trp Ala Phe Ala Arg Asp Glu Gly Leu Pro Phe
            20                  25                  30
Ser Ser Phe Phe Ala Tyr Ile Ser Pro Arg Tyr Lys Ile Pro Leu Arg
        35                  40                  45
Ala Leu Phe Leu Val Ala Met Ile Thr Val Leu Leu Ala Leu Ile Asn
    50                  55                  60
Ile Gly Ser Thr Thr Ala Phe Asn Ala Leu Leu Ser Leu Thr Thr Leu
65                  70                  75                  80
Gly Gln Tyr Ile Ser Tyr Leu Ile Pro Val Ile Phe Leu Leu Ile Lys
                85                  90                  95
Arg Leu Arg Ala Pro Gln Glu Ile Arg Trp Gly Ser Phe Arg Leu Gly
            100                 105                 110
His Trp Gly Val Pro Ile Asn Val Phe Ala Ile Val Tyr Gly Val Tyr
        115                 120                 125
Ile Ala Ile Phe Leu Pro Phe Pro Pro Asn Tyr Pro Val Thr Ala Gln
    130                 135                 140
Asn Met Asn Tyr Ala Ala Pro Val Phe Leu Ala Ala Leu Val Phe Ala
145                 150                 155                 160
Thr Gly Asp Trp Ile Val Arg Gly Arg Thr Arg Trp Gln Gly Pro Met
                165                 170                 175
Val Lys Val Arg Ala Glu
            180
```

<210> 34509
<211> 203
<212> PRT
<213> A.fumigatus

<400> 34509

```
Gly Leu Gln Glu Ser Gly Ser Arg Asn Gln Thr Ser Asp Ser Thr His
1               5                   10                  15
Ala Gly Val Gln Thr Gly Arg Gly Ala Gly Glu Gln Arg Gly Gly Arg
            20                  25                  30
Ala Gly Gly Gly Gly Ala Arg Gly Arg Trp Gly Ala Ala Trp Arg Gly
        35                  40                  45
Asp Arg Gly Leu Gly Gly Asp Asp Gly Leu Gly Ser Ser Gly Arg Gly
    50                  55                  60
Arg Ser Arg Ser Gly Ser Gly Ser Gly Gly Gly Ser Arg Gly Gly Leu
65                  70                  75                  80
Leu Gly Gly Gly Gly Ser Asn Arg Arg Arg Gly Leu Gly Val Ser Val
                85                  90                  95
Cys Gln Ser Val Gly Asn Ser Val Gly Pro Arg Val Gly Asp Gly Ile
```

```
            100                 105                 110
Gly Gln Arg Ser Arg Gln Gly Thr Ala Arg Ser Ser Thr Asp Leu Pro
        115                 120                 125
Asp Gly Ala Ala Ala Ile Val Gly Ala Val Arg Ala Trp Leu Ala Ala
    130                 135                 140
Ala Leu Thr Asp Ser Ala Ala Ala Val Gly Asp Gly Asn Ala Gly Arg
145                 150                 155                 160
Leu Ala Gly Leu Val Thr Arg Val Arg Phe Ala Ala Gly Asp Leu Ala
                165                 170                 175
Ser Asn Lys Ala Ile Val Ala Cys Arg Lys Gly Asp Ser Gly Gln Glu
            180                 185                 190
Arg Ser Ser Gln Lys Leu Val His Cys Lys Asp
        195                 200
```

<210> 34510
<211> 150
<212> PRT
<213> A.fumigatus

<400> 34510

```
Gly Arg Leu Arg Ala Arg His Val Leu His Arg Arg Trp Leu Leu Pro
1               5                   10                  15
His Arg Gly Asp Leu Tyr Trp Thr Trp Arg Tyr Pro Asp Gly Asn Ala
            20                  25                  30
Asp Arg Tyr His His Gln His Val Asp Gln His Cys Tyr Gln His Ser
        35                  40                  45
Asp Lys His Ser His Arg Asp Arg Gly Ala Tyr Tyr Tyr His His His
    50                  55                  60
Arg Gly Asp His Leu Tyr Phe His Leu His Phe His Phe His Phe Gly
65                  70                  75                  80
Phe Asp Pro Gly His Tyr Phe Gln Ala Arg His Pro His Pro Ala His
                85                  90                  95
Gly His Leu Ser Lys Arg His Pro Ile Ala Leu Gly Leu Leu His Arg
            100                 105                 110
Gln Pro Phe Leu Pro Ser Val His Arg Arg Arg Val Pro Ser Glu Arg
        115                 120                 125
Arg Arg Gly Cys Cys Arg Trp Ser Asp Cys Gly Ser Arg Ser Pro Val
    130                 135                 140
Ile Leu Thr Arg Ala Arg
145                 150
```

<210> 34511
<211> 206
<212> PRT
<213> A.fumigatus

<400> 34511

```
Ser Phe Ile Ile Ser Ile Phe Thr Met Tyr Lys Leu Leu Thr Ala Ser
1               5                   10                  15
Leu Leu Ala Thr Val Ala Leu Ala Ala Gly His Asn Gly Leu Ile Ala
            20                  25                  30
Arg Gln Val Ser Ser Cys Glu Ser His Pro Gly Tyr Lys Thr Cys Lys
        35                  40                  45
Ser Ser Cys Ile Pro Val Thr Tyr Ser Cys Cys Ala Ile Gly Glu Gly
    50                  55                  60
Gly Cys Glu Pro Gly Thr Tyr Cys Thr Asp Asp Gly Cys Cys Pro Ile
```

65 70 75 80
Gly Glu Ile Cys Thr Gly Pro Gly Gly Thr Leu Thr Gly Thr Leu Thr
85 90 95
Asp Thr Ile Thr Asn Thr Trp Thr Asn Thr Val Thr Asn Thr Leu Thr
100 105 110
Asn Thr His Thr Glu Thr Ala Ala Pro Ile Thr Thr Thr Thr Thr Glu
115 120 125
Glu Thr Thr Ser Thr Ser Thr Ser Thr Ser Thr Ser Thr Ser Ala Ser
130 135 140
Thr Pro Ala Thr Thr Ser Lys Pro Val Ile Pro Thr Gln Pro Thr Val
145 150 155 160
Thr Ser Pro Ser Gly Thr Pro Ser Pro Ser Gly Ser Ser Thr Ala Ser
165 170 175
Pro Ser Ser Pro Leu Phe Thr Gly Ala Ala Ser Arg Leu Asn Ala Gly
180 185 190
Val Gly Ala Val Ala Gly Leu Ile Ala Gly Ala Ala Leu Leu
195 200 205

<210> 34512
<211> 187
<212> PRT
<213> A.fumigatus

<400> 34512
Ser Leu Gln Pro Val Leu Ala Glu Gln Asp Val Cys Ser Arg Arg Ser
1 5 10 15
Glu Arg Ala Asp Gly Pro Val His His Gln Met Asp Ser Thr Glu Trp
20 25 30
Trp Ala Pro His Cys Asp His Lys Pro Val Arg Thr Asp Thr Ser Val
35 40 45
Met Trp Ile Ser Thr Asp Ser Asn Ser Asn Pro Asp Lys Asp Asp Leu
50 55 60
Trp Thr Lys Glu Leu Glu Gln Arg Gly Ala His Ile Glu Ile Met Ala
65 70 75 80
Ala Asp Val Thr Lys Lys Gln Glu Met Ile Asn Val Arg Asn Gln Ile
85 90 95
Leu Ser Ala Met Pro Pro Ile Gly Gly Val Ala Asn Gly Ala Met Leu
100 105 110
Gln Ser Asn Cys Phe Phe Ser Asp Leu Thr Tyr Glu Ala Leu Gln Asp
115 120 125
Val Leu Lys Pro Lys Val Asp Gly Ser Leu Val Leu Asp Glu Val Phe
130 135 140
Ser Ser Asp Asp Leu Asp Phe Phe Leu Leu Phe Ser Ser Ile Ser Ala
145 150 155 160
Val Val Gly Gln Pro Phe Gln Ala Asn Tyr Asp Ala Ala Asn Asn Val
165 170 175
Lys Phe Gly Gln Ser Ala Ala Val Arg Thr Tyr
180 185

<210> 34513
<211> 595
<212> PRT
<213> A.fumigatus

<400> 34513
Phe Arg Gly Glu His Glu Gly Cys Phe Gln Thr Leu Leu Leu Ala Phe

```
1               5                   10                  15
Ala Ala Pro Arg Asp Gly Ser Leu Trp Thr Ile Phe Val Pro Thr Gln
            20                  25                  30
Ile Gly Arg Leu Thr Ile Phe Pro Asn Ser Ser Val Gly Ile Asn Thr
        35                  40                  45
Pro Ala Ser Val Thr Ile Asp Thr His Leu His Glu Phe Thr Ala Gly
    50                  55                  60
His Lys Ala Asp Leu Pro Met Ile Lys Gly Asp Val Ser Val Tyr Ser
65                  70                  75                  80
Ser Glu Ala Gly Gln Leu Arg Ile Arg Leu Glu Gly Leu Thr Met Ser
                85                  90                  95
Pro Ile Ala Pro Ser Thr Glu Lys Gln Asp Lys Arg Leu Tyr Leu Lys
            100                 105                 110
Arg Thr Trp Leu Pro Asp Ile Leu Ser Gly Pro Val Leu Glu Arg Gly
        115                 120                 125
Lys Pro Val Phe Cys Tyr Glu Leu Phe Gly Leu Ser Leu Ala Pro Lys
    130                 135                 140
Ser Ile Leu Ala Ala Thr Arg Leu Leu Ser His Arg Tyr Ala Lys Leu
145                 150                 155                 160
Lys Ile Leu Gln Val Gly Thr Ser Ser Val His Leu Val His Ser Leu
                165                 170                 175
Cys Arg Glu Leu Gly Ser Ser Met Asp Ser Tyr Thr Ile Ala Cys Glu
            180                 185                 190
Ser Asp Ser Ser Met Glu Asp Met Arg Arg Arg Leu Leu Ser Asp Ala
        195                 200                 205
Leu Pro Ile Lys Tyr Val Val Leu Asp Ile Gly Lys Ser Leu Thr Glu
    210                 215                 220
Gly Asp Glu Pro Ala Ala Gly Glu Pro Thr Asp Leu Gly Ser Phe Asp
225                 230                 235                 240
Leu Ile Ile Leu Leu Lys Ala Ser Ala Asp Asp Ser Pro Ile Leu Lys
                245                 250                 255
Arg Thr Arg Gly Leu Ile Lys Pro Gly Gly Phe Leu Leu Met Thr Val
            260                 265                 270
Ala Ala Thr Glu Ala Ile Pro Trp Glu Ala Arg Asp Met Thr Arg Lys
        275                 280                 285
Ala Ile His Asp Thr Leu Gln Ser Val Gly Phe Ser Gly Val Asp Leu
    290                 295                 300
Leu Gln Arg Asp Pro Glu Gly Asp Ser Ser Phe Val Ile Leu Ser Gln
305                 310                 315                 320
Ala Val Asp His Gln Ile Arg Phe Leu Arg Ala Pro Phe Asp Ser Thr
                325                 330                 335
Pro Pro Phe Pro Thr Arg Gly Thr Leu Leu Val Ile Gly Gly Ala Ser
            340                 345                 350
His Arg Ala Lys Arg Pro Ile Glu Thr Ile Gln Asn Ser Leu Arg Arg
        355                 360                 365
Val Trp Ala Gly Glu Ile Val Leu Ile Arg Ser Leu Thr Asp Leu Gln
    370                 375                 380
Thr Arg Gly Leu Asp His Val Glu Ala Val Leu Ser Leu Thr Glu Leu
385                 390                 395                 400
Asp Gln Ser Val Leu Glu Asn Leu Ser Arg Asp Thr Phe Asp Gly Leu
                405                 410                 415
His Arg Leu Leu His Gln Ser Lys Ile Val Leu Trp Val Thr Tyr Ser
            420                 425                 430
Ala Gly Asn Leu Asn Pro His Gln Ser Gly Ala Ile Gly Leu Val Arg
        435                 440                 445
Ala Val Gln Ala Glu Thr Pro Asp Lys Val Leu Gln Leu Leu Asp Val
```

```
    450                 455                 460
Asp Gln Ile Asp Gly Asn Asp Gly Leu Val Ala Glu Ser Phe Leu Arg
465                 470                 475                 480
Leu Ile Gly Gly Val Lys Met Lys Asp Gly Ser Ser Asn Ser Leu Trp
                485                 490                 495
Thr Val Glu Pro Glu Leu Ser Val Gln Gly Gly Arg Leu Leu Ile Pro
            500                 505                 510
Arg Val Leu Phe Asp Lys Lys Arg Asn Asp Arg Leu Asn Cys Leu Arg
        515                 520                 525
Arg Gln Leu Lys Ala Thr Asp Ser Phe Glu Lys Gln Ser Ala Leu Ala
    530                 535                 540
Arg Pro Ile Asp Pro Cys Ser Leu Phe Ser Pro Asn Lys Thr Tyr Val
545                 550                 555                 560
Leu Ala Gly Leu Ser Gly Gln Met Gly Gln Ser Ile Thr Arg Trp Ile
                565                 570                 575
Val Gln Ser Gly Gly Arg His Ile Val Ile Thr Ser Arg Cys Glu Gln
            580                 585                 590
Thr Arg Leu
        595
```

<210> 34514
<211> 156
<212> PRT
<213> A.fumigatus

```
<400> 34514
Met Leu Ala Arg Met Ala Gly Pro Cys Gly Arg Lys Gln Glu Ala Gly
1               5                   10                  15
Ser Ser His Pro Gln Val Ala Glu Ala Cys Val Val Ala Ile Pro Asp
            20                  25                  30
Gln Leu Lys Gly Gln Leu Pro Phe Ala Phe Ile Ser Leu Ser Val Ala
        35                  40                  45
Asp His Pro Asp Ser Ala Ile Pro Ala Pro Thr Ile Ala Ala Glu Val
    50                  55                  60
Gln Ser Leu Val Arg Ser Arg Val Gly Ala Phe Ala Ser Leu Gly Gly
65                  70                  75                  80
Ile Val Gln Gly Lys Gly Met Ile Pro Lys Thr Arg Ser Gly Lys Thr
                85                  90                  95
Leu Arg Arg Val Leu Arg Glu Leu Leu Glu Asn Gly Val Tyr Gly Asp
            100                 105                 110
Leu Asp Arg Ser Val Glu Val Pro Ser Thr Ile Glu Asp Ala Thr Ala
        115                 120                 125
Val Gln Val Ala Arg Ala Gln Val Arg Glu Tyr Phe Asn Arg Asn Lys
    130                 135                 140
Gly Lys His Lys Ala Ile Glu Ala Arg Glu Thr Ala
145                 150                 155
```

<210> 34515
<211> 81
<212> PRT
<213> A.fumigatus

```
<400> 34515
Thr Leu Ser Ala Asp Pro Ser Ala Pro Val Val Lys Lys Gly Glu Ala
1               5                   10                  15
Ser Tyr Leu Pro Val Glu Val Cys Leu Val Glu Pro Gly Gln Pro Ala
```

```
            20                  25                  30
Lys Ser Lys Leu Thr Pro Met Gln Thr Arg Asn Met Leu Ser Phe Ala
        35                  40                  45
Val Arg Gly Pro Ala Ser Asn Ala Tyr Ser Ile Val Ser Lys Gly Thr
    50                  55                  60
Ala Val Leu Gly Leu Lys Asn Pro Leu Asn Pro Thr Leu Val Cys Val
65                  70                  75                  80
Leu
```

<210> 34516
<211> 493
<212> PRT
<213> A.fumigatus

<400> 34516

```
Ala Ser Phe Gly Ile Gln Pro Asp Leu Gln Leu Val Thr Val Pro Gly
1               5                   10                  15
Arg Val Leu Pro Ala Pro Arg Val Tyr Tyr Lys Asp Ala Lys Ser Asn
            20                  25                  30
Gln Arg His Ile Asp Thr Met Gly Gly Ser Trp Asn Met Lys Ser Ile
        35                  40                  45
Lys Phe Ser Thr Ser Thr Lys Leu Pro Ser Trp Thr Trp Leu Tyr Ile
    50                  55                  60
Asn Ser Glu Arg Gly Ile Pro Arg Phe Glu Asn Pro Gly Gln Leu Asn
65                  70                  75                  80
Thr Ser Leu Gln Ala Phe Thr Ala Lys Leu Asn Glu Ile Gly Val Ala
                85                  90                  95
Ala Ala Ala Pro Lys Pro Gly Met Met Ile Arg Leu Thr Gly Asn Asp
            100                 105                 110
His Glu Gly Glu Ile Asp Arg Ala Val Gly Glu Leu Met Gly Arg His
        115                 120                 125
Thr Pro Thr Leu Ile Leu Thr Ile Leu Tyr Ser Ser Asp Val Glu Ala
    130                 135                 140
Tyr Asn Cys Ile Lys Lys Ile Cys Asp Val Arg Arg Gly Val Arg Asn
145                 150                 155                 160
Val Asn Val Leu Ala Glu Lys Leu Arg Gly Ala Asn Asp Gln Tyr Tyr
                165                 170                 175
Ala Asn Val Gly Leu Lys Phe Asn Leu Lys Leu Gly Gly Ala Asn Gln
            180                 185                 190
Ile Leu Lys Ala Ser Glu Leu Gly Ile Val Ala Glu Gly Lys Thr Met
        195                 200                 205
Leu Val Gly Ile Asp Val Thr His Pro Ser Pro Gly Ser Ser Ala Glu
    210                 215                 220
Ala Pro Ser Val Ala Gly Met Val Ala Ser Ile Asp Ser Ser Leu Ser
225                 230                 235                 240
Gln Trp Pro Ala Asp Ile Arg Ile Gln Thr Ser Arg Gln Glu Met Val
                245                 250                 255
Ser Asn Leu Asp Glu Met Leu Lys Ala Arg Leu Gln Arg Trp Ala Arg
            260                 265                 270
Ala Asn Lys Asn Ala Leu Pro Glu Asn Ile Ile Val Tyr Arg Asp Gly
        275                 280                 285
Val Ser Glu Gly Gln Tyr Asp Val Val Ile Glu Gln Glu Leu Pro Leu
    290                 295                 300
Leu Lys Lys Ala Cys Val Glu Thr Tyr Pro Ala Ala Ser Thr Lys Lys
305                 310                 315                 320
```

```
Asn Phe Pro Arg Ile Ser Ile Val Ile Val Gly Lys Arg His His Thr
                325                 330                 335
Arg Phe Tyr Pro Thr Arg Asp Glu Asp Ala Asp Arg Ser Ala Asn Pro
            340                 345                 350
Lys Asn Gly Thr Val Val Asp Arg Gly Val Thr Glu Ala Arg Asn Trp
        355                 360                 365
Asp Phe Tyr Leu Gln Ala His Thr Ala Ile Lys Gly Thr Ala Arg Pro
    370                 375                 380
Ala His Tyr Phe Thr Val Trp Asp Glu Ile Phe Ala His Gln Lys Pro
385                 390                 395                 400
Val Ala Pro Phe Gln Asn Ala Ala Asp Ile Leu Glu Asp Leu Thr His
                405                 410                 415
Arg Leu Cys Tyr Leu Phe Gly Arg Ala Thr Arg Pro Val Ser Ile Cys
            420                 425                 430
Pro Pro Ala Tyr Tyr Ala Asp Leu Val Cys Thr Arg Ala Arg Cys Tyr
        435                 440                 445
Leu Ser Ser Val Phe Asp Pro Thr Pro Ala Ala Thr Pro Ser Val Ser
    450                 455                 460
Glu Ile Gly Gly Ile Gly Arg Gly Gly Leu Val Lys Gly Ser Asp Val
465                 470                 475                 480
Gln Ile His Glu Asn Val Arg Asp Thr Met Phe Tyr Ile
                485                 490
```

<210> 34517
<211> 280
<212> PRT
<213> A.fumigatus

<400> 34517

```
Pro Val Leu Arg Gln Arg Arg Pro Gln Val Gln Pro Glu Ala Trp Arg
1               5                   10                  15
Ser Gln Ser Asp Pro Gln Ser Glu Arg Thr Trp His Arg Arg Arg Gly
            20                  25                  30
Gln Asn Asn Ala Arg Trp His Arg Arg His Ala Pro Val Pro Arg Leu
        35                  40                  45
Leu Arg Arg Ser Pro Gln Arg Arg Arg His Gly Arg Phe Asn Arg Leu
    50                  55                  60
Ile Ala Glu Pro Met Ala Arg Arg His Pro His Pro Asp Leu Pro Ala
65                  70                  75                  80
Gly Asn Gly Val Lys Pro Gly Arg Asp Ala Gln Gly Pro Ala Ala Ala
                85                  90                  95
Leu Gly Ala Arg Gln Gln Glu Arg Pro Pro Arg Glu His His Arg Leu
            100                 105                 110
Pro Arg Arg Cys Leu Arg Arg Pro Ile Arg Arg Arg His Arg Ala Gly
        115                 120                 125
Thr Ala Pro Ala Gln Glu Gly Leu Arg Arg Asp Leu Pro Arg Arg Lys
    130                 135                 140
His Gln Glu Glu Leu Pro Ala His Leu His Arg His Arg Arg Gln Thr
145                 150                 155                 160
Pro Ser His Pro Leu Leu Pro His Pro Arg Arg Gly Arg Arg Pro Leu
                165                 170                 175
Arg Gln Pro Gln Glu Arg His Arg Arg Arg Pro Arg Arg His Arg Gly
            180                 185                 190
Pro Gln Leu Gly Leu Leu Pro Pro Gly Ser His Arg His Gln Gly His
        195                 200                 205
Arg Pro Ser Cys Pro Leu Leu Tyr Arg Leu Gly Arg Asp Leu Arg Pro
```

```
    210                 215                 220
Pro Glu Thr Arg Arg Pro Leu Pro Glu Arg Gly Gly Tyr Pro Arg Gly
225                 230                 235                 240
Ser His Pro Gln Thr Val Leu Ser Val Arg Pro Cys His Gln Ala Cys
                245                 250                 255
Glu Tyr Leu Ser Ala Cys Leu Leu Arg Gly Pro Gly Leu His Ser Ser
            260                 265                 270
Pro Leu Leu Pro Glu Gln Cys Leu
        275                 280
```

<210> 34518
<211> 170
<212> PRT
<213> A.fumigatus

<400> 34518

```
Pro Ser Cys Pro Pro Asn Leu Asn Leu Gly Tyr Ser Thr Arg Pro Gln
1               5                   10                  15
Thr Ser Ser Arg Ser Ala Pro Gly Pro Leu Ala Ser Ser Pro Val Asn
            20                  25                  30
Gln Arg Thr Asn Ser Ser Ser Val Gln Leu Gln Leu Val Thr Thr Arg
        35                  40                  45
Asn Pro Pro Leu Arg Thr Asn Leu Arg Ala Ile Leu Gly Tyr Arg Ser
    50                  55                  60
His Thr Arg Arg Trp Ile Thr Phe Pro Ser Leu Phe Pro Ser Thr Thr
65                  70                  75                  80
Thr Ser Ser Asp Asn Glu Thr Ala Ser Asn Val Pro Leu Ser Ser Thr
                85                  90                  95
Ile Ser Asn Pro Pro Cys Ala Tyr Gly Asn Gln Ser Ser Arg Pro Ser
            100                 105                 110
Pro Ser Asn Cys Pro Ser Glu Phe Lys Ile Ser His Ser Ser Asn Leu
        115                 120                 125
Ile Ile Met Ser Leu Ser Ser Ser Gly Thr Gly Leu Ala Ser Ala Val
    130                 135                 140
Ser Ala Pro Phe Glu Thr Thr Thr Ser Ser Ser Ser Pro Ser Ser Cys
145                 150                 155                 160
Ser Ser Pro Ser Asp Ser Leu Pro Leu Lys
                165                 170
```

<210> 34519
<211> 177
<212> PRT
<213> A.fumigatus

<400> 34519

```
Leu Cys Ile Ser Phe Tyr Ser Leu Ala Gln Ala Lys Thr Gly Thr Gly
1               5                   10                  15
Lys Thr Leu Ala Phe Leu Thr Pro Val Phe Gln Asn Ile Met Lys Asp
            20                  25                  30
Pro Ser Leu Lys Gly Leu Asn Trp Arg Arg Ser Gln Ala Ser Ser Ser
        35                  40                  45
Asp Ile Arg Ala Ile Ile Ile Ser Pro Thr Arg Glu Leu Ala Glu Gln
    50                  55                  60
Ile Ala Val Glu Ala Arg Arg Leu Ala Ala His Ser Gly Val Ile Val
65                  70                  75                  80
Gln Thr Ala Val Gly Gly Thr Gln Lys Arg Glu Gly Leu Arg Arg Ile
```

```
                85                  90                  95
Gln Arg Glu Gly Cys His Val Leu Ile Gly Thr Pro Gly Arg Leu Lys
            100                 105                 110
Asp Val Leu Ser Asp Ser Tyr Asn Gly Val Thr Ala Pro Asn Leu Ser
        115                 120                 125
Thr Leu Val Leu Asp Glu Ala Asp Arg Leu Leu Asp Asp Gly Phe Ser
    130                 135                 140
Asp Ala Ile Ile Asp Ile Gln Arg Leu Leu Pro Asp Pro Met Lys Val
145                 150                 155                 160
Asp Arg Gln Thr Leu Met Phe Ser Ala Thr Val Pro Met Glu Val Met
                165                 170                 175
His
```

<210> 34520
<211> 173
<212> PRT
<213> A.fumigatus

<400> 34520

```
Arg Arg Asn Gly Ile Ile Pro Asn Trp Gly Leu Gln Arg Gly Thr Lys
1               5                   10                  15
Pro Leu Asp Ala Ser Val Gln Gln Gly Asn Thr Thr Trp Ala Ser Ser
            20                  25                  30
Trp Arg Gly Asn Thr His Gly Lys Gly Lys Glu Leu Phe Gly Leu Gly
        35                  40                  45
Cys Gln Gln Thr Ser Ala Thr Phe Cys Ser Ala Ser Pro Ile Ala Ile
    50                  55                  60
Val Ala Ile Gly Tyr Pro Thr Gly Val Pro Thr Asp Gly Asp Trp Tyr
65                  70                  75                  80
Glu Asp Gln Cys His Gly Gln Gly Thr Phe Val Glu Lys Lys Thr Gly
                85                  90                  95
Asn Lys Tyr Val Gly Gly Tyr Lys Asp Gly Lys Arg His Gly Lys Gly
            100                 105                 110
Ile Ser Tyr Trp Glu Val Ala Asp Glu Glu Met Asp Leu Cys Gln Ile
        115                 120                 125
Cys Tyr Ser Glu Glu Gln Asp Ala Leu Phe Tyr Asp Cys Gly His Val
    130                 135                 140
Cys Ala Cys Val Thr Cys Ala Arg Gln Val Asp Ile Cys Pro Ile Cys
145                 150                 155                 160
Arg Lys Asn Ile Ile Ser Val Val Lys Ile Tyr Arg Thr
                165                 170
```

<210> 34521
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34521

```
Ala Phe Pro Leu Arg Arg Thr Asp Pro Arg Arg Pro Arg Thr Trp Pro
1               5                   10                  15
Ser Gln Asp Ala Ser Ser Pro Asp Ser Pro Pro Ser Leu Pro Leu Leu
            20                  25                  30
Leu Phe Leu Ser Gly Ile Tyr Phe Ser Arg Asn Thr Ile Asn Ser Ser
        35                  40                  45
Leu Asn Pro Ser Gln Phe Ser Asn Ser Pro Pro Pro Leu
```

50 55 60

<210> 34522
<211> 148
<212> PRT
<213> A.fumigatus

<400> 34522
Thr Met Tyr Pro Pro Val Phe Glu Ala Trp Ser Thr Glu Ser Met Ala
1 5 10 15
Ala Arg Arg Arg Leu Arg Cys Met Trp Gly Met Ala Arg Lys Ser Arg
20 25 30
Ser Phe Leu Asp Val Leu Thr Leu Gly Ser Phe Glu Ile Thr Pro Val
35 40 45
Pro Val Gln Gly Ala Ser Arg Arg Thr Arg Ser Lys Pro Pro Ser Ala
50 55 60
Leu Gly Lys Ala Val Arg Ala Ser Arg Phe Val Thr Met Val Phe Leu
65 70 75 80
His Pro Arg Arg Trp Met Leu Pro Ile Arg Pro Leu Ala Arg Gly Leu
85 90 95
Leu Ala Ser Leu Ala Met Thr Gln Pro Val Leu Arg Ile Arg Ala Glu
100 105 110
Met Tyr Val Val Leu Pro Pro Gly Ala Ala Ala Ile Ser Arg Thr Arg
115 120 125
Ser Leu Gly Cys Gly Ala Asn Ala Ile Thr Gly Arg Lys Asp Glu Ala
130 135 140
Ala Cys Arg Met
145

<210> 34523
<211> 621
<212> PRT
<213> A.fumigatus

<400> 34523
Trp Tyr Ser Gly Arg Ser Arg Phe Arg Arg Gly Arg Gly Glu Gly Glu
1 5 10 15
Asp Ser Val Gly Asn Gln Gly Arg Arg His Leu Gly Arg Ala Met Phe
20 25 30
Ser Asp Asp Glu Asp Leu Ser Asp Ala Glu Glu Lys Leu Thr Ala Ala
35 40 45
Asn Ile Glu Gly Leu Ser Arg Lys Leu Asp Glu Ala Arg Gln Ala Glu
50 55 60
Glu Glu Glu Ala Gln Arg Glu Leu Gln Glu Phe Ala Met Gln Thr Asn
65 70 75 80
Ile Ala Gly Asp Arg Pro Asp Val Phe Ala Asp Ala Glu Gly Lys Pro
85 90 95
Gly Leu Ala Pro Asp Leu Gln Leu Leu Arg Thr Arg Ile Thr Asp Thr
100 105 110
Ile Arg Ile Leu Gly Asp Leu Lys Thr Leu Gly Gln Pro Gly Lys Ser
115 120 125
Arg Ala Asp Tyr Leu Gln Leu Leu Leu Asp Asp Ile Cys Thr Tyr Tyr
130 135 140
Gly Tyr Thr Pro Phe Leu Ala Glu Lys Leu Phe Asn Leu Phe Thr Pro
145 150 155 160
Met Glu Ala Phe Ala Phe Phe Glu Ala Asn Glu Thr Pro Arg Pro Val

```
                 165                 170                 175
Val Ile Arg Thr Asn Thr Leu Arg Thr Asn Arg Arg Ser Leu Ala Gln
             180                 185                 190
Ala Leu Ile Asn Arg Gly Val Val Leu Glu Pro Val Gly Lys Trp Ser
         195                 200                 205
Lys Val Gly Leu Gln Val Phe Glu Ser Ala Val Pro Leu Gly Ala Thr
     210                 215                 220
Pro Glu Tyr Leu Ala Gly His Tyr Ile Leu Gln Ala Ala Ser Ser Phe
225                 230                 235                 240
Leu Pro Val Met Ala Leu Ala Pro Gln Pro Asn Glu Arg Val Leu Asp
                245                 250                 255
Met Ala Ala Ala Pro Gly Gly Lys Thr Thr Tyr Ile Ser Ala Leu Met
             260                 265                 270
Arg Asn Thr Gly Cys Val Ile Ala Asn Asp Ala Ser Lys Pro Arg Ala
         275                 280                 285
Lys Gly Leu Ile Gly Asn Ile His Arg Leu Gly Cys Lys Asn Thr Ile
     290                 295                 300
Val Thr Asn Leu Asp Ala Arg Thr Ala Phe Pro Lys Ala Leu Gly Gly
305                 310                 315                 320
Phe Asp Arg Val Leu Leu Asp Ala Pro Cys Thr Gly Thr Gly Val Ile
                325                 330                 335
Ser Lys Asp Pro Ser Val Lys Thr Ser Lys Asn Glu Arg Asp Phe Leu
             340                 345                 350
Ala Ile Pro His Met Gln Arg Asn Leu Leu Leu Ala Ala Ile Asp Ser
         355                 360                 365
Val Asp His Ala Ser Lys Thr Gly Gly Tyr Ile Val Tyr Ser Thr Cys
     370                 375                 380
Ser Val Thr Val Glu Glu Asn Glu Ala Val Val Gln Tyr Ala Leu Arg
385                 390                 395                 400
Lys Arg Pro Asn Val Lys Leu Val Asp Thr Gly Leu Gly Asp Phe Gly
                405                 410                 415
Ser Pro Gly Phe Thr Ser Tyr Met Gly Lys Lys Phe Asp Pro Lys Met
             420                 425                 430
Thr Leu Thr Arg Arg Tyr Phe Pro His Arg Glu Asn Val Asp Gly Phe
         435                 440                 445
Phe Val Cys Lys Leu Lys Lys Ile Gly Pro Thr Pro Thr Pro Lys Pro
     450                 455                 460
Ser Ala Gly Gly Phe Thr Ala Pro Ala Ala Ala Ala Asp Lys Pro Gly
465                 470                 475                 480
Lys Lys Ala Asp Asp Asp Glu Val Val Asp Lys Thr Pro Ile Leu Asn
                485                 490                 495
Glu Asp Gly Thr Thr Leu Asp Ile Glu Gly Gly Ala Phe Gly Pro Phe
             500                 505                 510
Asp Glu Glu Glu Asp Gln Glu Arg Ile Ala Arg Ala Glu Arg Asn Arg
         515                 520                 525
Leu Arg Arg Lys Gly Leu Asp Pro Arg Ala Val Leu Asn Lys Pro Lys
     530                 535                 540
Lys Ser Ala Ser Lys Lys Thr Asp Ala Ser Lys Lys Gln Glu Glu Ser
545                 550                 555                 560
Lys Lys Glu Glu Ser Ala Val Glu Asn Gly Asp Glu Lys Ala Ala Lys
                565                 570                 575
Thr Ser Asp Lys Val Asp Glu Lys Ala Asp Lys Lys Asp Lys Lys Ala
             580                 585                 590
Asp Lys Ser Lys Thr Asp Ser Asp Ser Lys Gly Ser Lys Lys Asn Lys
         595                 600                 605
Lys Ala Ala Ser Ser Ser Pro Gly Lys Lys Ala Gly Lys
```

610 615 620

<210> 34524
<211> 312
<212> PRT
<213> A.fumigatus

<400> 34524
Val Arg Ile Leu Pro Ala Pro Val Val Lys Thr Gln Leu Glu Glu Gly
1 5 10 15
Tyr Leu Lys Leu Lys Pro Trp Arg Leu Glu Asn Asp Gln Cys Ser Leu
20 25 30
Pro Gln Thr His Ala Asn Pro Thr Leu Gln Gln Ala Asp Arg Ser Asp
35 40 45
Val Asn Lys Ser Gly Leu Gln Cys Thr Pro Glu Pro Glu Leu Cys Ala
50 55 60
Ser Gln Pro His Thr Gly Gln Ala Gly His Ala Thr Ser Val Arg Val
65 70 75 80
Asn Glu Pro Arg His Tyr Arg Leu Phe Gly Ala Tyr Met Asn Cys Ile
85 90 95
Val Thr Tyr Gln Asp Cys Ser Thr Ala Leu Leu Ala Asn Asp Asp Phe
100 105 110
Met Ser Arg Met Ser Ser Thr Val Tyr Gln Lys Leu Gly Gly Ile Pro
115 120 125
Gly Thr Arg Val Val Arg Gly Phe Val Glu Thr Lys Arg Gln Lys Glu
130 135 140
Thr Pro Ala Val Lys Ser Arg Asp His Ser Val Gly Thr Lys Ser Ser
145 150 155 160
Ser Asp Thr Pro Asn Thr Ala Ser Thr Asp His Glu Val Lys Ser Val
165 170 175
Ala Glu Ile Ser Ser Asp Thr Cys His Asn Glu Asp Val Arg Glu Lys
180 185 190
Glu Thr Asn Gln Asp Asp Pro Arg Ser Thr Leu Glu Arg Gln Met Ser
195 200 205
Ser Leu Ala Gly Glu Pro Gln Asn Thr Ala Glu Leu Glu Glu Gln Ala
210 215 220
Arg Lys Gln Glu Glu Lys Glu Met Glu Asp Ser Arg Glu Ala Asp Glu
225 230 235 240
Glu Asp Arg Glu Arg Glu Ile Asp His Leu Val Leu Val Thr His Gly
245 250 255
Ile Gly Gln Arg Leu Gly Leu Arg Leu Glu Ser Ile Asn Phe Ile His
260 265 270
Asp Val Asn Val Leu Arg Lys Thr Met Lys Ser Val Tyr Lys Ala Ser
275 280 285
Pro Asp Leu Gln Ala Leu Asn Ser Ser Phe Ser Asp Ser His Lys Asn
290 295 300
Cys Arg Val Gln Val Leu Pro Val
305 310

<210> 34525
<211> 264
<212> PRT
<213> A.fumigatus

<400> 34525
Leu Leu Glu Thr Leu Leu Asp Phe Pro Tyr Arg Gly Val Arg Gln Asn

```
1               5                   10                  15
Arg Lys Glu Leu Asp Leu Ala Asp Ala Asp Phe Asp Asp Asp Asn Ser
            20                  25                  30
Tyr Pro Gly Leu Asn Asp Ile Thr Leu Asp Ser Val Pro Ala Val Arg
        35                  40                  45
Asn Leu Ile Ser Asp Leu Ala Met Asp Val Leu Leu Tyr Gln Ser Ala
    50                  55                  60
Tyr Cys Glu His Ile Ser Thr Ile Val Lys Gln Glu Cys Asn Arg Ile
65                  70                  75                  80
Leu Lys Leu Phe Lys Gln Arg Asn Pro Thr Phe Asn Gly Ser Val Ser
                85                  90                  95
Leu Cys Gly His Ser Leu Gly Ser Ala Ile Leu Phe Asp Ile Leu Cys
            100                 105                 110
Gln Gln Pro Ser Thr Pro Pro Thr Pro Gly Glu Arg Arg Met Asp Arg
        115                 120                 125
Glu Gly Ser Gln Asp Ile Leu Leu Asp Phe Asp Cys Glu Glu Leu Phe
    130                 135                 140
Cys Leu Gly Ser Pro Val Ala Leu Phe Gln Met Ile Lys Gly Asn Thr
145                 150                 155                 160
Ile Ala Gly Arg Ser Met Ile Asp Glu Ala Asn Met Lys Arg Ser Lys
                165                 170                 175
Lys Ala Cys Asp His Arg Asn Pro Lys Ser Phe Ser Ser Ala Ser Arg
            180                 185                 190
Gly Ala Ser Val Gln Ala Ser Thr Ala Ser Ser Glu Gly Leu Thr Ile
        195                 200                 205
Val Ser Ser Pro Lys Cys Arg Gln Leu Tyr Asn Ile Phe His Pro Ser
    210                 215                 220
Asp Pro Val Ser Tyr Arg Ile Glu Pro Leu Ile Ser Pro Ala Met Ser
225                 230                 235                 240
Ser Leu Lys Pro Gln Pro Leu Pro Ser Val Lys Lys Ser Leu Trp Ala
                245                 250                 255
Thr Pro Gly Ala Lys Pro Tyr Pro
            260
```

<210> 34526
<211> 181
<212> PRT
<213> A.fumigatus

<400> 34526

```
Ala Val Asn Leu Ala Gly Asn Val Val Ala Gln Ala Ala Ala Leu Ala
1               5                   10                  15
Leu Gly Lys Glu Glu Pro Leu Gly Asn Ser Trp Gly Lys Ala Leu Ser
            20                  25                  30
Met Ile Gly Ser Arg Val Gly Gln Ser Val Gly Thr Leu Trp Ser Asn
        35                  40                  45
Phe Ala Thr Gly Val Ala Ser Ser Leu Leu Ile Arg Ser Leu Gly Leu
    50                  55                  60
Gly Ser Glu Asp Ala Ser Gln Ser Thr Met Thr Ala Thr Glu Thr Gln
65                  70                  75                  80
Met Ser Arg Lys Ser Leu Ala Asn Ser Ser Leu Gly Glu Asp Gly Ser
                85                  90                  95
Ser Arg Phe Gly Ser Gly Val Asp Cys Gln Glu Ala Ser Ala Asn Arg
            100                 105                 110
Tyr Arg Thr Leu Ile Asp Ser Asn Leu Glu Thr Leu Tyr Glu Gly Thr
        115                 120                 125
```

```
Asn Arg Ala Lys Thr Ser Cys His Asn Asp Ile Leu His Ser Ala Ala
    130                 135                 140
Thr Glu Ser Val Val Gly Arg Glu Ser Glu Asp Leu Arg Arg Leu Lys
145                 150                 155                 160
Met Glu Asp Ala Lys Val Arg Ala Leu Asn Thr Asn Gly Arg Val Asp
                165                 170                 175
Tyr Ser Ile Gln Glu
            180
```

<210> 34527
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34527

```
Glu Asn Arg Met Gln Met Ala Val Ser Ala Ile Lys Asn Lys Lys Ile
1               5                   10                  15
Lys Leu Lys Gln Glu Ala Ala Ser Ile Phe Ser Val Ser Glu Ala Thr
            20                  25                  30
Leu His Ser Gln Leu Arg Gly Ile Lys Pro Gln Ser Glu Thr Arg Ala
        35                  40                  45
Asn Arg Ser Ser Pro Arg Gly Trp Lys Asp Ala Arg Arg Cys Lys
    50                  55                  60
```

<210> 34528
<211> 219
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (144)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34528

```
Ile Thr Ser Gln Glu His Gly Lys Cys Thr Pro Asp Ser Met Ala Arg
1               5                   10                  15
Ser Trp Leu Met Phe Ser Tyr Ile Ser Pro Arg Ser Gln Phe Ile Ser
            20                  25                  30
Ser Asn Asn Pro His Ala Leu Gln Ser Ser Leu Ser Pro Asp Phe Cys
        35                  40                  45
Ser Leu Ile Met Leu Arg Pro Val Ala Phe Leu Ala Phe Ser Ala Val
    50                  55                  60
Ala Gln Ala His Thr Val Ala Trp Ala Lys Gly Met Tyr Cys Leu Gly
65                  70                  75                  80
Gly Pro Asp Pro Ser Thr Asp Asn Ala Asn Thr Asn Thr Ala Val Asn
                85                  90                  95
Pro Leu Tyr Asn Leu Lys Lys Glu Asp Trp Trp Phe Gln His Asp Arg
            100                 105                 110
Gly Cys Asp Ala Ala Pro Pro Ala Glu Gly Asp Ile Leu Glu Leu Pro
        115                 120                 125
Ala Gly Gly Lys Phe Thr Val Glu Leu Ala His Asn Arg Ala Gln Xaa
    130                 135                 140
Thr Leu Ser Tyr Gly Gly Lys Tyr Ala Ser Glu Trp Pro Asp Gly Lys
145                 150                 155                 160
Glu His Pro Glu Asp Trp Ala Gly Pro Gly Asn Pro Pro Asp Cys Ile
```

```
                165                 170                 175
Gln Asp Asp Gly Ala Leu His Thr Asn Thr Arg Ser Met Ala Ala Gly
            180                 185                 190
Ala Ala Phe Ala Ile Ser Tyr Gln Ser Asp Leu Ser Ala Val Thr Met
        195                 200                 205
Glu Asn Leu Ala Val Phe Thr Val Leu Glu Gln
    210                 215
```

<210> 34529
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34529

```
Leu Thr Arg Ala Arg Tyr Met Ala Gly Tyr Lys Cys Asn Val Thr Gly
1               5                   10                  15
Ser Thr Ser Ser Lys Lys Val Ala Pro Ala Gln Val Pro Val Tyr Cys
            20                  25                  30
Ala Asp Asp Ser Ser Lys Cys Val Lys Gly Ala Lys Gln Met Ile Ala
        35                  40                  45
Phe Asn Arg Glu Ser Ala Phe Leu Leu Glu Val Trp Ser Glu Val Thr
    50                  55                  60
```

<210> 34530
<211> 284
<212> PRT
<213> A.fumigatus

<400> 34530

```
Glu Asp Asn Ala Gly Glu Asp Phe Ala Pro Glu Phe Leu Gln Glu Ile
1               5                   10                  15
Tyr Asp Ser Ile Lys Gln Asn Glu Ile Ile Leu Pro Asp Glu His Glu
            20                  25                  30
Asn Lys His Ala Phe Asp Tyr Ala Trp Arg Glu Leu Leu Leu Lys Ser
        35                  40                  45
Ser Ser Ala Gly Asp Leu Val Val Gly Glu Thr Asn Ile Tyr Asp Ser
    50                  55                  60
Glu Met Phe Glu Ala Thr Trp Lys Pro Val Val Ala Thr Leu Ser Tyr
65                  70                  75                  80
Val Phe Met Ser Ala Ser Asp Asp Ala Val Tyr Ser Arg Val Val Met
                85                  90                  95
Gly Phe Asp Gln Cys Ala Gln Ile Ala Ala Arg Tyr Gly Ile Thr Glu
            100                 105                 110
Ala Phe Asp Arg Ile Ile Phe Ser Leu Ala Ser Ile Ser Thr Leu Ala
        115                 120                 125
Thr Asp Lys Pro Pro Ser Thr Ala Leu Asn Thr Glu Val Gln Ala Gly
    130                 135                 140
Lys Lys Thr Val Met Val Ser Glu Leu Ala Val Lys Phe Gly Arg Asp
145                 150                 155                 160
Phe Arg Ala Gln Leu Ala Thr Val Val Leu Phe Arg Val Leu Ala Gly
                165                 170                 175
Asn Glu Ser Val Val Gln Gln Ser Trp Lys Tyr Val Phe Gln Ile Leu
            180                 185                 190
Ser Asn Leu Phe Val Asn Ser Leu Ile Pro Pro Phe Glu Ser Asp Met
        195                 200                 205
Ile Ala Glu Leu Gly Ile Pro Ser Ile Pro Leu Gln Pro Pro Ser Gln
```

```
    210                 215                 220
Val Val Asp Arg Asp Ala Arg Gly Ser Glu Ser Gly Leu Leu Ser Ala
225                 230                 235                 240
Phe Thr Ser Tyr Leu Ser Ser Tyr Ala Ala Asp Asp Pro Pro Glu Pro
                245                 250                 255
Ser Asp Glu Glu Leu Asp Asn Thr Leu Cys Thr Val Asp Cys Val Ala
            260                 265                 270
Ala Cys Ala Ile Asn Asp Val Leu Phe Asn Ile Lys
        275                 280
```

<210> 34531
<211> 318
<212> PRT
<213> A.fumigatus

<400> 34531

```
Leu Asn Lys Ala Cys Ser Glu Asn Glu Val Val Ala Arg Gly Val Lys
1               5                   10                  15
Ala Val Gly Leu Ile Tyr His Leu Thr Asn Arg Val Pro Thr Leu Ile
            20                  25                  30
Lys Gln Ser His Leu Glu Glu Arg Glu Gly Thr Tyr Lys Ala Cys Leu
        35                  40                  45
Val Gly Ala Glu Leu Ala Ile Asn Phe Asp Asn Ala Val Ala Trp Ser
    50                  55                  60
Ala Tyr Trp Ser Pro Ile Phe Gln Ser Leu Ser Ala Gln Cys Ile Asn
65                  70                  75                  80
Pro Cys Arg Asp Ile Arg His His Ala Val Ser Thr Leu Gln Arg Cys
                85                  90                  95
Leu Leu Ser Val His Ile Asp Ser Thr Asp Asp Lys Glu Trp Thr Gly
            100                 105                 110
Ile Phe Asp Gln Val Leu Phe Pro Leu Ile Leu Leu Leu Leu Lys Pro
        115                 120                 125
Glu Val Tyr His Ser Asp Pro Leu Gly Met Gly Glu Thr Arg Val Gln
    130                 135                 140
Ala Ala Thr Leu Val Cys Lys Ile Phe Leu Arg Tyr Leu Asp Gln Leu
145                 150                 155                 160
Pro Asn Arg Glu Gly Met Leu Glu Leu Trp Leu Lys Ile Leu Asp Ile
                165                 170                 175
Leu Asp Arg Met Met Asn Ser Gly Gln Gly Asp Ser Leu Val Arg Glu
            180                 185                 190
Val Ala Phe Leu Glu Leu Ser Arg Asn Gly Tyr Thr Asn Tyr Leu Leu
        195                 200                 205
Gln Ala Glu Ala Ile Pro Glu Ser Leu Lys Asn Ile Leu Leu Val Met
    210                 215                 220
Ala Asp Gly Gly His Leu Val Pro Pro Ser Gln Asp Pro Ser Lys Glu
225                 230                 235                 240
Pro Ile Trp Thr Glu Thr Lys Lys Arg Leu Glu Arg Phe Leu Pro Asp
                245                 250                 255
Leu Phe Lys Glu Ile Phe Pro Glu Asp Leu Ile Glu Lys Pro Ala Ala
            260                 265                 270
Val Pro Ala Val Ser Ser Pro Ile Ser Ser Ser His Asp Asn Thr Asn
        275                 280                 285
Ala Thr Asp Ala Asn Val Gly Glu Ser Gln Pro Thr Pro Gly Gln Ser
    290                 295                 300
Glu Ile Glu Gly Glu Ala Ile Lys Pro Glu Thr Lys Thr Asp
305                 310                 315
```

<210> 34532
<211> 202
<212> PRT
<213> A.fumigatus

<400> 34532
Thr Ala Gly His Arg Val Ala Gly Leu Tyr Gln Gly Cys Asn Glu Ser
1 5 10 15
Ala Leu Ala Gly Pro Phe Pro Asp Arg Leu Leu Phe Val Gln Phe Ile
20 25 30
Ala Thr Glu Pro Cys Ala His Ala Leu Pro Tyr Leu Phe Leu Ile Val
35 40 45
Tyr Val Gln Ser Ile Asn Ile Phe Gln Asp Gln Ser Phe Met Arg Val
50 55 60
Pro Val Ile Leu His Gly Ile Ser Ser Phe Glu Gln Asp Val Leu Glu
65 70 75 80
Ser Val Ala Val Pro Thr Ile Lys Gly Leu Ser Gln Cys Ile Ser Glu
85 90 95
Gln Gly Leu Leu Arg Asn Glu Leu Thr Val Ser Pro Asp Phe Trp Ser
100 105 110
Met Leu Gln Arg Leu His Gln His Thr Glu Ala Ala Pro Leu Val Phe
115 120 125
Glu Leu Leu Arg Arg Ile Ile Glu Ser Val Pro Pro Ile Val Thr Ala
130 135 140
Asp Asn Tyr Glu Ser Ala Val Gly Leu Ala Asn Asp Phe Ile Ser Ala
145 150 155 160
Gly Ser Val Gly Tyr Ile Glu Glu Arg Gln Arg Asp Val Ala Tyr Arg
165 170 175
Arg Ser Lys Gly Val Lys Pro Ser Lys Pro Arg Phe Val Ser Phe Ser
180 185 190
Lys Ser Glu Ile Asp Ile Ser Ser Ser Ser
195 200

<210> 34533
<211> 758
<212> PRT
<213> A.fumigatus

<400> 34533
Arg Cys Gln Thr Gly Gln Gly Arg Lys Val Met Ile Val Arg Arg Met
1 5 10 15
Ser Ser Leu Val Gly Ser Ser Pro Tyr Ser Ile Leu Leu Thr Glu Ala
20 25 30
Glu Thr Pro Pro Gly Glu Ile Pro Val Ile Asp Ser Ser Gln Glu Gln
35 40 45
Gly Glu Ser Gln Leu Asn Val Glu Ser Asn Lys Lys Asn Lys Gly Ala
50 55 60
Pro Thr Ala Phe Tyr Thr Val Arg Glu Asn Asn Pro Asp Arg Thr Thr
65 70 75 80
Glu Ala Glu Ser Ser Trp Ala Leu Ser Ile Pro Ser Gln Asp Asp Ser
85 90 95
Ser Gln Ser Ala Pro Val Ala Pro Val Ser Glu Ala Ser Ser Thr Ala
100 105 110
Ala Leu Leu Arg Pro Ser Leu Arg Ser Lys Gly Lys Arg Lys Leu Lys
115 120 125

```
Ser Leu Ser Ser Gly Ser Ile Gly Arg Gln Glu Pro Gln Asn Glu Arg
    130                 135                 140
Glu Asp Asp Val Ile Asp Pro Arg Ser Tyr Lys Tyr Ser Thr Thr Leu
145                 150                 155                 160
Leu Gly Gly Lys Val Lys Ser Tyr Gln Leu Asp Asp Lys Leu Met Asp
                165                 170                 175
Arg Gln Gln Arg Leu Met Ser Arg Ile Ala Tyr Thr Tyr Asp Val Leu
            180                 185                 190
Ser Gly Asn Arg Arg Gln Arg Arg Lys Leu Arg Glu Gly Glu Ile Ile
        195                 200                 205
Arg Ala Glu Arg Met Leu Val Arg Val Glu Val Ala Val Gln Lys Glu
    210                 215                 220
Leu Pro Asn Asp Tyr Thr Glu Asn Asp Ser Leu Arg Leu Glu Thr Lys
225                 230                 235                 240
Val Val Glu Ser Trp Arg Glu Phe Leu Val Val Cys Arg Val Ile Ser
                245                 250                 255
Asp Ala Glu Ser Ser Val Ala Leu Gln Met Tyr Lys Thr Arg Val Val
            260                 265                 270
Pro Glu Ile Gln Lys Ser Asn Ser Lys Val Lys Pro Tyr His Glu Ile
        275                 280                 285
Ala Leu Asn Arg Lys Asn Thr Lys Val Asn Leu Tyr Ser Cys Leu Asp
    290                 295                 300
Lys Thr Ile Val Ile Trp Arg Pro Cys Lys Arg Gly Thr Lys Ile Tyr
305                 310                 315                 320
Ile Ile Arg Pro Lys Ser Ala Val His Ala Thr Glu Trp Phe Thr Phe
                325                 330                 335
Ile Tyr Gln Val Leu Gly Arg His Arg Pro Ser Ser Leu Ser Ile Asn
            340                 345                 350
Val Pro Asp Leu Asn Val Ser Leu Val Phe Arg Asn Pro Phe Lys Gln
        355                 360                 365
Phe Glu Ser Asn Gly Glu Ala Gln Lys Gly Asp Lys Ile Asp Gly Thr
    370                 375                 380
Ser Val Gln Ser Thr Asp Arg Val Ala Asp Val Ala Ala Ala Ile Ile
385                 390                 395                 400
Arg Gly Cys Met Asp Leu Leu Glu Asn Arg Thr Glu Trp Ala Glu Val
                405                 410                 415
Leu Arg Glu Trp Ser Lys Thr Glu Lys Met Gly Leu Ala Trp Lys Arg
            420                 425                 430
Tyr Asp Arg Leu Glu Trp Val Val Gly Leu Gly Glu Glu Lys Met Tyr
        435                 440                 445
Gly Ser Leu Ala Met Gln Thr Thr His Gln Leu Gln Leu Arg Pro Arg
    450                 455                 460
Gln His Tyr Gln Thr Phe Val Lys Ile Gly Asp Glu Lys Val Glu Glu
465                 470                 475                 480
Pro Pro Pro Val Glu Gly Phe Leu Val Arg Leu Thr Ser Gln Arg Gly
                485                 490                 495
Val His Gln Arg Met Asn Arg Met Phe Phe Lys Arg Leu Tyr Phe Phe
            500                 505                 510
Thr Gln Asp His Tyr Leu Leu Phe Cys Arg Pro Ala Lys Ala Leu Pro
        515                 520                 525
Pro Thr Pro Pro Lys Leu Cys Ser Asp Glu Ala Gly Ile Pro Ser Ala
    530                 535                 540
Arg Gln Ile Leu Asn Glu Met Pro Leu Ser Tyr Asp Val Asp Pro Phe
545                 550                 555                 560
Pro Ile His Asp Gly Glu Ile Thr Trp Met Ser Ser Gly Asn Glu Ala
                565                 570                 575
```

```
His Leu Lys Glu His Asp Gln Asn Ala Tyr Ala His Ser Lys Arg Ser
            580                 585                 590
Ile His Asn Val Thr His Ala Asp Gly Phe Ile Asp Ile Cys Lys Val
        595                 600                 605
Arg Glu Val Arg Gln Val Trp Arg Gly Ser Ser Pro Ala Asp Pro Asn
    610                 615                 620
Ile Arg Glu Gly Leu Asp Val Glu Phe His Ser Glu Ala Gln Asp Thr
625                 630                 635                 640
His Arg Asp Asp Gly Ala Thr Lys Gln Phe Asp Asp Asp Arg Thr Phe
                645                 650                 655
Glu Met Val Leu Glu Asn Asp Leu Val Val Arg Leu Gln Ala Tyr Asp
            660                 665                 670
Lys Thr Thr Arg Asp Glu Trp Ile Lys Arg Met Asp Ala Leu Ala Lys
        675                 680                 685
Tyr Trp Lys Ala Arg Val Ala Ala Asp Ser Val Glu Leu Lys Ala Ile
    690                 695                 700
Arg Arg Arg Asn Leu Asn Ile Leu Asp Ile Asp Glu Gly Thr Glu Ser
705                 710                 715                 720
Val Val Gly Gln Cys Ser Glu Glu Trp Glu Thr Lys Lys Ser Glu Ala
                725                 730                 735
Ser Pro Leu Leu His Asn Ile Cys Thr Leu Ser Gly Cys Arg Thr Ile
            740                 745                 750
Lys Val Arg Cys Ala Ser
        755

<210> 34534
<211> 67
<212> PRT
<213> A.fumigatus

<400> 34534
His Phe Arg Pro Leu Gly Thr Val Phe Glu Gln Val His Thr Thr Pro
1               5                   10                  15
Asn Asp Ser Arg Ser Asn Ile Gly Tyr Ala Ile Cys Arg Leu Asn Gly
            20                  25                  30
Cys Ala Ile Asp Phe Val Pro Leu Leu Ser Leu Thr Ile Gly Leu Glu
        35                  40                  45
Leu Leu Lys Trp Ile Ser Lys Asp Lys Arg Asn Val Gln Ile Arg Asp
    50                  55                  60
Ile Asp Gly
65

<210> 34535
<211> 279
<212> PRT
<213> A.fumigatus

<400> 34535
Pro Leu Leu Lys Thr Asp Gly Gln Ser Thr Pro Ser Gly Asp Gln Ser
1               5                   10                  15
Ala Ala Pro Leu Thr Ser Asp Gly Arg Phe Ser Ala Leu Lys Ala Phe
            20                  25                  30
Tyr Lys Asp Gln Ile Ala Ala Thr Ser Thr Ser Pro Thr Asp Pro Leu
        35                  40                  45
Gly Thr Asp Phe Gly Pro Gly Phe Ala Ser Pro Gly Ala Leu Asn Arg
    50                  55                  60
```

```
Ile Met Ser Leu Tyr Ala Ala Ser Ser Arg Leu Ser Ser Leu Tyr Gly
65                  70                  75                  80
Ser Ala Asn Lys Lys Pro Lys Ser Lys Pro Pro Val Met Arg Glu Ala
                85                  90                  95
Leu Thr Ala Ser Glu Gly Leu Lys Val Ala Thr Pro Gly Ala Glu Asp
            100                 105                 110
Ala Ile Ile Gln Arg Ile Ser Ser Glu Val Cys Gly Trp Asp Gly Leu
        115                 120                 125
Ala Ser Ile Glu Gln Arg Met Phe Gln Ser Pro Asp Val Arg Phe Val
    130                 135                 140
Glu Asp Leu Leu Pro Leu Pro Val Leu Leu Arg Thr Lys Arg Ser Lys
145                 150                 155                 160
Arg Cys Lys Ser Cys Lys His Ile Leu Val Lys Pro Glu Leu Lys Pro
                165                 170                 175
Gln Ser Thr Arg Phe Arg Ile Arg Leu Ile Ala Leu Ser Tyr Ile Pro
            180                 185                 190
Leu Pro Thr Leu Arg Pro Leu Ala Leu Gly Pro Pro Thr Gly Leu Pro
        195                 200                 205
Ala Ile Thr Pro Ser Ala Ser Ser Ser Ala Pro Asn Leu Asp Ala Leu
    210                 215                 220
Pro Pro Leu Lys Pro Phe Gln Leu Leu Leu Thr Leu Lys Asn His Met
225                 230                 235                 240
Phe Asp Pro Val Arg Val Thr Leu Ala Thr Pro Ser Val Thr Pro Gly
                245                 250                 255
Arg Val Ala His Lys Ser His Asn Pro Leu Pro Ala Val Arg His Arg
            260                 265                 270
Ser Gln Gln Arg Arg Leu Glu
        275
```

<210> 34536
<211> 161
<212> PRT
<213> A.fumigatus

<400> 34536

```
Ser Pro Ala Gly His Thr Asn Trp Arg Arg Gln Ser Leu Leu Pro Phe
1                   5                   10                  15
Arg Arg Asp Glu Thr Ser Gly Asn Glu Lys Val Ala Glu Ala Gly Lys
            20                  25                  30
Val Trp Asp Lys Gly Arg Asn Trp Thr Thr Val Val Leu Glu Val Val
        35                  40                  45
Pro Gly Thr Leu Pro Gly Gly Ser Leu Gly Thr Arg Arg Arg Gln Ser
    50                  55                  60
Leu Gly Asp Asp Glu Gly Gly Asp Gly Ala Ser Ser Pro Ser Thr Asp
65                  70                  75                  80
Asp Asn Asp Glu Thr Asn Asn Lys Asn Ala Ser Leu Asp Trp Ser Gly
                85                  90                  95
Gln Ala Gln Asp Pro Lys Asn Gln Leu Gln Pro Asp Glu Asp Val Leu
            100                 105                 110
Glu Ile Pro Val Phe Val Arg Met Glu Trp Asp Ser Glu Asn Gln Met
        115                 120                 125
Glu Gln Ala Ala Gly Lys Gly Gln Asn Ser Asp Thr Val Lys Arg Glu
    130                 135                 140
Leu Ala Tyr Trp Met Val Leu Gly Val Gly Arg Ile Thr Ala Glu Leu
145                 150                 155                 160
Ala
```

<210> 34537
<211> 94
<212> PRT
<213> A.fumigatus

<400> 34537
Gly Arg Asn Ser Val Leu Asn Leu Asp Tyr Phe Pro Leu Arg Arg Pro
1 5 10 15
Thr Pro Leu Ala Thr Arg Lys Ala Ala Pro Ala Ala Gln Pro Ala Thr
20 25 30
Arg Arg Ser Ser Ala Ile Met Ala Ala Ile Asn Lys Ile Ala His Asn
35 40 45
Ser Pro Ser Arg Gln Asn Pro Ser Glu Leu Glu Thr Ala Ile Ala Gly
50 55 60
Ala Leu Tyr Asp Leu Glu Ser Asn Thr Gln Asp Leu Lys Ala Thr Leu
65 70 75 80
Arg Pro Leu Gln Phe Val Ser Ala Arg Glu Val Arg Leu Ala
85 90

<210> 34538
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34538
Trp Thr Leu Asp Ser Thr Gly Phe Val His Thr Tyr Ile Phe Phe Arg
1 5 10 15
Ser Ser Asn Thr Val Leu Gln Val Glu Val Gly His Gly Lys Lys Ala
20 25 30
Val Ile Ile Phe Val Pro Val Pro Leu Leu Gln Gly Phe His Lys Ile
35 40 45
Gln Gln Arg Tyr Glu Met Pro Ser Arg Asn Gln Tyr His Ser Arg
50 55 60

<210> 34539
<211> 127
<212> PRT
<213> A.fumigatus

<400> 34539
Gln Asp Cys Leu Cys Ser Leu Thr Arg Glu Leu Glu Lys Lys Phe Ser
1 5 10 15
Asp Arg His Val Leu Phe Val Ala Gln Arg Arg Ile Leu Pro Arg Pro
20 25 30
Lys Arg Ser Val Asn Ser Arg Thr Asn Gln Lys Gln Lys Arg Pro Arg
35 40 45
Ser Arg Thr Leu Thr Ala Val His Asp Ala Ile Leu Asn Asp Leu Val
50 55 60
Tyr Pro Val Glu Ile Val Gly Lys Arg Ile Arg Thr Lys Glu Asp Gly
65 70 75 80
Ser Lys Thr Leu Lys Val Ile Leu Asp Glu Lys Glu Arg Gly Gly Val
85 90 95
Asp His Arg Leu Asp Ala Tyr Gly Glu Val Tyr Arg Arg Leu Thr Gly
100 105 110

```
Arg Ser Val Ile Phe Glu Phe Pro Gln Ser Gly Ala Ala Glu Tyr
        115                 120                 125

<210> 34540
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34540
Ser Val Asp Asp Leu Val Asn Thr Ile Cys Leu Arg Cys Tyr Cys Leu
1               5                  10                  15
Arg Cys Lys Gly Arg Arg Lys Ser Arg Asp Glu Arg Ser Pro Lys Arg
            20                  25                  30
Ala Glu Ala Asn Pro Thr Thr Ala Lys Arg Asn Thr Ala Lys Arg Gly
        35                  40                  45
Ala Glu Thr Pro Ile Pro His Gln His Asp Arg Ala Gln Ile Val Gly
    50                  55                  60

<210> 34541
<211> 60
<212> PRT
<213> A.fumigatus

<400> 34541
His Lys Lys Arg Gly Lys Asp Pro Arg Gly Gln Phe Ile Phe Thr Gly
1               5                  10                  15
Cys Arg Leu Asn Asp Gln Val Thr Phe Pro Phe Pro Leu Gly Glu Val
            20                  25                  30
Thr Thr Pro Ala Val Tyr Leu Met Thr Leu Met Thr Pro Met Asn Ala
        35                  40                  45
Pro Thr His Phe Glu Leu Gln Pro Arg Ile Ile Asn
    50                  55                  60

<210> 34542
<211> 80
<212> PRT
<213> A.fumigatus

<400> 34542
Leu Leu Asn Cys Leu Leu Phe Ser Gly Thr Phe Leu Ser Asn Leu Leu
1               5                  10                  15
Asn Leu Leu Ile Leu Pro Ser Thr Ser Pro Ser Thr Thr Phe Thr Leu
            20                  25                  30
Asn Leu Val Val Pro Ala Asp Thr Val Leu Leu Asp Ser Phe Leu Ala
        35                  40                  45
Ala Phe Leu Lys Leu Ser Arg Tyr Ile Phe Pro Arg Pro Pro Ser Ser
    50                  55                  60
Phe Arg Ser Pro Cys Leu Gly Leu Val Tyr Arg Thr Gly Leu Glu Gly
65                  70                  75                  80

<210> 34543
<211> 162
<212> PRT
<213> A.fumigatus

<400> 34543
```

```
Ser Ala Glu Ile Arg Ala Leu Phe Ser Leu Ser Leu Pro Pro Met Pro
1               5                  10                  15
Lys His Tyr Arg Lys Val Val His Asp Met Ala Gly Ala Leu Ser Leu
            20                  25                  30
Lys Ser Gln Ser Arg Gly Lys Gly Ser Ser Arg Phe Pro Met Leu Tyr
        35                  40                  45
Lys Asn Ser Arg Thr Pro Lys His Thr Gln Lys Thr Ile Ala Gln Val
    50                  55                  60
Gly Glu Asn Ile Ile Glu Asn Leu Ser Ser Leu Asn Ala Gly Pro Lys
65                  70                  75                  80
Ala Arg Thr Ser Glu Gln Gln Glu Thr Gly Glu Arg Leu Leu Arg Gly
                85                  90                  95
Pro Pro Thr Ser Ser Val Ser Tyr Met Glu Gly Asp Val Val Gly Ala
            100                 105                 110
Ser Ala Pro Glu Ile Gly Ala Glu Asn Lys Gly Arg Ala Met Leu Glu
        115                 120                 125
Arg Met Gly Trp Ser Ser Gly Thr Pro Leu Gly Ala Ile Asn Asn Lys
    130                 135                 140
Gly Ile Leu Leu Pro Val Ala His Val Val Lys Asn Ser Lys Ala Gly
145                 150                 155                 160
Leu Gly
```

Sequence Listing

<210> 34544
<211> 425
<212> PRT
<213> A.fumigatus

<400> 34544

```
Cys Leu Arg Asp Gly Thr Leu Lys Gln Ser Thr Leu Glu Asp His Gln
1               5                  10                  15
Thr Glu Thr Asp Leu Arg Tyr His Val His Pro Arg Arg Thr Thr Leu
            20                  25                  30
Gly Ala Ser Leu Ile Glu Lys Ser Met Lys Thr Pro Thr Ile Val Glu
        35                  40                  45
Asp Thr Asn Leu Ala Arg Arg Val Thr Ala Gln Arg Ile Leu Gly Leu
    50                  55                  60
Pro His His Ser His Lys Thr Pro Thr Gln Ser Cys Ala Thr Thr Glu
65                  70                  75                  80
Asp Ala Leu Gly His Leu Leu His Ala Thr Glu Ser Thr Leu Pro Glu
                85                  90                  95
Arg Thr Asp Gln Ile Gln Pro Arg Ala Ile Asp Glu Thr Val Asp Phe
            100                 105                 110
Ile Pro Phe Lys Ser Thr His Ala Ser Ile Arg Glu Gln Tyr Ser Arg
        115                 120                 125
Leu Ser Glu Glu Glu Glu Asn Asp Ile Leu Thr Asp Tyr Ile Ala Asn
    130                 135                 140
Ile Asp Asp Asp Tyr Gly Asp Tyr Cys Gln Trp Thr Glu Leu Cys Arg
145                 150                 155                 160
Ser Thr Ser Thr Glu Ser Glu Asn Gly Arg Met Asp Arg Ser Ala Asn
                165                 170                 175
Thr Leu Val Ser Ala Glu Leu Val Asn Val Asn Cys Cys Gly Pro Pro
            180                 185                 190
Asn Asn Gly Glu Arg Ile Ile Ser Cys Glu Arg Gly Gln Met Leu Thr
        195                 200                 205
Glu Cys Glu Asp Glu Ser Asp Pro Asp Leu Thr Trp Arg Gly Met Pro
```

```
    210                 215                 220
Ser Gln Leu His Pro Asn Ser Tyr Leu Met Leu Lys Ser Pro Gly Phe
225                 230                 235                 240
Thr Ala Lys Ser Asn Gly Phe Ala Val Leu Cys Thr Ser Leu Pro Asp
                245                 250                 255
Lys His Ser Thr Thr Gly Ser Ser Glu Cys Ser Asp Phe Lys Thr Lys
            260                 265                 270
Gly Ile Gly Asn His Ser Glu Ile Glu Thr Glu Ser Asn Cys Leu Ser
        275                 280                 285
Arg Pro His Ser Asn His Asn Lys Ala Lys Arg Asn His Phe Ala Ser
    290                 295                 300
Ala Thr Ala Phe Ala Glu Ala Leu Glu Ser Asp Pro Phe Tyr Gly Phe
305                 310                 315                 320
Asp Ile Met Asp Phe Asn Arg Pro Ser Leu Arg Asn Lys Thr Lys Gly
                325                 330                 335
Asn Gln Arg Ala Phe Asp Leu Ser Leu Ser Asp Ser Glu Leu Glu Leu
            340                 345                 350
Gln Leu Glu Arg Ala Trp Arg Asn Asp Arg Glu Lys Lys Lys Thr Arg
        355                 360                 365
Lys Gln Lys Arg Glu Glu Leu Arg Ala Gly Gly Leu Leu Gly Arg Thr
    370                 375                 380
Ala Asn Ala Pro Asp Leu Arg Ala Lys Tyr Ser Ser Gly Phe Asp Val
385                 390                 395                 400
Asp Asp Leu Arg Ser Glu Leu Arg Ser Phe Leu Leu Ser Ser Lys Glu
                405                 410                 415
Arg Tyr Glu Ser Ser Cys Ser Arg Tyr
            420                 425
```

<210> 34545
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34545

```
Pro Arg Thr Val Ile Gly Pro Ser Pro Glu His Asn Leu Thr Pro Trp
1               5                   10                  15
Ala Gly Thr Gln Ile Thr Val Val Glu Lys His Asp Pro Gly Ile Pro
            20                  25                  30
Val Lys Thr Thr Leu Trp Ala Gly Phe Lys Pro Ile Asn Gly Gly Glu
        35                  40                  45
Thr Thr Pro Ser Arg Phe Tyr Pro Leu Tyr Glu Ser Ala Gln Phe
    50                  55                  60
```

<210> 34546
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34546

```
Trp Ser Ser Ser Val Leu Cys Phe Lys Val Pro Ser Arg Lys His Tyr
1               5                   10                  15
Leu Ile Leu Ala Gly Val Ile Pro Ser Gly Gly Asp Met Val Tyr Met
            20                  25                  30
Leu Ser Ile Cys Gly Ile Leu Ser Ile Arg Cys Asn Ser Ser Arg Gly
        35                  40                  45
Trp Ile Ser His Arg Ile Ser Val Gly Leu Phe Trp Gly
```

50 55 60

<210> 34547
<211> 259
<212> PRT
<213> A.fumigatus

<400> 34547
Ala Arg Arg Thr Leu Val Leu Arg Val Met Pro Ser Asn Asn Lys Arg
1 5 10 15
Lys Lys Lys Pro Ala Ser Asn Pro Ala Arg Gly Phe Ala Thr Val Ser
20 25 30
Val Pro Ser Lys Pro Lys Ser Val Asp Ser Thr Thr Pro Ala Ser Thr
35 40 45
Val Asp Ser Arg Ser Val Thr Glu Ser Asp Arg Pro Thr Pro Ala Glu
50 55 60
Pro Ser Gln Pro Pro Ser Glu Lys Gln Glu Pro Ser Ser Leu Gln Asn
65 70 75 80
Tyr Ser Pro Glu Glu Leu Glu Lys His Leu Glu Asn Ala Glu Leu Gln
85 90 95
Leu Leu Val Glu Lys Phe Ala Ala Lys Cys Lys Asn Asp Ala Ala Arg
100 105 110
Gln Val Ala Lys Leu Glu Thr Glu Arg Arg Val Leu Arg Gln Gln Ala
115 120 125
Val Ser Leu Asn Leu Ser Glu Trp Leu Pro Lys Glu Val Gln Glu Leu
130 135 140
Ile Leu Ser Leu Ala Glu Ala Glu Glu Arg Glu Ile Ser Pro Pro Ser
145 150 155 160
Ser Leu Lys Lys Ser Ser Ser Glu Glu Glu Leu Tyr Met Arg Leu Trp
165 170 175
Thr Leu Arg Glu Thr Leu Met Lys Leu Gly Phe Pro Glu Val Lys Val
180 185 190
Glu Glu Ala Leu Lys His Val Leu Phe Tyr Leu Pro Gly Thr Ala Thr
195 200 205
Ser Ser Asn Arg Asp Val Val Pro Asn Leu Asp Glu Ser Leu Asp Trp
210 215 220
Leu Ala Met His Cys Leu Ser Ala Glu Leu Pro Ser Tyr Thr Gln Ser
225 230 235 240
Ser Ala Gln Thr Arg Asn Glu Ser Glu Arg Leu Val Ser Tyr Ile Ser
245 250 255
Gly Lys Phe

<210> 34548
<211> 404
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (380),(404)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34548
Asn Gln Glu Ile Trp Arg Ala Cys Glu Ser Leu Ser Ser Arg Ala Arg
1 5 10 15

```
Leu Leu Ala Glu Leu Met Leu Ser Arg Ser Ser Ala Ile Glu Leu Val
            20                  25                  30
Ser Trp Leu Leu Leu Thr Pro Pro Glu Ser Ala Phe Gln His Gly His
        35                  40                  45
Cys Ser Arg Ala Leu Phe Ser Phe Asp Phe Leu Gly Thr Glu Leu Pro
    50                  55                  60
Gln Glu Ile Arg Gln Ser Leu Ile Gly Leu Leu Phe Thr Thr Tyr Pro
65                  70                  75                  80
Leu Tyr Val Asp Arg Pro Ser Arg Gln Ala Val Gln Gln Cys Leu Arg
                85                  90                  95
Thr Ile Leu Lys Ala Pro Val Pro Thr Glu Asp Leu Lys Tyr Leu Thr
            100                 105                 110
Gln Asn Leu Leu Ala Glu Ala Ser Lys Pro Gly Leu Ala Pro Ser Ser
        115                 120                 125
Ala Phe Val Leu Leu Glu Trp Cys Ser Leu Leu Leu Gln Ile Leu Lys
    130                 135                 140
Asn Asp Pro Asp Thr His Leu Ser Ile Val Leu Asp Ile Val Ala Val
145                 150                 155                 160
Asp Ala Lys Ala Leu Glu Thr Cys Leu Ala Ala Arg Pro Arg Pro Thr
                165                 170                 175
Leu Lys Gln Ser Ala Leu Thr Val Thr Arg Arg Ala Leu Arg Ala Ile
            180                 185                 190
Phe Ser Ser Asp Asn Trp Gly Glu Asp Ala Val Arg Gln Ser Val Ala
        195                 200                 205
Arg Leu Thr Gly Asp Ser Ala Ala Gly Gln Lys Asn Ala Pro Phe Leu
    210                 215                 220
Gly Val Ile Ser Gly Val Cys Ala Arg Leu Pro Asn Ser Lys Ala Val
225                 230                 235                 240
Leu Glu Asn Glu Lys Lys Leu Ile Leu Ala Tyr Tyr Ile Lys Glu Leu
                245                 250                 255
Val Gly Ser Lys Ala Ala Val Pro Asn His Ile Ala Ser Gly Leu Ser
            260                 265                 270
Asp Phe Phe Ala Ser Phe Ile Thr Tyr Glu Asp Phe Thr Ser Glu Leu
        275                 280                 285
Val Pro Pro Leu Glu Lys Ser Leu Leu Arg Ala Pro Glu Val Val Leu
    290                 295                 300
Gly Gly Leu Val Pro Ser Leu Cys Ser Ser Leu Pro Glu Asp Phe Asp
305                 310                 315                 320
Leu Ser Glu Ile Leu Phe Ser Arg Leu Leu Lys His Leu Leu Ser Ser
                325                 330                 335
Met Lys Ser Asn Asn Ala Thr Ile Arg Gln Gly Ala Val Gln Ser Leu
            340                 345                 350
Glu Ser Ile Leu Ser Lys Ser Lys Lys Glu Glu Trp Leu Val Lys Ile
        355                 360                 365
Ala Gly Glu Ile Ile Gly Pro Ile Lys Thr Gln Xaa Ile Thr Ser Pro
    370                 375                 380
Glu His Arg Ala Val Tyr Ala Gln Ala Val Cys Gly Ile Leu Pro Ser
385                 390                 395                 400
Glu Ser Val Xaa
```

<210> 34549
<211> 171
<212> PRT
<213> A.fumigatus

<400> 34549
Gly His His Gln Leu Phe Asp Val Ala Thr Lys Gly Ala Pro Thr Gly
1 5 10 15
Ser Tyr Leu Asp Leu His Val Ser Ser Arg Thr Arg Arg Gly Leu Ser
20 25 30
Pro Val His Leu Pro Lys Ser Arg Ile Val Thr Asp Ala Phe Leu Ser
35 40 45
Ser Ser Val Ile Ile Pro Val Ser Lys Ile Gly Ser Ser Val Ser Asn
50 55 60
Ile Ser Pro Arg Arg Ser Ala Val Ser Pro Leu Ser Ser Met Asn Pro
65 70 75 80
Ala Pro Phe Ser Ala Ser Val Asp Ala Ser Ser Gly Phe Leu Thr Ser
85 90 95
Gly Ser Thr Gly Pro Pro Phe Pro Ser Ser Arg Ala Thr Arg Leu Glu
100 105 110
Asn Ala Ala Ser Leu Leu Arg Ser Ser Ser Phe Ser Leu His Arg Tyr
115 120 125
Ser Ala Ser Ser Arg Ser Asn Asn Thr Ser Phe Ser Met Leu Ala Ser
130 135 140
Leu Arg Trp Ser Leu Ala Thr Trp Gly Ser Ser Val Val Thr Leu Ala
145 150 155 160
Cys Ser Arg Pro Asp Phe Leu Pro Phe Phe Gly
165 170

<210> 34550
<211> 249
<212> PRT
<213> A.fumigatus

<400> 34550
Pro Trp Thr Arg Ser Phe Val Leu Thr Gly Cys Leu Gln Ile Pro His
1 5 10 15
His Gly Ile Phe Ser Val Thr Asn Glu Pro Phe Pro Arg Pro Ala Pro
20 25 30
Ile Asp Glu His Trp Gln Ala Leu Gln Gly Ile Val Arg Ser Cys Arg
35 40 45
Asp Val Ala Cys Thr Ile Phe Arg Thr Met Ser Thr Ala Leu His Leu
50 55 60
Pro Ala Asp Lys Thr Phe Glu Ser Phe His His Pro Cys His Ala Ser
65 70 75 80
Leu Asp Ile Ile Arg Leu Leu Lys Tyr Gln Ser Ala Pro Pro Gly Glu
85 90 95
Thr Thr Pro Arg Val Pro Gln Thr Ala His Thr Asp Leu Gly Ser Leu
100 105 110
Thr Met Leu Phe Ala Ser Thr Pro Gly Leu Gln Ile Cys Pro Arg Gly
115 120 125
Ser Asp Asp Trp Leu Tyr Val Met Pro Arg Ala Asn Ser Met Ile Val
130 135 140
Asn Leu Gly Asp Ala Met Ser Ile Trp Thr Asp Gly Val Phe Gln Asn
145 150 155 160
Val Leu His Arg Val Ser Ser Met Pro Gly Gln Ala Met Glu Glu Arg
165 170 175
Tyr Ser Phe Ala Val Leu Met Arg Pro Ala Asp Gly Ala Pro Met Val
180 185 190
Ser Leu Met Arg Pro Ser Pro Ser Gly Leu Glu Ala Glu Pro Met Arg
195 200 205

```
Cys Asp Ile Trp Leu Arg Ala Lys Phe Leu Ala Leu Arg Gly Gln Lys
    210                 215                 220
Asn Gly Glu Arg Lys Asp Ser Asp Ile Ala Val Leu Thr Gly Cys Pro
225                 230                 235                 240
Asp Gly Arg Pro Arg Phe Leu Glu Val
                245
```

<210> 34551
<211> 105
<212> PRT
<213> A.fumigatus

<400> 34551

```
Leu Arg His Ala Val Gly Ala Asp Arg Leu Lys Val Leu Tyr Leu Thr
1               5                   10                  15
Gly Arg Asn Ala Ala Leu Ala Ser Asp Tyr Ala Leu His Arg Lys Arg
            20                  25                  30
Glu Leu Met Glu His His Val Cys Glu Cys Arg Gly His Asn Met Trp
        35                  40                  45
Ile Glu Pro Pro Leu Asn Met Val Gly Ser Leu Val Ala Thr Arg Gly
    50                  55                  60
Asp Asp Tyr Leu Gly Arg Gln Leu Phe Val Ala Met His Cys Arg Met
65                  70                  75                  80
Lys Thr Ile Ala His Leu Leu Pro Leu Asp Ser Asp Ile Ser Leu Thr
                85                  90                  95
Ala Cys Ser Leu Gly His Pro Arg Ser
            100                 105
```

<210> 34552
<211> 81
<212> PRT
<213> A.fumigatus

<400> 34552

```
Ile Thr Thr Pro Tyr Gln Thr Ser Lys Arg Thr Tyr Asn Tyr Cys Gln
1               5                   10                  15
Ala Val Leu Pro Arg Asn Ser Tyr Gly Gly Glu Asp Phe Asp His Leu
            20                  25                  30
Gly Ser Ser Pro Ala Leu Ala Cys Val Asp Thr Val Arg Leu Ala Gln
        35                  40                  45
Pro Glu Asp Ile Phe Cys Asp Asn Lys Arg Met Tyr Tyr Tyr Gly Gly
    50                  55                  60
Met Glu Glu Met Val Leu Leu Phe Ile Leu Leu Arg Ser Arg Tyr His
65                  70                  75                  80
Thr
```

<210> 34553
<211> 198
<212> PRT
<213> A.fumigatus

<400> 34553

```
Tyr Tyr Phe Ala Ser Leu Pro Phe His Phe Arg Thr Val Phe Cys Leu
1               5                   10                  15
Val Val His Tyr Leu Leu Tyr His Thr His Ile Ser Thr Ala Ser Leu
```

```
            20                  25                  30
Phe Phe Pro Ser Pro Tyr Ile Thr Phe Ser Ile Arg Lys Ser Ile Leu
        35                  40                  45
His Ile Met Pro Tyr Asn Thr Arg Arg Lys Ser Leu Ser Leu Pro Ser
    50                  55                  60
Leu Gly Ile His Leu Pro Asn Ser Ser Arg Arg Ser Pro Ser Ala Ser
65                  70                  75                  80
Lys Gln Pro His Ala Thr Asp Asp Pro Leu Pro Pro Ser Lys Lys Val
                85                  90                  95
Lys Arg Ser His Asp Ser Val Ser Ser Ser Pro Glu Pro Ser Pro Ser
            100                 105                 110
Ser Thr Ser Ser Thr Asp Ala Lys Asp Gln Gln Thr Ile Arg Pro Asn
        115                 120                 125
Gly Arg Arg Gly Ile Tyr Glu His Thr Pro Pro Pro Ser Pro Thr Asp
    130                 135                 140
Gly Thr Ala Ala Pro Lys Ile Asp Ile Glu Gly Ile Asn Asp Asp Ile
145                 150                 155                 160
Val Val Gly Val Ile Glu Gln Leu Glu Lys Thr Gly Asn Arg Pro His
                165                 170                 175
Leu Val Lys Glu Leu Ala Ala Ile Leu Val Thr Leu Asn Glu Asn Val
            180                 185                 190
Ala Lys Tyr Ala Ile Pro
        195
```

<210> 34554
<211> 348
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (282)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34554

```
Gly Ala Arg Ser His Ser Arg Tyr Pro Gln Arg Glu Cys Arg Lys Val
1               5                   10                  15
Cys Tyr Pro Leu Ala Leu Lys Pro Ser Tyr Ala Trp Lys Leu Thr Val
            20                  25                  30
Ser Leu Leu Pro Ser Ser Ala Asn Pro Ala Ala Leu Leu Ser Ser Arg
        35                  40                  45
Leu Gly Thr Tyr Met Lys Arg Pro Trp Thr Ala Leu Ala Pro Cys Pro
    50                  55                  60
Ile Ala Lys Glu Leu Ile Pro Ile His Pro Arg Lys Val Tyr Tyr Tyr
65                  70                  75                  80
Leu Thr Thr Leu Pro Arg Arg Pro Ile Pro Glu Asn Ser Asp Asp Val
                85                  90                  95
Ile Ile Pro Gly Val Asp Gly Lys Asp Phe Thr Pro Ser Val Ser Asn
            100                 105                 110
Ala Asp Leu Asp Asp Glu Glu Met Met Ala Arg Glu Arg Ser Leu Ser
        115                 120                 125
Pro Glu Val Asp Leu Ser Ser Pro Asp Phe Glu Glu Glu Asn Ile Asp
    130                 135                 140
Arg Ser Ala Gly Arg Pro Gly His Ser Phe Ser Glu His His Ser His
145                 150                 155                 160
Ala Arg Leu Met His Ser Asn Arg Ala Ala Ser Pro Pro Leu Glu Gly
```

```
                165                 170                 175
Asp Glu Lys Glu Phe Thr Gln Thr Ala Ser Ala Val Arg Glu Arg Ala
            180                 185                 190
Ser Glu Gln Lys Ala Ala Thr Glu Lys Ser Ser Ala Leu Ser Asp Ala
        195                 200                 205
Leu Ser Glu Leu Glu Asn Gly Val Met Ser Ile Ser Glu Thr Ala Ile
    210                 215                 220
Glu Asn Ser Pro Leu Ser Ser Ile Asn Glu Glu Arg Leu Pro Asp His
225                 230                 235                 240
Glu Asp Ser Asp Tyr Phe Ser His Gly Asn Tyr Gln Ala Gln Gln Arg
                245                 250                 255
Leu Gln Gln Gln Leu Glu Leu Glu Gln Val Asp Thr Asp Ser Val Ala
            260                 265                 270
Ala Ser Ala Leu Phe Gly Thr Ser Pro Xaa Pro Ser Leu Ala Ser Val
        275                 280                 285
Ala Ser Ser Leu Ser Ser Arg Thr Ser Ala Ala Ser Asp Asp Gly Leu
    290                 295                 300
Glu Val Glu Asp Arg Ala Thr Val Leu Ala Ser Ala Leu Gln Ile Ser
305                 310                 315                 320
Leu Leu Glu Asp Pro Ser Ala Pro Ser Val Ser Thr Leu Lys Arg Ser
                325                 330                 335
Ile Asp Met Leu Asn Ile Glu Leu Pro Asp Leu Glu
            340                 345
```

<210> 34555
<211> 112
<212> PRT
<213> A.fumigatus

<400> 34555

```
Gln Met Leu Ile Leu Gln Gly Tyr Trp Leu Gln Ile Ser Gly Ala Ser
1               5                   10                  15
Val Leu Ser Ile Thr Asp Ile Val His Gly Thr Tyr Gly Glu Gly Ser
            20                  25                  30
Asp Gly Ile Phe Gly Asp Val Asp Asp Val Asp Val Val Arg Glu Ile
        35                  40                  45
Ile Arg Asp Asn Ala Thr Arg Arg Ala Val Asp Asn Phe Ile Leu Asn
    50                  55                  60
Leu Ser Gly Pro Arg Thr Ala Leu Val Phe Ala Pro Ile Ile Tyr Gly
65                  70                  75                  80
Arg Gly Arg Gly Ile Ile Asn Gln Arg Ser Ile Gln Ile Pro Glu Leu
                85                  90                  95
Ala Arg Val Ala Ile Glu Thr Gly Arg Ala Ile Gln Val Gly Lys Gly
            100                 105                 110
```

<210> 34556
<211> 129
<212> PRT
<213> A.fumigatus

<400> 34556

```
Ile Phe Phe Arg Leu Arg Glu Asn Glu Ala Ala Phe Asp Arg Tyr Lys
1               5                   10                  15
Ile Leu Pro Arg Val Leu Arg Asn Val Asp Asn Val Asp Thr Thr Thr
            20                  25                  30
Glu Ile Leu Gly Thr Lys Val Ser Leu Pro Phe Gly Phe Ser Pro Ala
```

```
        35                  40                  45
Ala Ser Gln Lys Leu Ala His Pro Asp Gly Glu Leu Ala Ala Ser Arg
    50                  55                  60
Ala Ala Ala Lys Tyr Gly Ile Cys Met Gly Leu Ser Ser Tyr Ser Asn
65                  70                  75                  80
Tyr Ser Leu Glu Asp Val Ala Ala Gln Gly Thr Gly Asn Pro Tyr Val
                85                  90                  95
Met Gln Met Cys Val Leu Arg Asp Arg Ser Ile Thr Ile Gln Leu Leu
            100                 105                 110
Glu Arg Ala Gln Ser Ala Ser Leu Gly Phe Leu Ser Gly Val Asp Thr
        115                 120                 125
Tyr
```

<210> 34557
<211> 67
<212> PRT
<213> A.fumigatus

<400> 34557
```
Tyr Gly Ala Glu Ala Gly Tyr Lys Ala Leu Phe Leu Ser Val Asp Val
1               5                   10                  15
Pro Val Leu Gly Lys Arg Leu Asn Glu Tyr Arg Asn Ser Tyr Thr Leu
            20                  25                  30
Pro Glu Asp Met Asn Trp Pro Asn Ile Leu Ser Cys Gly Ala Asp Thr
        35                  40                  45
Ser Asn Arg Thr Asp Tyr Gly Arg Ser Ser Gln Phe Pro Met Ala Ala
    50                  55                  60
Ala Glu Arg
65
```

<210> 34558
<211> 110
<212> PRT
<213> A.fumigatus

<400> 34558
```
Ser Ser Thr His Gly Gly Arg Gln Leu Asp Gly Phe Pro Ala Thr Leu
1               5                   10                  15
Asp Ala Met Arg Val Cys Ala Leu Met Ala Arg Gly Arg Ile Pro Leu
            20                  25                  30
Ala Ile Asp Gly Gly Ile Arg Arg Gly Ser Asp Ile Phe Lys Ala Leu
        35                  40                  45
Ala Leu Gly Ala Ser Tyr Cys Ile Val Gly Arg Ile Pro Ile Trp Gly
    50                  55                  60
Leu Ala Val Ser Phe Val Leu Trp His Val Ala Met Ile Gly Leu Ala
65                  70                  75                  80
Asn Tyr Ile Gln Tyr Asn Gly Gln Glu Gly Val Glu Leu Ala Ile Arg
                85                  90                  95
Ile Leu Gln Gln Glu Leu Lys Ile Thr Met Ala Leu Ala Gly
            100                 105                 110
```

<210> 34559
<211> 105
<212> PRT
<213> A.fumigatus

<400> 34559
Ala Cys Arg Ser Ala Ser Pro Leu Ser Pro Val Arg Arg Leu Ile Leu
1 5 10 15
Glu Ser Gln Arg Pro Leu Thr Val Asn Leu Ile Ile His His Thr Ile
20 25 30
Ser His Arg Ser Thr Ile Arg Thr Met Gly Asp Leu Phe Val Asp Ile
35 40 45
Arg Thr Pro Asn Asn His Ala Tyr Arg Gln Pro Thr Gly Leu Phe Ile
50 55 60
Gly Gly Glu Val Val Ala Ala Ser Ser Gly Gln Thr Ile Thr Ser Ile
65 70 75 80
Asp Pro Ala Tyr Val Trp Arg Ile Leu Ser Glu Ser Ser Pro Arg Ala
85 90 95
Cys Gln Asp Pro Ser Leu Ser Cys Asn
100 105

<210> 34560
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34560
Val Ser Leu Leu Ala Glu Glu Asp Ser Gly Gly Gly Pro Ala Gly Leu
1 5 10 15
Thr Gly Phe Pro Thr Val Gly Ala Ser Ile Ser Gly Ala Thr Gly Gly
20 25 30
Ser Asp Glu Thr Ser Val Phe Ser Glu Ser Val Met Val Val Ser Asn
35 40 45
Cys Leu Thr Ile Leu Glu Lys Lys Leu Trp Arg Lys Ser Arg Arg
50 55 60

<210> 34561
<211> 463
<212> PRT
<213> A.fumigatus

<400> 34561
Leu Thr Ala Ile Asn Ile Thr Met Ala Ser Ser Pro Arg Thr Pro His
1 5 10 15
Ser His Phe Ser Leu Lys Arg Gln Ser Thr Gln His Ile Phe Ser Cys
20 25 30
Tyr Ala Cys Ser Tyr Tyr Pro Thr Ser Phe Phe Ile Ala Tyr Met Ser
35 40 45
Arg Ile Cys Lys Ala Met Ala Asp Asn Gly Glu Gly Ser Ser Arg Pro
50 55 60
Pro Ile Trp His Ser Lys Ser Pro Arg Thr Gln Pro Pro Arg Ile Pro
65 70 75 80
Phe Pro Tyr Ile Asn Pro Pro Ser Glu Pro Ser Pro Glu Asp Val Leu
85 90 95
Pro Asp Ile Phe Glu Gln Arg Pro Asp Ile Tyr Pro Gly Ser Ala Trp
100 105 110
Arg Gly Trp Arg Leu Arg Ala Pro Phe Gly Leu Lys His Asn Leu Pro
115 120 125
Gln Tyr Glu Met Asn Lys Gln Cys Thr His Gly Ile Met Val Arg Arg
130 135 140

```
Phe Val Asp Asp Arg Ile Leu Cys Pro Asn Cys Ala Arg Gln Pro Leu
145                 150                 155                 160
Leu Gly Trp Leu Leu Leu Cys Val Glu Asp Leu Asp Gln Pro Asn Gly
                165                 170                 175
Pro Gly Leu Ser Arg Gly Ile Ser Arg Ala Met Ile Asn Gly His Tyr
            180                 185                 190
Thr Phe Arg Glu Arg Thr Ile Val Arg Gln Gln Arg Ala Ile Val Leu
        195                 200                 205
Gln His Met Glu Gln Glu Tyr Gly Leu Ala Ala Ala Pro Phe Ser His
    210                 215                 220
Ile Glu Val Ile Gln Gly Ile Glu Pro Gly Asp Glu Val Asp Asp Asn
225                 230                 235                 240
Gly Asn Asp Gly Leu Pro Thr Glu Arg Met Glu Gly Ile Arg Gln Glu
                245                 250                 255
Asn Gln Val Glu Ser Met Pro Cys Leu Glu Gln Pro Ser Arg Gln Pro
            260                 265                 270
Arg Pro Pro Cys Arg Phe Trp Cys Cys Tyr His Cys Met Asp His Ile
        275                 280                 285
Pro Glu Arg Ala Ser Ile His Leu Asp Gly Phe Phe Lys Asn Pro Cys
    290                 295                 300
Thr Ala Ile Thr Leu Pro Trp Glu Leu Ser Asn Lys Arg Val Ser Asp
305                 310                 315                 320
Ala Arg Val Val Arg Asn Leu Asp Asn His Tyr Lys Gln Arg Glu His
                325                 330                 335
Phe Phe Gly Leu Pro Thr Pro Pro Tyr Thr Leu Ser Glu Ser Met Ser
            340                 345                 350
Leu Ala Ile Met Gln Pro Arg Leu Met Arg Leu Cys Ala Ile Ala Ser
        355                 360                 365
Arg Thr Asp Leu Arg Ser Leu Cys Asp Pro Leu Lys Val Lys Glu Tyr
    370                 375                 380
Ser Ser Ala Gly Leu Ile Pro Gly Val Ser Asp Ser Asp Ser Gly Ser
385                 390                 395                 400
Ala His Ser Phe Leu Ser Gly Gly Ser Arg Gly Ile Leu Ile Ala Tyr
                405                 410                 415
Ala Lys Glu Asn Ala Val Glu Pro Ala Glu Val Arg Ser Thr His Glu
            420                 425                 430
Arg Glu Ser Asp Leu Asp Val Glu Val Gly Asp Asp Asp Tyr Gly Leu
        435                 440                 445
Glu Ser Leu Phe Arg Ser Thr Thr Leu Asp Ile Cys Asp Leu Asn
    450                 455                 460
```

<210> 34562
<211> 208
<212> PRT
<213> A.fumigatus

<400> 34562

```
Lys Thr Val Arg Ser Leu His Ala Ile Pro Pro Pro Arg Pro His Arg
1               5                   10                  15
Arg Asn Pro Gly Phe Ser Pro Phe Pro Leu Ser Cys Leu Arg Thr Gly
            20                  25                  30
Ile Pro Ser Gly Ser Gly Val Leu Val Pro Leu Arg Thr Trp Gly Ser
        35                  40                  45
Ala Thr Leu Lys Ser Pro Pro Ser Asp Pro Ile Ile Arg Asn Leu Thr
    50                  55                  60
Leu Ala Gln Val Ala Val Asn Met Val Tyr Gln Phe Leu Glu Asn Val
```

65 70 75 80
Gly Tyr Leu Ala Ser Lys Gly Val Ile Ser Lys Lys Trp Ile Asp Arg
85 90 95
Trp Gly Gly Ile Asn Lys Trp Tyr Leu Trp Ser Ile Arg Ala Trp Phe
100 105 110
Gly His Ile Ile Phe Gln Phe Phe Val Leu Trp Arg Gln Val Val Leu
115 120 125
Arg Arg Arg Lys Ile Ala Ser Asn Pro Ala Glu Ala Gln Thr Lys Glu
130 135 140
Gly Gln Glu Glu Leu Arg Ala Glu Ile Arg Ala Trp Lys Lys Ala Leu
145 150 155 160
Val Asn Asn Val Cys Trp Ala Pro Leu Cys Leu His Trp Cys Phe Glu
165 170 175
Asn Gly Val Gly Ile Pro Asp Ser Leu Ser Gly Val Ile Ser Phe Met
180 185 190
Ala Gly Ala Trp Gly Phe Tyr Asp Leu Trp Ala Ala Thr Ala Lys Ser
195 200 205

<210> 34563
<211> 103
<212> PRT
<213> A.fumigatus

<400> 34563
Phe Asn Thr Glu Glu Ile Thr Tyr Asp Glu Leu Thr His Cys Asn Gln
1 5 10 15
His His His Gly Ile Val Ala Glu Asn Thr Pro Phe Thr Phe Phe Leu
20 25 30
Lys Ala Thr Glu His Thr Ala His Phe Gln Leu Leu Cys Leu Leu Leu
35 40 45
Leu Pro Asn Phe Phe Leu His Ser Leu His Val Thr His Met Gln Ser
50 55 60
His Gly Gly Gln Trp Arg Gly Lys Leu Glu Thr Ser Tyr Met Ala Gln
65 70 75 80
Gln Lys Ser Pro Asn Ala Thr Ser Ser Asn Ser Ile Ser Leu His Gln
85 90 95
Pro Ala Phe Arg Ala Leu Ala
100

<210> 34564
<211> 830
<212> PRT
<213> A.fumigatus

<400> 34564
Asp Pro Arg Pro Pro Arg Ala Pro Pro Pro Pro Pro Val Lys Val
1 5 10 15
Asp Leu Pro His Ser Arg Pro Gly Glu Asp Met Ser Val Val Glu Asp
20 25 30
Gly Pro Leu Phe Arg Ala Thr Met Lys Ala Leu Glu Gln Lys Thr Gly
35 40 45
Asn Met Arg Ala Lys Ile Lys Lys Val Leu Lys Lys Ala Glu Ala Ala
50 55 60
Gln Gln Ala Gln Gly Ala Cys Asn Asp Ala Val Glu Ala Phe Leu Ser
65 70 75 80
Ala Leu Ser Glu Ala Ser Thr Thr Asn Ser Asn Ala Ile Gln Pro Ala

```
                85                  90                  95
Leu Asp His Tyr Phe Glu Lys Ile Ala Arg Gln Ile Leu Asn Tyr Glu
            100                 105                 110
Arg Leu Asn Thr Ile Gln Leu Gln Lys Leu Val Ile Glu Pro Leu Val
        115                 120                 125
Lys Leu Tyr Asn Asn Asp Ile Lys Gln Ala Glu Ala Lys Lys Lys Glu
    130                 135                 140
Phe Glu Glu Glu Ser Arg Asp Tyr Tyr Ala Tyr Val Ser Arg Tyr Leu
145                 150                 155                 160
Gly Gln Arg Gln Asp Ser Leu Lys Glu Lys Lys Arg Ala Glu Ser Asp
                165                 170                 175
Ser Gln Tyr Gln Ala Lys Arg Arg Asn Phe Glu Leu Lys Arg Phe Asp
            180                 185                 190
Tyr Ser Ser Phe Met Pro Asp Leu His Gly Gly Arg Lys Glu His Glu
        195                 200                 205
Val Leu Ser Pro Leu Thr Arg Tyr Ala Asp Glu Gln Ala Lys Ser Phe
    210                 215                 220
Leu Ala Ala Ala Lys Lys Val Asp Asp Met Ile Pro Gln Leu Asp Ala
225                 230                 235                 240
Leu Ile His Glu Val Asn Gln Ala Asp Lys Glu Phe Gln Phe Gln Arg
                245                 250                 255
Thr Glu Arg Glu Glu Lys Arg Arg Ala Leu Glu Lys Ser Ser Asn Leu
            260                 265                 270
Phe Leu Glu Pro Asp Ser Leu Ala Asn Pro Ser Val Pro Ser Ser Leu
        275                 280                 285
Thr Gly Asn Gly Ser Ser Cys His Met Ser Glu Ser Asp Leu Gly Arg
    290                 295                 300
Ala Asp Ser Thr Gly Ser Gln Leu Arg Ser Val Val Ser Asn Ser Ser
305                 310                 315                 320
Ser Met Ala Ser Gln Thr Asn Ala Ala Met Asn Ser Thr Ala Gly Ile
                325                 330                 335
Pro Pro Ile Ser Ser Asn Ala Asn Ser Ser Gly Gln Gln Arg Lys Glu
            340                 345                 350
Gly Leu Leu Trp Ala Leu Ser Arg Pro Gly Ser His Ile Asp Pro Lys
        355                 360                 365
Gly Ile Asn Lys Gln Ala Trp His Lys Phe Trp Ile Val Leu Asp Gln
    370                 375                 380
Gly Lys Leu Ser Glu Tyr Ser Asn Trp Lys Gln Lys Leu Asp Leu His
385                 390                 395                 400
Met Asp Pro Ile Asp Leu Arg Met Ala Ser Val Arg Glu Ala Arg Asn
                405                 410                 415
Ala Glu Arg Arg Phe Cys Phe Glu Val Ile Thr Pro Gln Phe Lys Arg
            420                 425                 430
Ile Tyr Gln Ala Thr Ser Glu Glu Asp Met Gly Asn Trp Ile Arg Ala
        435                 440                 445
Ile Asn Asn Ala Leu Gln Ser Ala Val Glu Gly Arg Gly Met Ser Pro
    450                 455                 460
Pro Val Pro Ser Lys Asn Asp Ser Ser Ser Leu Gly Arg Asp Ile Gly
465                 470                 475                 480
Ser Val Leu Thr Gly Lys Ser Ser Ser Tyr Ser Gly Gln His Ser Gln
                485                 490                 495
Ser Ala Ser Ser Val Ser Ser Val Ser Arg Arg Thr Thr Val Gly Ala
            500                 505                 510
Arg Pro Ser Tyr Val Arg Asn Asp Ser Thr Gly Tyr Glu Glu Asn Pro
        515                 520                 525
Ala Lys Leu Leu Gln Thr Val Arg Asp Ala Asp Gln Gly Asn Asn Trp
```

```
    530                 535                 540
Cys Ala Asp Cys Gly Ser Thr Ser Lys Val Glu Trp Val Ser Ile Asn
545                 550                 555                 560
Leu Gly Ile Val Leu Cys Ile Glu Cys Ser Gly Ile His Arg Ser Leu
                565                 570                 575
Gly Thr His Ile Ser Lys Ile Arg Ser Leu Thr Leu Asp Val Asn Ser
            580                 585                 590
Phe Ser Asn Asp Ile Val Glu Ile Leu Leu Gln Ile Gly Asn Arg Val
        595                 600                 605
Ser Asn Met Val Trp Glu Ala Thr Leu Asp Gln Ser Gln Lys Pro Met
    610                 615                 620
Ala Thr Ser Thr Arg Glu Gln Arg Leu Lys Phe Ile Thr Ala Lys Tyr
625                 630                 635                 640
Ser Asp Arg Ala Phe Val Gln Pro Leu Pro Ser Pro Leu Ser Arg Phe
                645                 650                 655
Ser Thr Pro Asp Glu Thr Leu Leu Ala Ala Ile Lys Lys Asn Asp Ile
            660                 665                 670
Gln Gly Val Leu Tyr Gly Ile Ala Leu Arg Ala Asp Val Asn Ile Thr
        675                 680                 685
Asp Arg Ser Arg Asn Thr His Ala Val Phe Leu Ala Leu Ala Ala Ala
    690                 695                 700
Asp Pro Ala Ser Pro Gly Ser Thr Pro Ser Asn Leu Pro Pro Arg Pro
705                 710                 715                 720
Ser Thr Ala Asn Ala Ala Lys Ala Ile Pro Phe Pro Ile Ala Glu Leu
                725                 730                 735
Leu Val Gln Asn Gly Ala Glu Ile Pro Ser Gln Pro Pro Pro Ile Pro
            740                 745                 750
Leu Ser Pro Ala Ala Gln Leu Tyr Leu Ser Gln Arg Thr Thr Arg Tyr
        755                 760                 765
Val Thr Pro Met Ala Gly Ser Ser Thr Ala Asp Thr Val Gly Ser Leu
    770                 775                 780
Pro Ser Ile Arg Gly Thr Ala Gly Asp Gln Ala Val Pro Ser Gly Ser
785                 790                 795                 800
Leu Asp Ser Lys Glu Arg Asp Arg Leu His Lys Arg Gly Ser Ala Gly
                805                 810                 815
Ala Arg Phe Ala Gly Lys Val Ala Ser Leu Gly Ile Glu Arg
            820                 825                 830

<210> 34565
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34565
Arg Pro Leu Arg Leu Asn Ser Thr Ala Thr Asp Leu Thr Ile Gln Ile
1               5                   10                  15
Asn Trp Leu Thr Gly Cys Ile Arg Arg His Val Lys Leu Ala Ala Leu
            20                  25                  30
Arg Leu Leu Arg Gly Ala Thr His Lys Asn Gly Phe Lys Ala Ala Val
        35                  40                  45
Glu Asp Asn Thr Asp Ile Tyr Ile Val Thr Arg Gly Ile
    50                  55                  60

<210> 34566
<211> 91
<212> PRT
```

<213> A.fumigatus

<400> 34566
Tyr Lys Val Met Ala Phe Asp Gln Glu Gly Thr Ala Gln Leu Thr Glu
1 5 10 15
Thr Thr Thr Ser Tyr Glu Pro Pro Pro Ile Tyr Asp Thr Ile Ala Asp
20 25 30
Pro Ile Ile Leu Arg Thr Leu Leu Val Glu Asp Ile Tyr Leu Pro Gly
35 40 45
Gly Gln Phe Ala Ile His Leu Ser Ile Ala His Ser Ala Leu Pro Lys
50 55 60
Gly Ala Thr Thr Asn Pro Thr Trp Pro Leu Ala Phe Pro Pro Ser Ala
65 70 75 80
Glu Tyr Asn Pro Phe Leu Asn Gly Gly Arg Phe
85 90

<210> 34567
<211> 415
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (415)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34567
His Arg Pro Ser Thr Phe Ile Thr Leu Phe Ala Glu Asn Lys Glu Lys
1 5 10 15
Lys Arg Lys Gly Leu Thr Ala Gln Glu Met Glu Pro Thr Pro Phe Gln
20 25 30
Ser Ser Asp His Gly Phe Gln Ser Thr Gly Pro Asn Val Asp Arg Lys
35 40 45
Gly Ser Val Lys Arg Ala Arg Gln Met Leu Glu Ala Gly Arg Arg Pro
50 55 60
Asp Ile Ala Met Ala Pro Ser Gln Ser Ile His Pro Gly Pro Asn Pro
65 70 75 80
Lys Val Lys Ala Asp Gln Ser His Met Thr Gln Trp Pro Leu Pro Thr
85 90 95
Asp Gly Val Leu Gln Thr Ser Val Ser Ser Thr Gln Ala Arg Gln Phe
100 105 110
Ile Pro Asn Gly Leu Pro Pro Glu Arg Pro Pro Arg Pro Asp Ala Pro
115 120 125
Ser Pro Ser Val Tyr Ser Glu Arg Ser Met Ser Asp Ile Ala Pro Ser
130 135 140
Pro Leu His Leu Ala Arg Pro Ile Pro Ser Phe Ser His Pro Leu Pro
145 150 155 160
Asn Pro Pro Pro Pro Arg Pro Pro Phe Lys Gly His Leu Pro Pro Tyr
165 170 175
Gly Pro Asp Arg Ala Ala Tyr Ala Ala Pro Arg Val Pro Met Thr Thr
180 185 190
Asp Glu Ser Phe Arg Gln Ser Thr Ala Ser Ser Phe Met Ser Ile Pro
195 200 205
Ser Ile Pro Asp Phe Ala Leu Pro Ala Gln Pro Ala Thr Ala Glu Thr
210 215 220
Asn Pro Ala Gln Lys Glu His Gln Arg Arg Leu Ala Pro Ser Asn Ala

```
225                 230                 235                 240
Ala Arg Phe Ser Thr Lys Arg Arg Ser Ser Val Ser Pro Ile Pro Glu
                245                 250                 255
Glu Leu Ser Asp Ser Pro Thr Ile Leu Gln Gly Ser Tyr Ala Ser Ser
            260                 265                 270
Arg Val Ile Pro Ser Ser Trp Gly Ser Ala Pro Ala Gly Ser Glu Phe
        275                 280                 285
Leu Gly Ala Tyr Gln Asp Val Glu Ser Gly Asp Asp Gln Asp Ser Pro
    290                 295                 300
Pro Thr Val His Glu Gly Asp Ser Asn Leu Val Arg Gln Ala Ser Leu
305                 310                 315                 320
Gly Lys Arg Gly Lys Pro Ser Leu Arg Thr Ile Gln Lys Pro Ser Ser
                325                 330                 335
Pro Ser Pro Val Ser Met Val Glu Glu Arg Ser Val Ser His Ile Val
            340                 345                 350
His Ala Ala Thr Ala Ser Glu Arg Ile Ala Ala Gly Ser Lys Asn Glu
        355                 360                 365
Arg His Ser Val Ser Thr Ile Ser Thr Asp Ser Ser Val Leu Asp Pro
    370                 375                 380
Glu Lys Arg Arg Ser Trp Trp Thr Ser Thr Ala Asn Ile Leu His Ser
385                 390                 395                 400
Ser Thr Arg Met Met Ile Trp Asn Leu Arg Arg Arg Ser Gly Xaa
                405                 410                 415
```

<210> 34568
<211> 85
<212> PRT
<213> A.fumigatus

<400> 34568

```
Asn Gln Ala Arg Met Trp Met Ser Lys Val Asp Pro Tyr Leu Glu Ala
1               5                   10                  15
Ser Ala Gln Pro Leu Met Gly Val Leu Ile Ser Arg Thr Val Leu Leu
            20                  25                  30
Gln Ala Met Lys Glu Glu Pro Ala Pro Asp Ala Lys Cys Lys Asp Lys
        35                  40                  45
Phe Leu Val Gln Thr Val Ala Val Thr Gly Asp Met Glu Phe Ser Asn
    50                  55                  60
Val Ser Ser Ile Val Arg Leu Ser Leu Ala Ala Ser Cys Leu Pro Tyr
65                  70                  75                  80
Phe Leu Thr Ala Ile
                85
```

<210> 34569
<211> 146
<212> PRT
<213> A.fumigatus

<400> 34569

```
Ser Ala Pro Glu Glu Glu Pro Pro Ser Tyr Thr Ser Pro Gly Ala Asn
1               5                   10                  15
Tyr Gln Thr Pro Ala Val Gly Ala Ser Thr Lys Phe Ser Asn Asp Thr
            20                  25                  30
Ser Pro Ile Pro Pro Pro Asp Phe Ser Glu Lys Pro Lys Arg Asp Ala
        35                  40                  45
Phe Ala Gln Gln Ser Asn Glu Thr Ser Ala Thr Ser Val Lys Ser Asn
```

```
    50                  55                  60
Thr Ser Gly Ile Pro Ala Ser Ala Asp Glu Leu Lys Ala Gln Leu Ser
65                  70                  75                  80
Glu Ala Asn Ala Gln Ile Gln Lys Leu Lys Glu Arg Leu Ala Asp Gln
                85                  90                  95
Gly Leu Arg Gln Arg Lys Ile Gly Gly Asp Asn Glu Lys Ser Thr Pro
            100                 105                 110
Thr Met Gln Gln Gln Gln Val Gln Pro Asp Ala Ala Gly Val Pro Leu
        115                 120                 125
Gln Ile Val Ala Gly Leu Cys Leu Leu Ser Phe Leu Ile Ala Tyr Phe
    130                 135                 140
Phe Phe
145
```

<210> 34570
<211> 66
<212> PRT
<213> A.fumigatus

<400> 34570

```
Lys Tyr Asp Phe Leu Val Thr Leu Met Ile Arg Ile Gln Gln Met Gln
1               5                   10                  15
Gln Phe Cys Leu Tyr Leu Ala Glu Glu His Gly Asp Phe Ser Ile Lys
            20                  25                  30
Tyr His Ala Gln Leu Ser Ile Val Ser Tyr Glu Phe Pro Ser Lys Leu
        35                  40                  45
Phe Arg Leu Cys Arg Met Thr Ile Phe Gln Ser Ser Ser Gln Ser Ser
    50                  55                  60
Cys Tyr
65
```

<210> 34571
<211> 126
<212> PRT
<213> A.fumigatus

<400> 34571

```
Arg Asp Trp Thr Ser Arg Ser Arg Ser Val Ser Leu Pro Thr Ala Ser
1               5                   10                  15
Val Ala Lys Trp Gly Ser Val Gly Ser Gly Val Ser Thr Thr Thr Thr
            20                  25                  30
Thr Ala Thr Ala Ala Thr Thr Ala Ala Thr Pro Ala Ala Ile Thr Ala
        35                  40                  45
Val Thr Thr Thr Ala Ala Ala Val Ala Ser His Leu Ser Glu Thr Gly
    50                  55                  60
Val Asn Leu Leu Leu Gly Leu Ser Glu Asp Ser Asn Gln Val Thr Ser
65                  70                  75                  80
Leu Leu Gly Val Cys Ile Glu Glu Ser Leu Val Met Thr Ile Thr Asp
                85                  90                  95
Arg Gly Ser Arg Lys Arg Asn Leu Leu Ser Val Val Lys Lys Val Met
            100                 105                 110
Ala Val Pro Phe Ala Pro Ala Arg Pro Val Arg Pro Ile Arg
        115                 120                 125
```

<210> 34572
<211> 432

<212> PRT
<213> A.fumigatus

<400> 34572

```
Val Gln Gly Pro His Gly Met Ser Thr Ile Phe Arg Arg Pro Asp Lys
1               5                  10                  15
Ala Trp Thr Ser His Val Ile Pro Thr Trp Phe Leu Leu Glu Glu Ser
            20                  25                  30
Gln Ala Pro Cys His Cys His Thr Thr Ser Ile Trp Val Arg Glu Leu
        35                  40                  45
Arg Lys Glu Asn Arg Glu Gly Arg Gly Glu Ser Cys Asp Ser Ile Ile
    50                  55                  60
Pro Ile Pro Arg Glu Ala Thr Ser Val Ala Thr Met Ile Gly Leu Leu
65                  70                  75                  80
Pro Val Leu Asn Ser Phe Lys Thr Gln Ser Leu Ser Cys Cys Cys Leu
                85                  90                  95
Ser Pro Trp Ile Ala Gly Ile Val Val Ser Lys Arg His Trp Gly Asn
            100                 105                 110
Asp Lys Met Ile Arg Arg Leu Thr Lys Cys Gly Pro Ser Val Leu Ala
        115                 120                 125
Glu Glu Ser Ser Asn Leu Ile Ser Asn Ala Leu Ser Ala Gly Glu Asn
    130                 135                 140
Gln Thr Leu Val Ala Thr Val Phe His Asp Phe Leu Glu Val Leu Asn
145                 150                 155                 160
His Leu Val Ala Leu Phe Glu Val Gly Asn Asp Leu Asp Asn Leu Ser
                165                 170                 175
Asn Ser Val Val Ser Arg Gln Val His Gly Thr Asp Val His Leu Asp
            180                 185                 190
Val Val Val Gln Glu Val Arg Ser Glu Leu Thr Asp Phe Leu Gly Pro
        195                 200                 205
Ser Gly Gly Pro His Ala Gly Leu Ser Val Arg Thr Asn Leu Arg Asn
    210                 215                 220
Asn Leu Ala Asn Leu Arg Phe Glu Thr His Val Gln His Ala Val Ser
225                 230                 235                 240
Phe Val Lys Asn Glu Val Arg Asp Thr Ala Glu Val Gly Pro Ala Ser
                245                 250                 255
Phe Gln His Val Asn Gln Thr Thr Arg Gly Cys Asp Ala Asp Phe Asp
            260                 265                 270
Thr Ala Ala Gln Ile Thr Asn Leu Arg Ala Leu Gly Asn Thr Thr Ile
        275                 280                 285
Asp Ala Ser Val Ala Asn Pro Gly Arg Leu Ser Glu Leu Ala Asp Phe
    290                 295                 300
Gly Leu Asn Leu Asn Ser Lys Leu Thr Gly Arg Ser Lys Asp Glu Asp
305                 310                 315                 320
Asn Arg Thr Ile Ala Gly Ser Lys Glu Arg Leu Ser Val Asp Val Tyr
                325                 330                 335
Asn Gly Arg Glu Thr Val Gly Lys Cys Leu Ser Gly Thr Ser Phe Ser
            340                 345                 350
Asn Thr Asp Asp Ile Pro Thr Arg Lys Ser His Trp Pro Thr Leu Arg
        355                 360                 365
Leu Asn Gly Ser Arg Thr Leu Glu Ala Leu Ser Leu Asp Leu Thr Gln
    370                 375                 380
Asp Val Leu Gly Glu Pro Ser Leu Val Glu Ile Leu Asp Gly Thr Arg
385                 390                 395                 400
Asn Ile Ala Ser Leu His Ser His Leu Val Leu Leu Ala Glu Leu Leu
                405                 410                 415
```

```
Asn Leu Ala Leu Arg Ala Ser Gly Asn Ile Gly Met Leu Phe Val Glu
            420                 425                 430

<210> 34573
<211> 105
<212> PRT
<213> A.fumigatus

<400> 34573
Phe Ser Pro Ala Leu Ser Ala Leu Leu Met Arg Leu Leu Asp Ser Ser
1               5                  10                  15
Ala Arg Thr Asp Gly Pro His Phe Val Ser Leu Arg Ile Ile Leu Ser
            20                  25                  30
Phe Pro Gln Cys Leu Leu Leu Thr Thr Ile Pro Ala Ile His Gly Asp
        35                  40                  45
Lys Gln Gln Gln Glu Arg Asp Trp Val Leu Asn Glu Phe Lys Thr Gly
    50                  55                  60
Lys Ser Pro Ile Met Val Ala Thr Asp Val Ala Ser Arg Gly Ile Gly
65                  70                  75                  80
Met Ile Glu Ser Gln Leu Ser Pro Leu Pro Ser Leu Phe Ser Phe Leu
                85                  90                  95
Ser Ser Leu Thr His Ile Asp Val Val
            100                 105

<210> 34574
<211> 76
<212> PRT
<213> A.fumigatus

<400> 34574
Leu Phe Asn Ala Asp Ser Lys Gln Ala Arg Asp Leu Val Thr Ile Leu
1               5                  10                  15
Thr Glu Ala Lys Gln Gln Ile Asp Pro Arg Leu Ala Glu Met Ala Arg
            20                  25                  30
Tyr Ser Gly Gly Gly Gly Gly His Gly Gly Tyr Gly Arg Trp Gly Gly
        35                  40                  45
Arg Gly Gly Arg Gly Gly Gly Arg Gly Arg Gly Gly Thr Tyr Thr Ala
    50                  55                  60
Ser Asn Ala Ala Pro Leu Gly Asn Ala Arg Arg Trp
65                  70                  75

<210> 34575
<211> 77
<212> PRT
<213> A.fumigatus

<400> 34575
Leu Thr Asn Thr Tyr Ser Ser Arg Gly Gly His Asp Thr Gly Tyr Gln
1               5                  10                  15
Asn Gly Asn Gly Tyr Ser Gly Gly Tyr Ser Gly Gly Gly Gly Tyr Gly
            20                  25                  30
Gly Gly Tyr Gly Gly Gly Tyr Gly Arg Gly Gly Gly Ala Ala Gly Gly
        35                  40                  45
Asp Arg Met Ser Asn Leu Gly Ala Gly Leu Lys Lys Gln Asp Trp Gly
    50                  55                  60
Lys Leu Thr Thr Leu Asp Ser Arg Ser Asp Phe Gly Cys
```

65 70 75

<210> 34576
<211> 258
<212> PRT
<213> A.fumigatus

<400> 34576
Lys Trp Cys Ser Tyr His Glu Asp Leu Gly Leu Thr Val Gln Cys Ser
1 5 10 15
Arg Leu Ile Arg Thr Phe Cys Ser Glu Phe Ser Ile Ser Val Leu Glu
20 25 30
Pro Arg Trp Ser Arg Asp Gly Leu Ser Leu Thr Ser Thr Leu Leu Arg
35 40 45
Leu His Ser Lys Val Thr Leu Gly Pro Arg Ser Cys Pro Arg Arg Trp
50 55 60
Thr Leu Pro Gln Thr Asp Phe Asp Tyr Arg Val Arg Glu Arg Val Met
65 70 75 80
His Gln Val Ser His Asp Ser Lys Gly Arg Leu Gly Leu Val Ala Ile
85 90 95
Phe Thr Asn Ala Leu Phe Ala Asn Leu Asn Leu Phe Lys Asp Val Arg
100 105 110
Asp Ile Thr His Val Leu Asn Tyr Asp Tyr Pro Asn Asn Ser Glu Asp
115 120 125
Tyr Ile His Arg Ile Gly Arg Thr Gly Arg Ala Gly Ala Lys Gly Thr
130 135 140
Ala Ile Thr Phe Phe Thr Thr Glu Ser Lys Phe Leu Leu Arg Leu Pro
145 150 155 160
Leu Ser Val Ile Val Met Thr Asn Asp Ser Ser Met Gln Thr Pro Ser
165 170 175
Arg Leu Val Thr Trp Leu Leu Ser Ser Leu Arg Pro Ser Ser Arg Leu
180 185 190
Thr Pro Val Ser Leu Arg Trp Leu Ala Thr Ala Ala Ala Val Val Val
195 200 205
Thr Ala Val Met Ala Ala Gly Val Ala Ala Val Val Ala Ala Val Ala
210 215 220
Val Val Val Val Val Leu Thr Pro Leu Pro Thr Leu Pro His Leu Ala
225 230 235 240
Thr Leu Ala Val Gly Lys Leu Thr Asp Leu Asp Leu Asp Val Gln Ser
245 250 255
Arg His

<210> 34577
<211> 387
<212> PRT
<213> A.fumigatus

<400> 34577
Leu Pro Trp Ile Pro Val Leu Thr Ser Gly Ala Asp Leu Leu Ser Leu
1 5 10 15
Asp Leu Asp Ser Leu Pro Lys Phe Glu Lys Ser Phe Tyr Lys Glu His
20 25 30
Pro Asp Val Ala Ala Arg Ser Glu Arg Glu Val Glu Glu Phe Arg Lys
35 40 45
Lys His Glu Met Thr Val Gln Gly Arg Asn Val Pro Arg Pro Val Glu

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```
     50                  55                  60
Asn Phe Asp Glu Ala Gly Phe Pro Gln Tyr Val Leu Ser Glu Val Lys
65                  70                  75                  80
Ala Gln Gly Phe Glu Arg Pro Thr Ala Ile Gln Ser Gln Gly Trp Pro
                85                  90                  95
Met Ala Leu Ser Gly Arg Asp Val Val Gly Ile Ala Glu Thr Gly Ser
            100                 105                 110
Gly Lys Thr Leu Thr Tyr Cys Leu Pro Ala Ile Val His Ile Asn Ala
        115                 120                 125
Gln Pro Leu Leu Ala Pro Gly Asp Gly Pro Ile Val Leu Ile Leu Ala
    130                 135                 140
Pro Thr Arg Glu Leu Ala Val Gln Ile Gln Ala Glu Ile Ser Lys Phe
145                 150                 155                 160
Gly Lys Ser Ser Arg Ile Arg Asn Thr Cys Val Tyr Gly Gly Val Pro
                165                 170                 175
Lys Gly Pro Gln Ile Arg Asp Leu Ser Arg Gly Val Glu Val Cys Ile
            180                 185                 190
Ala Thr Pro Gly Arg Leu Ile Asp Met Leu Glu Ala Gly Arg Thr Asn
        195                 200                 205
Leu Arg Arg Val Thr Tyr Leu Val Leu Asp Glu Ala Asp Arg Met Leu
    210                 215                 220
Asp Met Gly Phe Glu Pro Gln Ile Arg Lys Ile Val Ser Gln Ile Arg
225                 230                 235                 240
Pro Asp Arg Gln Thr Cys Met Trp Ser Ala Thr Trp Pro Lys Glu Val
                245                 250                 255
Arg Gln Leu Ala Thr Asp Phe Leu Asn Asp Tyr Ile Gln Val Asn Ile
            260                 265                 270
Gly Ser Met Asp Leu Ser Ala Asn His Arg Ile Thr Gln Ile Val Glu
        275                 280                 285
Val Val Ser Asp Phe Glu Lys Arg Asp Lys Met Ile Lys His Leu Glu
    290                 295                 300
Lys Ile Met Glu Asn Arg Ser Asn Lys Cys Leu Ile Phe Thr Gly Thr
305                 310                 315                 320
Lys Arg Ile Ala Asp Glu Ile Thr Arg Phe Leu Arg Gln Asp Gly Trp
                325                 330                 335
Pro Ala Leu Cys Lys Ser Ser Asp His Phe Ile Ile Pro Pro Met Pro
            340                 345                 350
Leu Ala Asn Asn Asn Pro Ser Tyr Pro Arg Arg Gln Ala Thr Thr Gly
        355                 360                 365
Lys Arg Leu Gly Leu Glu Arg Val Gln Asp Arg Gln Glu Pro Asn His
    370                 375                 380
Gly Gly His
385
```

<210> 34578
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34578

```
Tyr Tyr Gly Met Ser Gly Leu Phe Gln Asn Tyr Val Asn Asn Leu Leu
1               5                   10                  15
Asp Gly Ser Lys Gly Arg Gly Ala Phe Gly Met Gly His Gln Gly Ala
            20                  25                  30
Thr Gly Leu Thr Thr Phe Phe Gln Phe Trp Cys Tyr Gly Glu Ile Cys
        35                  40                  45
```

```
Pro Pro Arg Thr Ser Gln Thr Thr Thr Asn Val Leu Thr
    50                  55                  60

<210> 34579
<211> 126
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (120),(124)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34579
Leu Asp Val Val Thr Pro Ile Leu Gly Ala Ile Ile Ala Asp Gln Tyr
1               5                   10                  15
Leu Gly Lys Tyr Lys Thr Ile Val Leu Phe Cys Gly Val Tyr Leu Val
            20                  25                  30
Gly Leu Leu Ile Leu Val Cys Thr Ser Ile Pro Thr Ala Leu Glu His
        35                  40                  45
Gly Ala Gly Leu Gly Gly Phe Ile Val Ala Ile Leu Val Ile Gly Leu
    50                  55                  60
Gly Thr Gly Gly Ile Lys Ser Asn Val Ala Pro Leu Ile Ala Asp Gln
65                  70                  75                  80
Tyr Arg Arg Lys Lys Met Ala Val Ser Thr Thr Lys Lys Gly Glu Arg
                85                  90                  95
Val Ile Ile Asp Pro Ala Leu Thr Ile Gln Arg Ile Tyr Arg Ser Ser
            100                 105                 110
Thr Ala His Gln Pro Gly Leu Xaa Val Ser Ala Xaa Tyr Ser
        115                 120                 125

<210> 34580
<211> 338
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34580
Ser Leu Leu Xaa Thr Leu Asn Met Glu Arg Asp Ile Gly Phe Trp Ser
1               5                   10                  15
Gly Tyr Leu Leu Cys Leu Cys Met Phe Ala Cys Gly Thr Leu Val Leu
            20                  25                  30
Ile Val Gly Arg Lys Phe Tyr Val Val Arg Pro Pro Gln Gly Ser Ile
        35                  40                  45
Ile Thr Asp Ala Phe Lys Ala Leu Gly Ile Met Ile Ile Asn Arg Asn
    50                  55                  60
Met Asp Ala Pro Lys Pro Ser Trp Gln Ala Ala Asn Gly Gly Ser Arg
65                  70                  75                  80
Arg Asn Leu Pro Trp Asp Asp His Phe Ile Asp Glu Leu Lys Arg Ala
                85                  90                  95
Leu Val Ala Cys Arg Val Phe Cys Phe Phe Pro Ile Tyr Trp Val Val
            100                 105                 110
```

```
Tyr Gly Gln Phe Ser Gly Asn Phe Val Thr Gln Ala Ala Gln Met Gln
        115                 120                 125
Gly His Gly Ile Pro Asn Asp Leu Met Gln Asn Phe Asp Pro Ile Ser
    130                 135                 140
Ile Ile Val Phe Ile Pro Ile Leu Glu Thr Leu Val Tyr Pro Leu Leu
145                 150                 155                 160
Arg Arg Phe His Ile Arg Phe Arg Pro Ile Thr Arg Ile Ser Leu Gly
                165                 170                 175
Phe Val Val Ala Ser Leu Ala Met Met Tyr Ala Ala Ile Val Gln His
            180                 185                 190
Leu Ile Tyr Ser Ala Gly Pro Cys Tyr Glu His Pro Leu Cys Asp Ala
        195                 200                 205
Ser Lys Ile Asp Gly Thr Ala Gln Gly Asn Arg Val His Ile Ala Ile
    210                 215                 220
Gln Thr Pro Ala Tyr Met Phe Ile Gly Ile Ser Glu Ile Phe Ala Ser
225                 230                 235                 240
Val Ser Gly Leu Glu Tyr Ala Tyr Thr Lys Ala Pro Pro Ser Met Lys
                245                 250                 255
Ser Phe Val Gln Ser Met Tyr Leu Leu Thr Asn Ala Phe Gly Ser Ala
            260                 265                 270
Ile Ala Glu Ala Leu Thr Pro Ala Ala Phe Asp Pro Ala Ile Met Trp
        275                 280                 285
Met Phe Val Gly Leu Ala Cys Ala Ser Phe Leu Val Gly Val Ile Phe
    290                 295                 300
Trp Leu Val Phe His His Leu Asn Ala Gln Glu Asp Asp Met Asn Lys
305                 310                 315                 320
Leu Asp Ala Asp Asp Pro Asp Thr Pro Pro Pro Arg Ala Arg Glu Glu
                325                 330                 335
Lys Asn
```

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<210> 34581
<211> 343
<212> PRT
<213> A.fumigatus

<400> 34581

```
Ser Phe Gln Pro Arg Gly Glu Asp Arg Gly Leu Glu Ala Glu Arg Leu
1               5                   10                  15
Gln Gln Gln Lys Leu Val Glu Ser Leu Lys Gln Lys Ile Glu Glu His
            20                  25                  30
Glu Ala Thr Ala Ala Ala His Leu Gln Lys Ile Ala Ala Leu Glu Gln
        35                  40                  45
Ser His Lys Thr Ala Gln Glu Gln Leu Ser Asp Leu Leu Ala Thr Lys
    50                  55                  60
Asp Arg Ala Ser Gly Glu Ala Glu Gly Phe Gln Ser Arg Val Ser Glu
65                  70                  75                  80
Leu Glu Lys Glu Ile Glu Ile His Lys Ser Ala Ala Glu Ser His Lys
                85                  90                  95
Lys Asp Leu Glu Ser Leu Gln Glu Leu His Lys Thr Glu Leu Ala Glu
            100                 105                 110
Leu Glu Glu Arg Ala Lys Ala Val Ala Gln Ala Glu Tyr Asp Ser Arg
        115                 120                 125
Ile Ala Glu Lys Asn Ala Glu His Glu Glu Ala Met Lys Ser Leu Thr
    130                 135                 140
Ser Glu Ile Glu Thr Ser Arg Asn Glu Leu Val Lys Leu Leu Lys Met
```

145 150 155 160
Val Ser Glu Leu Leu Asn Ser Asp Val Thr Ala Asp Asn Leu Ala Asp
165 170 175
Gln Ile Gln Asp Ile Leu Thr Gln Lys Gln His Phe Ser Asp Lys Tyr
180 185 190
Ala Glu Leu Ile Asp Ala Asn Glu Asp Leu Arg Lys Gln Leu Glu Ala
195 200 205
Lys Lys Gly Asp Ala Asn Lys Leu Glu Asp Leu Thr Gln Arg Glu Ala
210 215 220
Ala Lys Asp Ala Lys Val Asn Glu Leu Ala Ile Leu Val Ala Thr Leu
225 230 235 240
Glu Asp Thr Leu Gln Arg Lys Glu Glu Gln Val Lys Lys Lys Asp Ala
245 250 255
Leu Ile Glu Glu Ile Thr Ala Glu Lys Asp Lys Ser Leu Arg Leu Val
260 265 270
Glu Glu Leu Glu Glu Gln Ile Thr Asn Ser Phe Asp Gln His His Asn
275 280 285
Arg Leu Ser Val Ile Gln His Glu Arg Asp Gln Ala Leu Glu Glu Ala
290 295 300
Lys Ala Lys Ile Ala Thr Tyr Glu Lys Glu Ile Glu Thr Tyr Arg Met
305 310 315 320
Arg Ile Glu Gln Leu Glu Val Ser Thr Ala Val Leu His Thr Ala Ile
325 330 335
Arg Ile Pro Thr Asn Gly Leu
340

<210> 34582
<211> 182
<212> PRT
<213> A.fumigatus

<400> 34582
Leu Gln Leu Lys Asn Gly Ala Gly Gln Asp Ser Ser His Asp Arg Thr
1 5 10 15
Ser Ser Leu Thr Ser Asn Leu Arg Lys Ser Thr Ser Ala Thr Ser Leu
20 25 30
Pro Ser Pro Pro Pro Ala Ile Pro Leu Pro Pro Leu Pro Thr Ile Gln
35 40 45
Ser Ala Thr Asn Gly Ser Val Ser Pro Pro Asn Ser Arg His Thr Ser
50 55 60
Lys Glu Leu Val Ser Val Gln Ile Val Glu Asp Gln Glu Ala Arg Ile
65 70 75 80
Arg Thr Ile Glu Lys His Leu Asn Ala Glu Lys Gln Leu Thr Ala Thr
85 90 95
Leu Glu Glu Ala Leu Gly Asp Leu Glu Ala Gln Ser Asn Lys Val Lys
100 105 110
Ala Asp Cys Glu Ala Trp Lys Lys Lys Ala Trp Gln Leu Glu Glu Glu
115 120 125
Leu Thr Ala Leu Arg Lys Glu Arg Asn Ser Gln Arg Leu Ser Leu Gln
130 135 140
Ala Val Glu Glu Glu Arg Asn Ala Arg Arg Glu Ala Glu Ala Ala Arg
145 150 155 160
Ala Gln Leu Glu Glu Arg Met Asn Ala Leu Asn Lys Lys Lys Lys Lys
165 170 175
Ser Thr Leu Asn Cys Phe
180

<210> 34583
<211> 229
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (98)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34583
Ser Gln Phe Gly Pro Ala Pro Phe Asp Met Pro Ala Gly Glu Ile Met
1 5 10 15
Arg Ala Thr Tyr Arg Pro Asp Pro Thr Ala Thr Arg Glu Thr Leu Asp
20 25 30
Phe Phe Ser Thr Ile Pro Lys Cys Ala Glu Ile Leu Ser Gln Pro Asp
35 40 45
Leu Arg Val Asn His Pro Arg Asn Pro Asp Ala Phe Phe His Ser Thr
50 55 60
Leu Arg Ser Asn Asn Gly Ile Leu Lys Ser Ile Phe Ile Tyr Gln Pro
65 70 75 80
Ala His Ser His Thr Pro Ala Ser Asp Val Ser Pro Ser Glu Ala Asn
85 90 95
Ala Xaa Ala Ile Pro Arg Glu Arg Gly Gln Glu Gly Gly Arg Glu Arg
100 105 110
Gly Tyr Leu Leu Leu His Leu Gly Ala Gly Val Ser Gly Gln Pro Asp
115 120 125
Ile Ala His Gly Gly Phe Leu Ala Thr Val Leu Asp Gln Val Thr Gly
130 135 140
Thr Ala Ile Arg Ala Ser Gly Leu Asp Arg Gly Arg Gly Ala Val Thr
145 150 155 160
Val Tyr Leu Asn Val Ile Tyr Lys Lys Pro Val Arg Val Pro Gly Val
165 170 175
Val Val Ala Lys Ala Glu Val Lys Lys Val Gln Gly Arg Lys Ile Tyr
180 185 190
Val Val Gly Glu Ile Ser Val Ala Glu Ala Asp Gly Gly Gly Glu Glu
195 200 205
Gln Gly Val Cys Val Val Cys Glu Gly Met Phe Leu Val Lys Arg Asp
210 215 220
Ala Ala Gly Arg Ile
225

<210> 34584
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34584
Phe Ser Ala Ala Gly Asp Ser Ser Ser Asn Ile Lys Ala Gln Pro Gln
1 5 10 15
Leu Leu Lys Tyr Lys Trp Gly Ala Lys Ser Ile Arg Thr Thr Pro Thr
20 25 30
Leu Pro Pro Lys Asp Leu Val Cys Trp Gln Lys Ala Thr Lys Arg Val
35 40 45
His Leu His His Phe Pro Arg Leu Ser Thr Thr Lys Lys

```
    50                  55                  60

<210> 34585
<211> 60
<212> PRT
<213> A.fumigatus

<400> 34585
Lys Val Ile Phe Pro Ser Tyr Ile Thr Arg Ser Ser Arg Asn Lys Glu
1               5                  10                  15
Ile Phe Lys Leu Val Lys Ala Tyr Leu Ile Ser Ser Pro Ser Ile Arg
            20                  25                  30
Thr Asn Phe Asn Pro Thr Ile Val Trp Glu His Asp Ile Leu Ile Leu
        35                  40                  45
Thr Leu Tyr Ile Asp Phe Ser Phe Glu Asp Asn Ile
    50                  55                  60

<210> 34586
<211> 1066
<212> PRT
<213> A.fumigatus

<400> 34586
Pro Arg Gly His Asn Pro Phe Pro Lys Ser Thr Val Arg Ala Leu Thr
1               5                  10                  15
Ser Thr Asp Ala Val Pro Lys Asn Glu Lys Ala Ala His Asp Ile Leu
            20                  25                  30
Trp Lys Ser Ile Ser Gln Val Ser Pro Ala Glu Arg Ala Leu Gly Ile
        35                  40                  45
Arg Ala Ala Ile Ala Ala Gln Arg Leu Gly Glu Trp Tyr Arg Glu Val
    50                  55                  60
Gln Ala Trp Asp Trp Pro Lys Arg Ala Asp Ala Glu Leu Gly Lys Gly
65                  70                  75                  80
Phe Met Pro Pro Ser Ser Ser Asn Val Asn Ser Glu Glu Gln Gly Tyr
                85                  90                  95
Tyr Gly Ser Leu Pro Ser Val Val Val Lys Gln His Glu Asp Arg Ile
            100                 105                 110
Glu Glu Ile Arg Asp Gly Met Glu Thr Leu Asp Val Asp Glu Leu Lys
        115                 120                 125
Glu His Val Leu Asn Ala His Ile Pro Ala Arg Ser Arg Pro Ser Ser
    130                 135                 140
Ser Asn Ser Thr Val Ser Val Pro Pro Pro Leu Thr Tyr Val Gln Leu
145                 150                 155                 160
Ser Asp Phe Thr Ala Val Ile Thr Ala Thr Ile Leu Arg Ala Leu Pro
                165                 170                 175
Leu Leu Ser Arg Leu Asn Asn Leu Leu Thr Thr Trp Asp Val Arg Leu
            180                 185                 190
Leu Val Leu Arg Gln Ile Pro Gly Leu Leu Arg Ala Leu His Phe Ala
        195                 200                 205
Gln Ser Glu Val Asp Ser Ala Met Asp Leu Leu Lys Ala Thr Ala Pro
    210                 215                 220
Pro Ser Glu Asn Asp Pro Leu Tyr Ser Arg Glu Asn Tyr His Ala Lys
225                 230                 235                 240
Arg Thr Ser Leu Glu Ala Ile Val Leu Ser Ala Gly Arg Arg Met Asp
                245                 250                 255
Ile Val Leu Asp Ala Leu Glu Gly Arg Glu Asp Ser Leu Pro Glu Ser
```

```
            260                 265                 270
Trp Ile Asp Lys Leu Glu Ala Val Glu Ser Asp Phe Ser Thr Trp Val
        275                 280                 285
Met Glu Ala Glu Lys Arg Thr Val Glu Asn Glu Trp Leu Arg Met Arg
    290                 295                 300
Ser Thr Thr Ser Glu Ser Lys Glu Ala Gln Arg Val Gln Asn Lys Gln
305                 310                 315                 320
Asn Arg Leu Ser Asn Ile Pro Glu Glu Glu Asp Ser Lys Phe Pro Val
                325                 330                 335
Ala Asp Ser Ser Asp Pro Ser Pro Gln Ser Ser Cys Ser Leu Pro Met
            340                 345                 350
Glu Thr Ile Asn Glu Gly Asp Gly Asp Gln Leu Leu Val Glu Ala Ile
        355                 360                 365
Ser Asp Ala Val Thr His Asn Gln Asn Ser Ala Gln Gly Leu Asn Ala
    370                 375                 380
Leu Asp Pro Ser Gln Ser His Leu Asp Ser Ser Glu Phe Val Ser Leu
385                 390                 395                 400
Ser Gly Pro Asp Thr Lys Ile Ser Asn Glu Pro Ser Glu Gln Ser Thr
                405                 410                 415
Ile Glu Ile Ala Ile Asp Ala Val Leu Pro Val Asp Val Asp Met Pro
            420                 425                 430
Arg Pro Glu Ser Ser Glu Ile Val Lys Ser Phe Ser Glu Asp Ser Ser
        435                 440                 445
Asp Asp Ser Ile Gly Gly Ser Ser Asp Lys Pro Ser Asn Asp Arg Pro
    450                 455                 460
Ser Gln Ser Thr Pro Ser Val Cys Gln Ile Arg Pro Ala Val Ser Glu
465                 470                 475                 480
Ala Ala Ser Glu Glu Val Ser Leu Glu Glu Leu Val Ala Ala Ala Thr
                485                 490                 495
Gln Arg His Gly Asn Thr Thr Val Leu Gln Ile Pro Glu Gln Gly Arg
            500                 505                 510
Ser Thr Ser Ile Glu Gln Ser Ser Gly Glu Met Thr Asp Asp Thr Ser
        515                 520                 525
Ser Ser Lys Lys His Gln Ala Pro Arg Asp Leu Gln Cys Ser Leu Pro
    530                 535                 540
Ile Asp His Phe Val Ala Asn Arg Pro Gly Val Glu Cys Leu Ser Val
545                 550                 555                 560
Ser Ser Glu Leu Val Pro Glu Asn Thr Tyr Leu Val Ser His Val Glu
                565                 570                 575
Glu Lys Leu Cys Ser Ser Gln Leu Ser Ala Ser Ala Gln Glu Val Ser
            580                 585                 590
Ser Ile Ala Thr Arg Leu Ala Asp Ser Ser Tyr Lys Glu His Lys Val
        595                 600                 605
Pro Leu Lys Glu Pro Ser Phe Ala Thr Thr Lys Asn Asp Ser Phe Arg
    610                 615                 620
Ile Ala Glu Ser Glu Thr Pro Ser Leu Arg Thr Thr Gly Thr Ser Met
625                 630                 635                 640
Glu Gln Thr Asp Ala Val Cys Gly Ile Asn Glu Asn Gln Thr Ser Ser
                645                 650                 655
Thr Thr Ala Gly Asp Asn Ser Gln Glu Glu Arg Lys Gln Phe Ser Asp
            660                 665                 670
Gly Leu Ser Ala Val Ala Thr Pro Ser Asp Ser Gly Arg Gln Leu Ser
        675                 680                 685
Val Glu Pro Leu Glu Asp Lys Val Ala Pro Thr Val Ser Ser Asn Leu
    690                 695                 700
Ala Glu Val Ala Phe Thr Glu Glu Thr Ser Ala Ala Glu Leu Leu Asp
```

```
705                 710                 715                 720
Arg Gln Gly Leu Asn Val Asp Ile Gly Arg Ala Ile Asp Pro Phe Asp
                725                 730                 735
Ser Glu Lys Ser Ser Pro Ile Glu Asn Glu Ala Ala Thr Leu Ala Ser
            740                 745                 750
Val Ile Ala Glu Ala Ala Thr Thr Arg Ala Pro Ser Thr Ser Thr Ser
        755                 760                 765
Leu Lys Arg Glu Glu Ser Phe Ser Arg Ser Ala Thr Ser Ser Pro Glu
    770                 775                 780
Pro Ala Lys Pro Val Ser Asn Ser Arg Asn Asp Lys Ala Ser Ala Val
785                 790                 795                 800
Asp Pro Gly Glu Pro Gln Gln Ser Ser Glu Thr Val Pro Pro Pro Lys
                805                 810                 815
Ile Arg Leu Glu Ser Pro Ile Lys Leu Ser Lys Thr Arg Pro Gln Ser
            820                 825                 830
Leu Asn Ile Ser Lys Gly Asn Ser Lys Ser Gln Ala Arg Arg Thr Ser
        835                 840                 845
Thr Ala Ser Ala Gly Ser Leu Ser Asp Tyr Pro Ser Leu Thr Ser Ser
    850                 855                 860
Pro Gly Ile Arg Glu Pro Arg Thr Ala Ser Ser Asn Gly Thr Pro Leu
865                 870                 875                 880
Leu Leu Glu Thr Pro Pro Pro Phe Gln Asp Leu Ser Leu Ala Ser Asp
                885                 890                 895
Tyr Val Ser Val Gly Thr Asp His Thr Leu Arg Glu Glu Arg Leu Arg
            900                 905                 910
Arg Leu Asp Asn Gln Lys Val Pro Asn Ala Thr Val Ser His Asn Arg
        915                 920                 925
Ala Leu Ser Leu Pro Leu Gln Arg Phe Ile Asn Glu Arg Leu Asp Met
    930                 935                 940
Gln Tyr Glu Ser Gly Ala Gly Gly Asp Leu Asn Gly Ala Leu Gly Tyr
945                 950                 955                 960
Arg Arg Ala Ser Val Ala Ser Ile Asp Leu Arg Pro Gln Ser Glu Gln
                965                 970                 975
His Ala Thr Asp Leu Gln Ser Ser Lys Asp Gly Ser Thr Val Pro Thr
            980                 985                 990
Asn Asn Leu Lys Leu Leu Ala Ser Gln His Met Glu Leu Ser Gln Arg
        995                 1000                1005
Arg Gln Ser Thr Ser Lys Leu Asp Asp Ala Thr Pro Lys Pro Ser Lys
    1010                1015                1020
Ala Trp Ala Asn Asn Ala Asn Ala Phe Ala Arg Asp Ser Val Ile Pro
1025                1030                1035                1040
Ser Pro Ser Leu Glu Ser Thr Val Arg Asn Asp Thr Val Ser Ser Pro
                1045                1050                1055
Arg Gly Trp Lys Gly Pro Arg Asn Lys Ser
            1060                1065
```

<210> 34587
<211> 98
<212> PRT
<213> A.fumigatus

<400> 34587

```
Gln Lys Lys Met His Phe Ser Lys Phe Phe Leu Val Ala Ala Ala Thr
1               5                   10                  15
Leu Ala Ala Ala His Pro Gly Glu Val His Asp Ala His Ala Leu Lys
            20                  25                  30
```

```
Arg Glu Ile Arg Ala Arg Asp Ala Tyr Ala Val Ala Ala Lys Arg Ala
        35                  40                  45
Leu Asp Ala Cys Ala Ser Thr Thr Glu Ala Gln Gln Leu Asn Gln Arg
    50                  55                  60
Asn Val Ala Arg Arg Ala Arg Thr Ala Arg Gln Leu Arg Gln Asn Lys
65                  70                  75                  80
Gly Ile Thr Thr Ser Lys Arg Pro Leu Arg Phe Val Val Leu Pro Ala
                85                  90                  95
Asp Gly
```

<210> 34588
<211> 121
<212> PRT
<213> A.fumigatus

<400> 34588

```
Asp Ala His Lys Trp Arg Arg Asp Leu Ala Ala Leu Glu Lys Trp Glu
1               5                   10                  15
Ala Ile Asn His Asn Lys Thr Asp Val Leu Asp Tyr Ser Ala Asn Thr
            20                  25                  30
Pro Glu Ser Arg Ile Phe Gly Gly Asn Thr Ser Ala Ile Leu Ala Pro
        35                  40                  45
Thr Ile Thr Asp Gly Pro Tyr Tyr Val Trp Gly Glu Ile Leu Arg Gln
    50                  55                  60
Asn Val Lys Glu Glu Lys Tyr Cys Asp Gly Val Asp Leu Thr Leu Glu
65                  70                  75                  80
Val Gln Tyr Ile Asp Val Asn Thr Cys Arg Pro Val Lys Gly Ala Val
                85                  90                  95
Val Asp Ile Trp Asn Ala Asn Ala Thr Gly Val Tyr Arg Tyr Asp Leu
            100                 105                 110
Val Ala Tyr Pro Glu Asn Gly Pro Cys
        115                 120
```

<210> 34589
<211> 212
<212> PRT
<213> A.fumigatus

<400> 34589

```
Pro Asp Ser Gly Ile Ser Thr Ser Gly Asn Tyr Ala Ala Asp Gly Trp
1               5                   10                  15
Asp Ser Thr Tyr Leu Arg Gly Ile Gln Gln Thr Asp Asp Asp Gly Val
            20                  25                  30
Val Thr Phe Asp Thr Ile Phe Pro Gly His Tyr Glu Gly Arg Ala Thr
        35                  40                  45
His Thr His Leu Leu Thr His Leu Asn Ala Thr Met Asn Ala Asn Gly
    50                  55                  60
Thr Leu Glu Val Gly Thr Gly Ser Ile Ala His Ile Gly Gln Leu Phe
65                  70                  75                  80
Trp Asn Glu Val Leu Arg Ser Ala Val Glu Asp Thr Ser Pro Tyr Asn
                85                  90                  95
Thr Asn Thr Gln Ala Ile Thr Thr Asn Ala Asp Asp Met Trp Ser Val
            100                 105                 110
Leu Gln Ala Ser Asp Glu Tyr Asp Pro Phe Pro Glu Tyr Leu Tyr Leu
        115                 120                 125
```

```
Gly Glu Gly Leu Glu Asp Gly Leu Phe Ala Trp Ile Gln Ile Gly Ile
    130                 135                 140
Asn Ala Ser Ala Asp Tyr Thr Asp Asn Ser Tyr Tyr Ser Ile Ala Ala
145                 150                 155                 160
Tyr Tyr Gln Glu Asp Gly Gly His Gln Asn Ser Ala Ser Ser Ala Phe
                165                 170                 175
Gly Gly Ser Gly Gly Asp Met Asn Gly Thr Met Pro Ser Gly Val Ala
            180                 185                 190
Pro Ser Gly Ala Met Pro Ser Gly Ala Ile Pro Ser Gly Ala Ser Pro
        195                 200                 205
Ser Ser Ser Ala
    210
```

<210> 34590
<211> 89
<212> PRT
<213> A.fumigatus

<400> 34590

```
Arg Ala Gln Trp Trp Ile Ser Gly Thr Pro Met Pro Pro Val Ser Thr
1               5                   10                  15
Gly Met Thr Ser Ser Leu Ile Pro Arg Thr Asp Pro Ala Asp Leu Thr
            20                  25                  30
Val Ala Ser Leu His Pro Ala Thr Thr Pro Leu Thr Ala Gly Ile Pro
        35                  40                  45
Pro Thr Cys Ala Val Ser Ser Arg Pro Thr Thr Thr Gly Trp Leu Pro
    50                  55                  60
Ser Thr Pro Ser Ser Pro Ala Thr Thr Arg Asp Ala Pro Pro Thr Leu
65                  70                  75                  80
Thr Ser Ser Arg Ile Ser Thr Pro Arg
                85
```

<210> 34591
<211> 330
<212> PRT
<213> A.fumigatus

<400> 34591

```
Ser Ile Arg Lys Phe Trp Lys Thr Gly Arg Leu Met Pro Ser Thr Pro
1               5                   10                  15
Pro Leu Thr Ser Arg Pro Val Val Ala Ile Ala Gly Ala Thr Gly His
            20                  25                  30
Leu Cys Lys His Val Ala Ala Ala Phe Leu Ser Pro Pro Leu Asn Ala
        35                  40                  45
Tyr Phe Ser Glu Ile Ile Phe Leu Ser Arg His Asp Asn Pro Pro Val
    50                  55                  60
Pro Ser Val Pro Glu Ser Ser Gly Gly Gly Ala Val Val Thr Val Arg
65                  70                  75                  80
Lys Tyr Asp Glu Asp Asn Leu Pro Ala Ala Leu Glu Gly Val Asp Val
                85                  90                  95
Leu Val Asn Pro Met Gly Ala Ser Ala His Glu Phe Lys Arg Lys Leu
            100                 105                 110
Leu Arg Ala Phe Pro Ser Thr Gly Val Gln Val Tyr Phe Pro Ser Glu
        115                 120                 125
Phe Gly Val Asp His Tyr Val His Asp Phe Pro His Gly Glu Trp Asp
    130                 135                 140
```

```
Gln Lys Lys Arg His Phe Glu Leu Ala Gly Gln Leu Ile Pro Gln Val
145                 150                 155                 160
Lys Val Cys Arg Val Phe Cys Gly Leu Phe Leu Glu Asp Ser Ile Gly
                165                 170                 175
Pro Trp Phe Gly Phe Asp Thr Val Arg Gly Arg Tyr Gly Ser Val Gly
            180                 185                 190
Ser Ala Lys Ser Leu Val Ser Phe Thr Gly Leu Glu Asp Val Gly Lys
        195                 200                 205
Thr Val Ala Ser Leu Ala Ala Met Pro Leu Met Ser Ile Pro Glu Val
    210                 215                 220
Val His Ile Ala Gly Asp Thr Arg Ser Ile Glu Glu Ile Ala Lys Val
225                 230                 235                 240
Met Glu Gly Ala Gly Ala Gly Pro Ile Glu Ile Thr Glu Val Asp Leu
                245                 250                 255
Met Lys Tyr Lys Glu Glu Thr Thr Gly Lys Val Ser Asn Asp Pro Ala
            260                 265                 270
Ser Tyr Leu Arg Phe Leu Met Gly Glu Asn Lys Ile Asn His Thr Ala
        275                 280                 285
Ser Gly Leu Gly Ser Asp Asn Asp Leu Ile Asn Leu Gln Gln Lys Thr
    290                 295                 300
Trp Lys Trp Lys Thr Met Lys Asp Leu Ala Lys Ser Thr Asn Gly Arg
305                 310                 315                 320
Pro Trp Lys Asp Phe Pro Trp Pro Pro Lys
                325                 330
```

<210> 34592
<211> 86
<212> PRT
<213> A.fumigatus

<400> 34592

```
Lys His His Val Gln Phe Leu Ser Leu Ala Tyr Asn Glu Leu Tyr Thr
1               5                   10                  15
Tyr Arg Phe Val His Ala Val Cys Pro Arg Asp Ser Tyr Pro Ser Pro
            20                  25                  30
Ser Asn Val Ile Tyr Ala Leu Glu Glu Gly Leu Ala Pro Glu Gly Ile
        35                  40                  45
Ala Pro Glu Gly Ile Ala Pro Glu Gly Ala Thr Pro Glu Gly Met Val
    50                  55                  60
Pro Phe Ile Ser Pro Pro Glu Pro Pro Lys Ala Glu Leu Ala Leu Phe
65                  70                  75                  80
Trp Cys Pro Pro Ser Ser
                85
```

<210> 34593
<211> 186
<212> PRT
<213> A.fumigatus

<400> 34593

```
Gly Gln Leu Gly Gly Asn Leu Val Tyr Phe Leu Arg Pro Arg Gly Ile
1               5                   10                  15
Gly Phe Val Pro Ala Gly Ala Gln Pro Arg Val Pro Pro Asp Val Gly
            20                  25                  30
Glu Gly Phe Asp Pro Pro Val Arg Lys Pro Cys Gly Gly Ala Trp Pro
        35                  40                  45
```

```
Ile Ala Glu Lys Pro Ser Gly Pro Asp His Arg Glu Ser Met Thr Leu
    50                  55                  60
Ser Pro His Arg Asp Ser Cys Thr Arg Tyr Arg Gln Arg Ala Glu Leu
65                  70                  75                  80
His His Val Arg Gly Ala Gly Glu Arg Gln Gln Pro Ala Gly Asp Gly
                85                  90                  95
Gly Pro Val Ala Asp Ala Val Pro Val Val Gly Gly Gly Ala Gln Gly
            100                 105                 110
Gln Gly Gln Arg Arg Arg Ala Val His Ala Gly His Ala Gly Ala Ala
        115                 120                 125
Ala His Gly Ala Ala Ala Val Tyr Gly Gly Gly Gln Val Leu Arg Ala
    130                 135                 140
Ala Gly Gly Val Val Pro Gly Gly Gly Asp Ser His Thr Asp Ala Ser
145                 150                 155                 160
Ala Asp Gln Ser Ala Asp Val Ser His Ala His Cys Asp Val Cys Ala
                165                 170                 175
Val Leu Ala Pro Trp Asn Arg Val Gly Tyr
            180                 185
```

<210> 34594
<211> 126
<212> PRT
<213> A.fumigatus

<400> 34594

```
Arg Lys Arg Ala Glu Ala Lys Glu Glu Ile Thr Pro Asp Ser Thr Lys
1               5                   10                  15
Ser Thr Gln Gln Lys Ile Lys Glu Gly Val Thr Asp Thr Gly Asp Arg
            20                  25                  30
Val Ala Arg Gly Leu Gln Thr Asp Gly Ser Lys Ser Gly Thr Gln Glu
        35                  40                  45
Ala Phe Asp Lys Thr Gln Arg Ser His Asp Asn His Ala His Cys Arg
    50                  55                  60
Gly Lys Arg Ile Tyr Leu Asn Leu Leu Pro Thr Pro Leu Ile Leu Ala
65                  70                  75                  80
Pro His Leu Gln Leu Gly Leu Pro Ser Leu Ala Asp Lys Val Pro Lys
                85                  90                  95
Pro Phe Arg Pro Arg Asn Pro Leu Asn Leu Ala Pro Trp Glu Ser Gln
            100                 105                 110
Leu Ile Ile Phe Leu Arg Ser Leu His Phe Cys Gln Ser Pro
        115                 120                 125
```

<210> 34595
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34595

```
Leu Arg Met Pro Ala Lys Leu Pro Ser Asn Tyr Thr Ser Asp Ala Glu
1               5                   10                  15
Ala Ala Val Asp Ser Arg Asp Leu Gln Thr Glu Ser Gly Tyr Val Ser
            20                  25                  30
Gly Asp Ser Ser Asp Val Tyr Thr Pro Glu Ile Val Phe Thr Lys Pro
        35                  40                  45
His Leu Gln Phe Leu Asn Arg Gln Leu Gln Phe Leu Glu Pro Gln Gly
    50                  55                  60
```

<210> 34596
<211> 247
<212> PRT
<213> A.fumigatus

<400> 34596
Glu Ile Leu Arg Trp Cys Ile Thr Ser Leu Pro His Leu Phe Gln Thr
1 5 10 15
Thr Ala Phe Gly Leu Thr Gly Leu Val Thr Leu Asp Met Leu Ser Lys
20 25 30
Leu Gln Val Pro Arg Pro Gln Met Val Asp Leu Ile Phe Leu Asp Thr
35 40 45
Leu His His Phe Pro Glu Thr Leu Ala Leu Val Asp Arg Val Arg Lys
50 55 60
Arg Tyr Pro Leu Asn Asn Ile His Ile Tyr Lys Pro Ala Gly Ile Glu
65 70 75 80
Thr Ala Glu Glu Phe Ser Lys Lys Tyr Gly Ala Lys Leu Trp Glu Thr
85 90 95
Asp Asp Gln Phe Tyr Asp Trp Val Ala Lys Val Glu Pro Ala Gln Arg
100 105 110
Ala Tyr Arg Glu Leu Asn Val His Ala Val Leu Thr Gly Arg Arg Arg
115 120 125
Ser Gln Gly Gly Lys Arg Gly Asp Leu Asp Val Ile Glu Val Asp Glu
130 135 140
Ala Gly Leu Ile Lys Val Asn Pro Leu Ala Asn Trp Thr Phe Glu Gln
145 150 155 160
Val Lys Gln Tyr Ile Lys Glu Asn Asp Val Pro Tyr Asn Glu Leu Leu
165 170 175
Asp Arg Gly Tyr Lys Ser Ile Gly Asp Trp His Ser Thr Gln Pro Val
180 185 190
Lys Glu Asn Glu Asp Glu Arg Ser Gly Arg Trp Lys Gly Gln Glu Lys
195 200 205
Thr Glu Cys Gly Ile His Asn Pro Arg Ser Lys Tyr Ala Gln Tyr Leu
210 215 220
Met Glu Leu Glu Arg Lys Arg Gln Glu Glu Ala Leu Ser Gln Ala Leu
225 230 235 240
Gln Asn Gln Leu Thr Thr Ala
245

<210> 34597
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34597
Pro Glu Thr Pro His Ala Ala Thr Asp Lys Pro Ile Asn Gly Asn Ser
1 5 10 15
Ser His His Asp Ile Leu Arg Thr Ala Cys Val Ile Val Asn Phe Phe
20 25 30
Leu Ser Phe Gly Cys Ser Trp His Phe Asp Ile Thr Cys Ser Asp Gln
35 40 45
Pro Tyr Leu Leu Val Pro Val Val Ala Ser Thr Met Cys Leu Leu Thr
50 55 60
Val Ser Ser Trp Arg Ile Glu Thr Val Leu
65 70

<210> 34598
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34598
Ser Arg His Arg Ala Thr Cys Thr Arg Met Ser Ile Ser Leu Asn Leu
1 5 10 15
Lys Leu Phe Ser Leu Val Asn Ala Asn Ile Thr Leu Ile Ile Leu Ile
20 25 30
Ser Gly Gln Val Leu Met Cys Leu Trp Ile Asp Arg Pro Phe Thr Tyr
35 40 45
Gly Leu Gly Ile Thr Leu Thr Met Arg Asn Gln Ser Val Val Ile Ala
50 55 60
Gln Tyr Arg Leu Leu Val Leu Arg His Met
65 70

<210> 34599
<211> 79
<212> PRT
<213> A.fumigatus

<400> 34599
Glu Lys Glu Val Arg Ser Tyr Ile Val Lys Thr Asp Arg Gly Ile Gly
1 5 10 15
Asp Val Asp Leu Pro Arg Gln Asn Leu Ile Ile Arg Leu His Glu Asp
20 25 30
Asp Arg Lys Gly Asn Gly Ser Thr Ser Gly Gly Ser Ile Glu His Met
35 40 45
Ser Gln Val Tyr Ser Leu Arg Ala Tyr Arg Asn Gly Gln Glu Ser Phe
50 55 60
Tyr Asp Met His Val Ser His Ala Ser Gln Val Phe Ala Phe Ala
65 70 75

<210> 34600
<211> 173
<212> PRT
<213> A.fumigatus

<400> 34600
Ala Ser Val Ser Ser Pro Ala Arg Thr Trp Ser Ser Gln Leu Tyr Asn
1 5 10 15
Ser Arg Ser Cys Gln Arg Arg Ser Arg Thr Ser Ser Ala Ala Ala Pro
20 25 30
Arg Pro Ala Ala Ala Arg Ile Thr Cys Cys Thr Leu Leu Ser Ile Thr
35 40 45
Asn Leu Leu Ser Thr Ala Glu Thr Arg Ser His Gly Ala Ser Pro Gly
50 55 60
Pro Pro Val Ala Pro Met Tyr Arg Thr Arg Ala Gly Asn Glu Ala Gly
65 70 75 80
Ser Thr Ser Asp Leu Ser Trp Met Ser Ser Pro Cys Ser Glu Ser Arg
85 90 95
Leu Lys Ile Gln Ser His Met Leu Cys Ala Gly Ala Val Arg Gly Thr
100 105 110
Ser Leu Glu Pro Pro Glu Val Ser Ser Ala Ala Ala Leu Gly Gly Ala

```
        115                 120                 125
Ala Gly Arg Ser Arg Arg Pro Gly Phe Gly Ala Val Ala Asp Asp Gly
    130                 135                 140
Ser Thr Ser Cys Ala Ser Leu Arg Pro Asp Arg Val Ala Thr Asn Thr
145                 150                 155                 160
Glu Asp Pro Val Gly Leu Tyr Val Ala Leu Arg Arg Arg
                165                 170
```

<210> 34601
<211> 874
<212> PRT
<213> A.fumigatus

<400> 34601

```
Gly Thr Arg Val Phe Gln Pro Val Val Lys Thr Thr Ser Ile Pro Pro
1               5                   10                  15
Gln Pro Ser Leu Ser His Asp Ala Met Arg Asp Phe His Gln Ile Gly
            20                  25                  30
Gly Ser Ala Leu Glu Ile Asp Thr Ile Asn Ser Phe Glu Ala Ser Ala
        35                  40                  45
Glu Ala Asp Arg Phe Ser Ile Thr Arg Leu Ile Phe Lys Asp Asp Lys
    50                  55                  60
Arg Phe Ile Glu Ala Ala Lys Leu Leu Asn Gln Ser Lys Ala Pro Val
65                  70                  75                  80
Ala Glu Cys Ile Pro Glu Pro Asp Trp Thr Asp Ser Asp Leu Leu Glu
                85                  90                  95
Ala Gln Lys Glu Val Val Gln Leu Val Thr Leu Arg Thr Leu Ser Ile
            100                 105                 110
Pro Ala Gly Arg Ala Met Leu Ala Phe Ser Gly Arg Leu Pro Leu Leu
        115                 120                 125
Thr Glu Lys Leu Pro Ile Pro Ser Phe Ser Leu Gln Cys Val Met Lys
    130                 135                 140
Pro Ser Asn Val Thr Val Ser Ala Glu Arg Ala Phe Phe Ser Glu Glu
145                 150                 155                 160
Lys Val Cys Trp Ala Phe Phe His Asn Gly Val Ser Thr Gly Leu Ala
                165                 170                 175
Ile Ser Lys Lys Ser Lys Gly Ile Asp Thr Ser Trp Ile Leu Phe Asn
            180                 185                 190
Lys Pro Gln Glu Leu Thr Asn Arg His Ala Gly Phe Leu Leu Ala Leu
        195                 200                 205
Gly Leu Asn Gly His Leu Lys Ser Leu Ala Lys Trp Val Ala Phe Lys
    210                 215                 220
Tyr Leu Thr Pro Lys His Thr Met Thr Ser Ile Gly Leu Leu Leu Gly
225                 230                 235                 240
Leu Ser Ala Ser Tyr Leu Gly Thr Met Asp Thr Leu Ile Thr Arg Leu
                245                 250                 255
Leu Ser Val His Val Thr Arg Met Leu Pro Pro Gly Ala Ala Glu Leu
            260                 265                 270
Asn Leu Ser Pro Leu Thr Gln Thr Ala Gly Ile Met Gly Ile Gly Leu
        275                 280                 285
Leu Tyr Cys Asn Ser Gln His Arg Arg Met Ser Glu Val Met Leu Ser
    290                 295                 300
Glu Ile Glu Asn Ala Glu Gln Glu Glu Ser Ser Pro Ser His Glu Asp
305                 310                 315                 320
Leu Arg Asp Glu Gly Tyr Arg Leu Ala Ala Gly Phe Ala Leu Gly Phe
                325                 330                 335
```

```
Ile Asn Leu Gly Lys Gly Lys Asp Leu Arg Gly Met Arg Asp Met His
            340                 345                 350
Ile Val Glu Arg Leu Leu Ala Ile Ala Val Gly Thr Lys Thr Val His
        355                 360                 365
Leu Ala His Val Leu Asp Arg Ala Thr Ala Gly Ala Thr Val Ala Leu
    370                 375                 380
Thr Ile Ile Phe Met Lys Thr Asn Asp Glu Val Leu Ala Arg Lys Ile
385                 390                 395                 400
Asp Ile Pro Asp Thr Thr Val Arg Phe Asp Tyr Val Arg Pro Asp Leu
                405                 410                 415
Phe Leu Leu Arg Thr Leu Ala Arg His Val Ile Met Trp Asp Ser Ile
            420                 425                 430
Arg Pro Ser Tyr Asp Trp Ile Ile Glu Ser Leu Pro Lys Ile Tyr Arg
        435                 440                 445
Arg Arg Tyr Arg Leu Thr Gly Val Ser Arg Leu Lys Ser Asp Asp Met
    450                 455                 460
Pro Phe Phe Asn Ile Ile Ala Gly Leu Cys Phe Ala Leu Gly Leu Arg
465                 470                 475                 480
Phe Ala Gly Ser Ala Gln Leu Ala Val Arg Asp Leu Leu Val Ala Tyr
                485                 490                 495
Leu Asp Gln Phe Ile Arg Ile Cys Arg Leu Pro Ala Val Asn Tyr Asp
            500                 505                 510
Gly Arg Leu Thr Arg Asn Ser Val Arg Asn Cys Gln Asp Ile Val Ala
        515                 520                 525
Leu Ser Ala Ala Thr Val Met Ala Gly Thr Gly Asp Leu Ala Leu Phe
    530                 535                 540
Arg Arg Leu Arg Ser Leu His Gly Arg Val Asp Ala Asp Thr Pro Tyr
545                 550                 555                 560
Gly Ser His Met Ala Ala His Met Ala Ile Gly Leu Leu Phe Leu Gly
                565                 570                 575
Gly Gly Ser Tyr Thr Val Gly Thr Ser Asp Leu Ala Ile Ala Ser Leu
            580                 585                 590
Ile Cys Ser Leu Tyr Pro Ile Phe Pro Thr Thr Val Leu Asp Asn Lys
        595                 600                 605
Cys His Leu Gln Ala Phe Arg His Leu Trp Val Leu Ala Ala Glu Pro
    610                 615                 620
Arg Cys Leu Val Pro Arg Asp Leu Asp Ser Arg Arg Pro Ile His Leu
625                 630                 635                 640
Pro Ile Thr Val Thr Asn Thr Ser Gly Gln Lys Gln Thr Val Thr Ala
                645                 650                 655
Pro Cys Leu Leu Pro Asp Leu Asp Ser Ile Ala Lys Val Glu Ile Arg
            660                 665                 670
Ser Ala Asp Tyr Trp Pro Leu Val Leu Asp Phe Thr Gln Asn Lys Arg
        675                 680                 685
Leu Tyr Asp Lys Phe Arg His Gly Asp Gln Ser Val Tyr Leu Arg Arg
    690                 695                 700
Lys Ala Thr Tyr Asn Pro Thr Gly Ser Ser Val Phe Val Ala Thr Leu
705                 710                 715                 720
Ser Gly Leu Asn Glu Ala Gln Asp Val Leu Pro Ser Ser Ala Thr Ala
                725                 730                 735
Pro Asn Pro Gly Arg Arg Leu Leu Pro Ala Ala Pro Pro Lys Ala Ala
            740                 745                 750
Ala Leu Leu Thr Ser Gly Gly Ser Lys Leu Val Pro Arg Thr Ala Pro
        755                 760                 765
Ala Gln Ser Met Trp Asp Trp Ile Phe Asn Leu Asp Ser Leu Gln Gly
    770                 775                 780
```

```
Leu Asp Ile His Glu Arg Ser Leu Val Leu Pro Ala Ser Phe Pro Ala
785                 790                 795                 800
Arg Val Arg Tyr Met Gly Ala Thr Gly Gly Pro Gly Asp Ala Pro Trp
                805                 810                 815
Leu Arg Val Ser Ala Val Asp Ser Lys Leu Val Ile Glu Ser Ser Val
            820                 825                 830
Gln Gln Val Ile Arg Ala Ala Ala Gly Arg Gly Ala Ala Ala Asp Glu
        835                 840                 845
Val Arg Asp Arg Leu Trp Gln Leu Arg Leu Leu Tyr Ser Trp Leu Asp
    850                 855                 860
His Val Arg Ala Gly Glu Asp Thr Glu Ala
865                 870

<210> 34602
<211> 172
<212> PRT
<213> A.fumigatus

<400> 34602
Arg Arg Pro Val Ser Cys Pro Ile Trp Thr Ala Ser Arg Lys Trp Lys
1               5                   10                  15
Ser Ala Ala Pro Thr Thr Gly Pro Leu Phe Trp Thr Leu His Arg Thr
            20                  25                  30
Ser Gly Cys Thr Thr Ser Ser Gly Thr Gly Thr Ser Pro Ser Ile Cys
        35                  40                  45
Asp Ala Arg Pro Arg Thr Thr Pro Pro Asp Pro Pro Cys Ser Trp Arg
    50                  55                  60
Pro Tyr Pro Ala Ser Thr Arg Arg Arg Thr Cys Ser Arg His Pro Arg
65                  70                  75                  80
Pro His Gln Thr Gln Ala Gly Asp Ser Ser Pro Pro His His Pro Arg
                85                  90                  95
Pro Pro Arg Cys Ser Pro Arg Ala Ala Pro Ser Ser Ser Leu Ala Arg
            100                 105                 110
Arg Arg His Arg Ala Cys Gly Thr Gly Ser Ser Thr Ser Thr Arg Cys
        115                 120                 125
Arg Asp Ser Thr Ser Thr Arg Gly His Ser Cys Cys Arg Pro Arg Ser
    130                 135                 140
Pro His Ala Phe Gly Thr Trp Gly Arg Leu Val Gly Arg Gly Met Arg
145                 150                 155                 160
Arg Gly Cys Ala Ser Arg Pro Trp Thr Ala Asn Trp
                165                 170

<210> 34603
<211> 271
<212> PRT
<213> A.fumigatus

<400> 34603
Phe Phe Leu Ala Thr Met Asp Arg Val Thr His Ile Ile Asp Pro Asp
1               5                   10                  15
Gly Glu Val Val Ile Ile Leu Arg Asn Ala Asn Thr Pro Phe Ala Glu
            20                  25                  30
Leu Asp Glu Asp Met Val Ala Ser Ile Ala Ser Gln Pro Ala Glu Val
        35                  40                  45
Ser Thr Pro Glu Pro Ala Glu Glu Asn Gly Leu Ala Pro Ala Glu Gln
    50                  55                  60
```

```
Pro Pro Glu Gln Gln Ala Glu Gln Gln Pro Glu Glu Glu Pro Glu Glu
65                  70                  75                  80
Gln Leu Gln Gln Pro Glu Gln Pro Ala Glu Asp Pro Ile Glu Ile Gly
                85                  90                  95
Gly Glu Thr Glu Asp Glu Thr Cys Phe Arg Ile Gln Val Ser Ala Lys
            100                 105                 110
His Leu Met Leu Ala Ser Pro Tyr Phe Lys Lys Leu Leu Thr Gly Arg
        115                 120                 125
Trp Arg Glu Ser Val Ala Tyr Gln His Met Gly Ser Ile Glu Leu Pro
    130                 135                 140
Glu Glu Gly Trp Asp Ile Asn Ala Phe Leu Ile Leu Leu Arg Ala Ile
145                 150                 155                 160
His Ser Gln His Tyr Arg Ile Pro Arg Thr Leu Thr Val Glu Met Leu
                165                 170                 175
Ala Lys Gly Thr Val Leu Ala Asp Tyr Tyr Lys Cys Glu Glu Ala Ile
            180                 185                 190
Ser Val Trp Thr Thr Ile Trp Ile Asn Ala Leu Glu Glu Glu Ile Pro
        195                 200                 205
Ser Thr Tyr Ser Arg Asp Leu Phe Leu Trp Leu Trp Ile Ser Trp Tyr
    210                 215                 220
Phe Lys Leu Pro Lys Gln Phe Lys Gln Ala Thr Ser Thr Ala Met Ser
225                 230                 235                 240
Arg Ser Asp Asn Trp Ile Lys Asn Gly Pro Gly Leu Pro Ile Pro Thr
                245                 250                 255
Lys Val Ile Ser Lys Ala Arg Arg Thr Leu Ser Val Leu Ser His
            260                 265                 270
```

<210> 34604
<211> 72
<212> PRT
<213> A.fumigatus

<400> 34604

```
Ala Ala Leu Lys Ala Thr Pro Pro Ser Ala Ala Glu Lys Ser Leu Ala
1               5                   10                  15
Cys Val Met Lys Asp Leu Asp Gln Val Ile Asp Ser Phe Leu Ser Ala
            20                  25                  30
Val Val His Arg Val Tyr Val Pro Leu Val Thr Glu His Ala Glu Ser
        35                  40                  45
Ser Ser Ser Leu Thr Tyr Asp Phe Arg Arg Tyr Trp Lys Thr Arg Thr
    50                  55                  60
Val Leu Asn Pro Ile Ile Thr Ser
65                  70
```

<210> 34605
<211> 168
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34605

```
Ser Ile Phe Val Phe Thr Cys Xaa Cys Ile Pro Val Thr Ala Met Trp
```

```
1               5                   10                  15
Asp Met Thr Gln Leu Pro Thr Ala Lys Cys Val Asp Gln Leu Ala Val
            20                  25                  30
Val Tyr Ala Asn Ala Ala Phe Asn Leu Leu Ser Asp Leu Met Thr Leu
        35                  40                  45
Ile Leu Pro Val Lys Leu Cys Trp Ala Leu Gln Thr Thr Leu Lys Gln
    50                  55                  60
Lys Val Leu Leu Cys Val Val Leu Ala Met Gly Ser Phe Ala Cys Val
65                  70                  75                  80
Ile Ala Ile Val Arg Ile Val Thr Met Met Pro Phe Val His Ser Met
                85                  90                  95
Asp Phe Thr Trp Tyr Lys Val Thr Leu Ala Lys Trp Ala Tyr Val Phe
            100                 105                 110
Phe Pro Phe Pro Leu Phe Cys Arg Phe Arg Leu Val Gly Pro Met Leu
        115                 120                 125
Met Asn Leu Lys Asp Gly Arg Asn Gln Cys Arg His His Leu Arg Leu
    130                 135                 140
Ser Pro Arg Pro Pro Ala Ser Ala Ala Thr Arg Arg Ser Pro Val Ser
145                 150                 155                 160
Arg Gln Gln Glu Leu Gly Arg Gly
                165
```

<210> 34606
<211> 105
<212> PRT
<213> A.fumigatus

<400> 34606

```
Arg Met Val Glu Ile Asn Val Gly Ile Ile Cys Ala Cys Leu Pro Val
1               5                   10                  15
Leu Arg Pro Leu Leu Leu Arg Val Val Pro Gln Leu Ala Gly Ser Lys
            20                  25                  30
Asn Ser Gly Ala Asp Lys Gln Ser Asp Glu Ser Tyr Thr Leu Arg Asp
        35                  40                  45
Ala Val Pro Arg Lys Lys Lys Gly Ile Arg Asn Trp Asp Tyr Leu Thr
    50                  55                  60
Thr Val Gly Gly Thr Gln Asn Pro Arg Glu Asp Asp Val Glu Ser Val
65                  70                  75                  80
His Val Arg Pro Asn Gly Lys Ser Glu Ser Gln Glu Gly Ile Ile Leu
                85                  90                  95
Ser Thr Glu Thr Lys Ile Thr Tyr His
            100                 105
```

<210> 34607
<211> 572
<212> PRT
<213> A.fumigatus

<400> 34607

```
Val Gln Thr Ala Ile Ser Arg Arg Asn Leu Pro Phe Leu Gln Pro Pro
1               5                   10                  15
Ala Gly Ile Lys Ala Thr Val Ala Ala Ala Pro Pro Val Ala Ile Pro
            20                  25                  30
Met Ser Val Met Thr Arg Ser Arg Phe Leu Arg Pro Ser Lys Arg Gly
        35                  40                  45
Ser Arg Ser Thr Pro Ala Asn Lys Arg Ser Ala Ser Arg Ser Ala Leu
```

```
    50                  55                  60
Gly Met Trp Gln Leu Ser Glu Val Arg Arg Met Ile Leu Glu Asn Gly
65                  70                  75                  80
Ser Trp Lys Arg Lys Gly Ile Cys Glu Gln Leu Phe Cys Leu Glu Leu
                85                  90                  95
Gln Asp Pro Arg Asp Met Ser Asp Gly Thr Asp Trp Gly Ser Gly Asp
            100                 105                 110
Asp Ala Ser Arg Asp Thr Gln Gly Gly Gln Ser Lys Arg Lys Gly Phe
        115                 120                 125
Pro Lys Leu Pro Pro Tyr Glu Pro Glu Lys Val Gly Leu Tyr Val Leu
    130                 135                 140
Gly Leu Gln Glu Val Val Asp Val Ser Ser Ala Ala Glu Ala Leu Arg
145                 150                 155                 160
Pro Tyr Val Asp Pro Gly Pro Ser Asn Lys Trp Lys Ala Ala Leu Glu
                165                 170                 175
Lys Ala Leu Pro Glu Gly Phe Gln Leu Val Ser Glu Ala Gln Leu Val
            180                 185                 190
Gly Leu Leu Leu Leu Ile Tyr Ala Ala Pro Ser Val Val Glu Ser Ile
        195                 200                 205
Ser Ser Val Ser Ser Ala Asn Val Gly Thr Gly Leu Leu Gly Tyr Met
    210                 215                 220
Gly Asn Lys Gly Ala Val Ala Thr Arg Leu Met Leu Gly Glu Thr Thr
225                 230                 235                 240
Cys Leu Val Phe Val Asn Ser His Leu Ser Ala Gly Ser Asp Lys Ser
                245                 250                 255
Ser Leu Glu Arg Arg Asn Trp Asp Ala Ser Gln Ile Val Gly Arg Ala
            260                 265                 270
Lys Phe Asp Pro Ile Asp Pro Asp Lys Gly Leu Arg Glu Asp Pro Gly
        275                 280                 285
Asp Ser Ile Gly Arg Glu Asp Phe Ala Phe Trp Phe Gly Asp Leu Asn
    290                 295                 300
Tyr Arg Leu Glu Asp Ile Pro Gly Gly Asp Val Arg Gln Val Leu Ala
305                 310                 315                 320
Arg His Thr Glu Asn Glu Tyr Asp Lys Arg His Lys Pro Ser His His
                325                 330                 335
Val Glu Gly Glu Val Pro Ser Ser Pro Met Val Gly Val Glu His Asp
            340                 345                 350
His Lys Ser Glu Glu Ser Phe Pro Thr Leu Ser Asp Asp Glu Ile Asp
        355                 360                 365
Pro His Thr Asp Pro Ser Ser Leu Gln Thr Thr Ile Ala Ser Leu Leu
    370                 375                 380
Pro His Asp Gln Leu Arg Met Gln Gln Lys Lys Asn Arg Ala Phe His
385                 390                 395                 400
Asp Gly Trp Arg Glu Gly Asp Ile Thr Phe Leu Pro Thr Tyr Lys Tyr
                405                 410                 415
Asp Val Gly Ser Val Ala Arg Phe Asp Ser Ser Glu Lys His Arg Gly
            420                 425                 430
Pro Ser Trp Cys Asp Arg Ile Leu Tyr Arg Ala Arg His Asp Arg Leu
        435                 440                 445
Arg Tyr Glu Lys Arg Val Gln Glu Ala Glu Lys Ser Arg Gln Arg Asp
    450                 455                 460
Glu Glu Met Lys Ala Arg Gly Leu Asp Lys Ala Ala Ala Asp Asp Ser
465                 470                 475                 480
Val Leu Phe Asp Tyr Asp Pro Asp Val Asp Gly Ala Asp Ser Gly Asp
                485                 490                 495
Glu Tyr Asp Ser Asn Lys Asp Lys Ser Ser Asp Ser Asp Ser Val Ser
```

```
            500                 505                 510
Ser Glu Ser Asp Lys Asp Glu Cys Cys Arg Leu Glu Tyr Tyr Val Ser
        515                 520                 525
His Gln Gly Ile Leu Ser Ser Asp His Lys Pro Leu Thr Ala Gly Phe
    530                 535                 540
Thr Ile Lys Tyr Glu Ala Val Asp Pro Tyr Leu Lys Ala Lys Val His
545                 550                 555                 560
Gln Glu Val Val Arg Glu Leu Asp Lys Ala Glu Lys
                565                 570
```

<210> 34608
<211> 329
<212> PRT
<213> A.fumigatus

<400> 34608

```
Val Phe Pro Ser Thr Thr His Ile Leu Thr Met Thr Thr Arg Lys Pro
1               5                   10                  15
Arg Arg Thr Asn Asn Gly Ser Gly Asn His His Arg Pro Asn His Asn
            20                  25                  30
Gly Thr Gln Pro Ser Asp Tyr Glu Ser Asp Tyr Pro Asn Tyr Phe Ser
        35                  40                  45
Asp Thr Gln Gln Gln Gln Glu Gln His Met Pro Pro Pro Pro Leu Arg
    50                  55                  60
Ser Asn Glu Glu Leu Asn Leu Ser Val Leu Arg Arg His Asn Pro Ser
65                  70                  75                  80
Val Asn Thr Ile Leu Ser Leu Ala Pro Tyr Ala Val Val Tyr Leu Phe
                85                  90                  95
Asn Pro Thr Ser Arg Gln Trp Glu Lys Ser Gly Val Glu Gly Ser Leu
            100                 105                 110
Phe Val Cys Gln Leu Ser Gln Gly Ser Leu Gly Glu Glu Arg Tyr Ser
        115                 120                 125
Val Phe Val Leu Asn Arg Arg Gly Leu Asn Asn Phe Asp Ile Leu Leu
    130                 135                 140
Thr Asp Gly Asp Asn Val Glu Leu Thr Glu Glu Tyr Val Ile Ile Lys
145                 150                 155                 160
Ser Asp Tyr Asp Leu Asp Thr Asp Gln Gly Ile Ser Asn Asn Gly Asp
                165                 170                 175
Tyr Ser Gly Ala Lys Lys Asn Val Asn Pro Ala Asp Val Arg Ile Tyr
            180                 185                 190
Gly Leu Trp Ile Tyr Ser Glu Pro Pro Pro Asn Ser Thr Ala Glu Thr
        195                 200                 205
Arg Thr Ile Asn Ala His Met Ile Arg Glu Cys Ala Val His Ala Gly
    210                 215                 220
Gln Ser Leu Lys Ile Ala Arg Glu Arg Leu Glu Ala Thr Arg Gln Asn
225                 230                 235                 240
Gly Leu His Val Ala Thr Ala Ala Ala Glu Ala Gly Ser Met Asp Gly
                245                 250                 255
Met His Ser Ser Val Pro Met Gly Arg Gln Ile Ser Leu Lys Asp Leu
            260                 265                 270
Phe Gly Gln Gln Arg Ala Gln Asp Asp Glu Trp Ser Val Lys Ala His
        275                 280                 285
Asn Phe Gly Gln Pro Gln Trp Gln Gln Thr Pro Met Glu Met Pro Ala
    290                 295                 300
Ala Glu Pro Leu Pro Arg Gln Asp Val Leu Arg Asp Leu Phe Arg Arg
305                 310                 315                 320
```

```
Ala Gly Leu Ala Cys Gln Glu Tyr Ser
                325

<210> 34609
<211> 62
<212> PRT
<213> A.fumigatus

<400> 34609
Leu Glu Val Ile Tyr Tyr Ile Phe Ser Val Leu Tyr Thr Ser Phe Thr
1               5                  10                  15
Lys Glu Ser Thr Gly Val Asn Ser Met Ser Ile Pro Leu His Tyr Thr
            20                  25                  30
Tyr Ser His Asn Asp Asp Pro Gln Thr Pro Thr Asn Glu Gln Trp Gln
        35                  40                  45
Trp Gln Pro Ser Ser Ser Gln Ser Gln Trp His Ala Thr Leu
    50                  55                  60

<210> 34610
<211> 146
<212> PRT
<213> A.fumigatus

<400> 34610
Ser Pro Thr Ser Ser Ser Ala Phe Pro Ser Ser Val Arg Leu Leu Leu
1               5                  10                  15
Phe Pro Pro Leu Pro Val Pro Ser Tyr Leu Ile Cys His Cys Ile Ile
            20                  25                  30
Leu Ile Ser Leu Leu Phe Ser Leu Val Thr Tyr Trp Leu Ser Asn Phe
        35                  40                  45
Cys Ser Asp Ala Phe Val Phe Phe Thr Trp Val Met Trp Leu Phe Leu
    50                  55                  60
Asp Leu Leu Ala Ala Glu Ser Leu Val Val Phe Val Thr Ser Ile Phe
65                  70                  75                  80
Pro Asn Phe Val Ile Glu Phe Ala Leu Val Ala Phe Ala Asn Gly Leu
                85                  90                  95
Trp Met Ser Val Gly Gly Phe Leu Val Ser Pro Thr Ile Leu Asn Pro
            100                 105                 110
Phe Trp Lys Tyr Val Phe His Tyr Ile Asp Tyr Gln Tyr Thr Pro His
        115                 120                 125
Pro Ile Phe Phe Ser Gln Ala Val Asp Cys Gly Arg His Val Ser Asp
    130                 135                 140
Tyr His
145

<210> 34611
<211> 301
<212> PRT
<213> A.fumigatus

<400> 34611
Ala Gly Gly Cys Ser Asp Arg Phe Val Asp Cys Ala Gly Asp Val Glu
1               5                  10                  15
Val Cys Cys Gly Ser Leu Val Thr Lys Val Cys Phe Gln Ser Ser Phe
            20                  25                  30
Ser Val Leu Gln Gly Leu Arg Thr Gly Ala Cys Ser Ser Val Ser Lys
```

```
        35                  40                  45
Ala Gln Arg Arg Asp Arg Ile Gln Thr Leu Leu Glu Ser Phe Gly Ile
    50                  55                  60
Leu Asn Gln Ala Ala Thr Leu Val Gly Thr Pro Ile Arg Lys Gly Ile
65                  70                  75                  80
Ser Gly Gly Gln Lys Arg Arg Val Ser Val Ala Ser Gln Leu Ile Thr
                85                  90                  95
Cys Pro Lys Ile Cys Phe Leu Asp Glu Pro Thr Ser Gly Leu Asp Ser
            100                 105                 110
Thr Ala Ser Tyr Glu Val Ile Ser Tyr Val Lys Glu Leu Ala Val Ala
        115                 120                 125
Asn Asn Val Arg Arg Ile Pro Leu Leu Val Gly Asp Trp Thr Asp Ala
    130                 135                 140
Ser Phe Ala Ala His Arg His Arg Lys Tyr Pro Ser Ala Val Asp Asn
145                 150                 155                 160
His Ile Pro Ala Leu Arg Gln Ile Ala Ser Phe Val Lys Arg Gln Val
                165                 170                 175
Leu Leu Leu Trp Ala Arg Ser Ser Asp Ile Asp Leu Phe Arg Gln Tyr
            180                 185                 190
Arg Ala Pro His Pro Val Glu His Glu Ser Arg Arg Val His Ser Arg
        195                 200                 205
His Cys Gln Leu Arg Leu Leu Arg Cys Lys Gly Arg Gln Cys Arg Gly
    210                 215                 220
Thr Ser Ala Ala Tyr Pro Gly Ile Leu Val Ala Val Arg Arg Ala Glu
225                 230                 235                 240
Gly Arg Arg Gln Pro Asn Leu Ala Ala Asp Arg Ala Pro Arg Ala Gly
                245                 250                 255
Gln Glu Glu Asp His Asn Gly Arg Thr Leu Pro Ala Lys His Cys Gln
            260                 265                 270
Tyr His Leu Val Thr Val Ala Pro Leu Phe His Gln Glu Leu Pro Arg
        275                 280                 285
Cys Cys Gly Val Trp His Pro His Arg His Val Ser Gly
    290                 295                 300
```

<210> 34612
<211> 149
<212> PRT
<213> A.fumigatus

<400> 34612

```
Leu Arg Ala Ser Ala Gly Val Ser Ser Arg Val Cys Tyr Cys Cys Ile
1               5                   10                  15
Leu Ala Thr Leu Glu Ser His Ser Val Asp Ile Ala Lys Gly Glu Leu
            20                  25                  30
Val Ala Leu Met Gly Pro Ser Gly Cys Gly Lys Thr Thr Leu Leu Asn
        35                  40                  45
Val Leu Ala Arg Arg Ala Ala Thr Ser Gly Ala Lys Thr Thr Gly Glu
    50                  55                  60
Cys Tyr Val Asn Gly Gly Ala Leu Asp Asn Ala Thr Phe Gly Arg Ile
65                  70                  75                  80
Thr Ser Tyr Val Glu Gln Glu Asp Ala Leu Ile Gly Ser Leu Thr Val
                85                  90                  95
Gln Glu Thr Leu Lys Phe Ala Ala Asp Leu Ser Leu Pro Arg Tyr Ala
            100                 105                 110
Ser Asn His Arg Ser Leu Cys Tyr Lys Ala Tyr Gly Gln Gly Pro Ala
        115                 120                 125
```

```
Ala Leu Phe Gln Lys His Ser Asp Val Thr Val Phe Arg Leu Tyr Trp
    130                 135                 140
Ser Pro Leu Val Phe
145

<210> 34613
<211> 182
<212> PRT
<213> A.fumigatus

<400> 34613
Asp Glu Ser Arg Tyr Trp Leu Glu Thr Gly Leu Thr Gln Val Ser Gln
1               5                   10                  15
Leu Ile Val Ile Ala Ser Ile His Gln Pro Ser Thr Thr Thr Phe Gln
            20                  25                  30
Leu Phe Asp Lys Leu Leu Leu Leu Ser Lys Gly Lys Ser Cys Tyr Phe
        35                  40                  45
Gly Pro Val Pro Gln Ile Ser Thr Tyr Phe Gly Ser Ile Gly His Pro
    50                  55                  60
Ile Pro Leu Asn Thr Asn Pro Ala Glu Phe Ile Leu Asp Ile Val Ser
65                  70                  75                  80
Ser Asp Phe Ser Asp Ala Lys Glu Gly Asn Ala Ala Glu Arg Val Arg
                85                  90                  95
His Ile Gln Glu Ser Trp Leu Gln Ser Ala Glu Arg Arg Ala Val Asp
            100                 105                 110
Asn Gln Ile Ser Gln Leu Ile Glu His Pro Glu Gln Asp Arg Lys Lys
        115                 120                 125
Ile Thr Met Gly Glu Leu Ser Arg Pro Asn Thr Ala Ser Ile Thr Trp
    130                 135                 140
Ser Leu Leu His Arg Ser Phe Ile Lys Ser Tyr Arg Asp Val Val Ala
145                 150                 155                 160
Tyr Gly Ile Arg Ile Val Met Tyr Leu Gly Lys Tyr Leu Ser Arg Glu
                165                 170                 175
Pro Gly Ser Gly Ala Cys
            180

<210> 34614
<211> 180
<212> PRT
<213> A.fumigatus

<400> 34614
Leu Thr Arg Gly Leu Ala Ile Met Met Gly Thr Val Trp Leu Arg Leu
1               5                   10                  15
His Glu Ser Gln Glu Tyr Ile Gln Pro Phe Ile Asn Ala Ile Val Ser
            20                  25                  30
Asn Pro Cys Ser Ser Ser Glu Arg Arg Ser Arg Ser Asp Val Gln Phe
        35                  40                  45
Phe Gly Ser Ala Phe Met Ser Phe Met Ala Val Ala Tyr Val Pro Ala
    50                  55                  60
Phe Leu Glu Asp Arg Ala Thr Phe Ile Lys Glu Arg Ala Asn Gly Leu
65                  70                  75                  80
Tyr Gly Ala Leu Pro Phe Ile Ile Ser Asn Phe Ile Ile Gly Leu Pro
                85                  90                  95
Phe Leu Cys Ala Ser Pro Pro Leu Pro Pro Thr Ser Arg Pro Leu Ile
            100                 105                 110
```

```
Ser Asn Leu Pro Leu Tyr Asn Pro Asn Leu Thr Pro Leu Leu Pro Arg
        115                 120                 125
His Leu Leu Ala Leu Gln Leu Leu Leu Arg Arg Ile Arg Leu Leu His
    130                 135                 140
Met Gly His Val Ala Leu Pro Arg Pro Pro Ser Arg Arg Ile Pro Arg
145                 150                 155                 160
Arg Leu Arg Asp Ile His Leu Pro Gln Leu Arg His Arg Val Cys Pro
                165                 170                 175
Arg Arg Leu Arg
            180
```

<210> 34615
<211> 191
<212> PRT
<213> A.fumigatus

<400> 34615

```
Pro Gln Gly Pro Asp Arg Asp Val Ser Ala Val Ala Phe Ser Ile Leu
1               5                   10                  15
Val Leu Pro Val Val Gly Ser Asp Ser Asn Ser Val Asn Leu Gly Gly
            20                  25                  30
Leu His Thr Leu Ala Arg Leu Asp Thr Thr Val Thr Val Val Asp Ala
        35                  40                  45
Phe Asn Leu Leu Ser Asn Phe Asp Thr Ala Glu Phe Leu Ser Asp Arg
    50                  55                  60
Tyr Gly Ser Lys Asp Ile Ile Pro Glu Asp Glu Arg Thr Ile Ser Asp
65                  70                  75                  80
Leu Met Val Asp Gln Ile Glu Phe Ala Asp Val Leu Ile Ile Asn Lys
                85                  90                  95
Ile Glu Thr Val Asp Glu Asn Thr Arg Ala Arg Ile Arg Arg Leu Leu
            100                 105                 110
Lys Thr Leu Asn Pro Glu Ala Lys Val Leu Glu Thr Ser Tyr Ser Arg
        115                 120                 125
Val Asp Val Lys Glu Ile Leu Asp Thr Gly Arg Phe Asp Phe Leu Lys
    130                 135                 140
Ala Ala Ser Gly Ala Gly Trp Leu Arg Ser Leu His Glu Met Thr Ile
145                 150                 155                 160
Gln Asn Thr Gly Asn Gly Gln Arg Met Ala Pro Lys Pro Glu Thr Leu
                165                 170                 175
Glu Phe Val Ser Pro Ala Leu His Pro Thr Ser Gly Lys Val His
            180                 185                 190
```

<210> 34616
<211> 117
<212> PRT
<213> A.fumigatus

<400> 34616

```
Ala Ser Thr Gly Thr Ser Leu Ser Ile Ser Gly Asn Ile Asp Ala Tyr
1               5                   10                  15
Trp Gln Tyr Arg Leu Asn Ile Asp Ala Ala Leu Ile Thr His His Arg
            20                  25                  30
Val Ser Gln Thr Lys Glu Lys Leu Ile Gln Leu Gln Asn Gly Cys Ile
        35                  40                  45
Cys Cys Thr Leu Arg Gly Asp Leu Leu Ser Glu Leu Ala His Leu Ala
    50                  55                  60
```

```
Arg Gln Lys Glu Val Gln Tyr Val Val Ile Glu Ser Thr Gly Ile Ser
65                  70                  75                  80
Glu Pro Met Gln Val Ala Glu Thr Phe Thr Ala Glu Phe Ser Ser Ala
                85                  90                  95
Met Leu Gln Ala Asp Gln Glu Met Leu Val Asp Glu Asp Ser Arg Lys
            100                 105                 110
Val Leu Thr Glu Met
        115
```

<210> 34617
<211> 308
<212> PRT
<213> A.fumigatus

<400> 34617

```
Gln Phe Arg Ile Leu Glu Met Gly Arg Glu Trp Leu Arg Ser Arg Arg
1               5                   10                  15
Pro Trp Ser Leu Ser Pro Leu Pro Ser Ile Gln His Gln Gly Arg Tyr
            20                  25                  30
Thr Asp Leu Asn Arg Tyr Gly Ile Asn Asn Phe Val Tyr Thr Ala Arg
        35                  40                  45
Arg Pro Phe His Pro Arg Arg Leu Phe Thr Leu Leu His Asp Lys Phe
    50                  55                  60
Ile Leu Leu Gln Asn Asn Glu Ala Asp Glu Gly Asp Glu Asp Glu Asp
65                  70                  75                  80
Glu Lys Glu Ala Ala Asp Glu Gly Glu Glu Glu Gly Glu Glu Glu Asp
                85                  90                  95
Asp His Met Glu Met Asp Glu Asp Glu Asp Glu Asn Asp Gly Asp Asp
            100                 105                 110
Asp Asp Asp Asp Glu Ser Ile Ser Asp Phe Glu Gln Pro Asp Pro Ser
        115                 120                 125
Glu Ile Leu Lys Asn Lys Arg Asn His Pro Ala Phe Ser Ser Val Leu
    130                 135                 140
Arg Ser Lys Gly Phe Phe Trp Leu Ala Thr Arg Pro Phe Gln Phe Gly
145                 150                 155                 160
Glu Trp Ser Gln Ala Gly Gly Met Leu Thr Met Gly Cys Gly Gly Pro
                165                 170                 175
Trp Phe Ala Glu Val Pro Asp Glu Ala Trp Pro Glu Asp Pro Asp Val
            180                 185                 190
Arg Lys Ser Ile Glu Asn Asp Phe Arg Glu Pro Pro Leu Gly Asp Arg
        195                 200                 205
Arg Gln Glu Ile Val Phe Ile Gly Glu Gly Ile Asn Thr Glu Leu Ile
    210                 215                 220
Thr Lys Leu Leu Asp Glu Cys Leu Val Asp Asp Asp Asp Met Ser Arg
225                 230                 235                 240
Trp Thr Lys Ile Met Asn Asn Lys Arg Leu Ser Tyr Arg Gln Lys Glu
                245                 250                 255
Glu Lys Leu Gly Lys Leu Trp Glu Asp Gly Trp Glu Ala Trp Pro Glu
            260                 265                 270
Phe Gly Ile Val Asp Glu Asp Glu Glu Asp Asn Asn Glu Gly Gly Lys
        275                 280                 285
Lys Lys His Lys Gln Tyr Thr Ser Glu Tyr Gln Gly Arg Val Gln Ser
    290                 295                 300
His Ser Tyr Lys
305
```

<210> 34618
<211> 107
<212> PRT
<213> A.fumigatus

<400> 34618
Thr Phe Arg Gln Gln Glu Ile Phe Thr Lys Asn Leu Thr Leu Gly Cys
1 5 10 15
Trp Phe Trp Asp Asn Gln Phe Arg Tyr Ile Gln Arg Tyr Gly Val Gly
20 25 30
Thr Gln Ser Leu Lys Glu Pro Ile Asp Ile Val Trp Ser Lys Gln Arg
35 40 45
Phe Tyr Ala Phe Ser Gly Ser Met Leu Thr Arg Ser Ser Ser Gln Ser
50 55 60
Tyr Lys Ile Ala Glu Met Asn Gly Trp Phe Tyr Ile Pro Ser Lys Ala
65 70 75 80
Tyr Asn Thr His Ala Ser Gly Phe Pro Glu Ala Arg Lys Ile Leu Glu
85 90 95
Arg Ser Glu Gln Cys Gly Arg Leu His His Lys
100 105

<210> 34619
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34619
Asn Ile Glu Pro Glu Ser Arg Glu Arg Ala Phe His Ser Gly Ala Leu
1 5 10 15
Glu Phe Ala Leu Ser Arg Ala Tyr Phe Ser Asp Glu Leu Met Ser Trp
20 25 30
Ile Phe His Ser Gly Gln Tyr Leu Phe Val Val Glu Ser Ser Ala Leu
35 40 45
Leu Thr Thr Phe Lys Tyr Leu Ala Ser Leu Gly Lys Ala
50 55 60

<210> 34620
<211> 186
<212> PRT
<213> A.fumigatus

<400> 34620
Pro Asn Phe Lys Leu His Arg Val Phe Ile Thr Ala Tyr Asp Thr Ile
1 5 10 15
Arg Asp Ser Val Leu Gln Ser Arg Leu Leu Lys His Ile Leu Pro Thr
20 25 30
Ser Ser Arg Ile Ala Ala Leu Arg Cys Arg Leu Ala Leu Ala Phe Leu
35 40 45
Thr Ser Asp Pro Glu Arg Leu Thr Glu Ala Pro Asp Val Met Ser Asp
50 55 60
Leu Lys Met Ile Ile Asn Leu Leu Lys Asp Arg Arg Phe Asn Ile Asn
65 70 75 80
Leu Tyr Lys Gly Arg Gly Asn Pro Glu Tyr Asp Tyr Gly Glu Leu Ser
85 90 95
Ala Val Thr Asp Leu Leu Asn Val Ala Ile Asp Ser Gly Trp Ser Gly
100 105 110

```
Leu Ala Phe Pro Thr Lys Glu Ala Glu Lys Asp Phe Asn Ala Asp Val
        115                 120                 125
Asp Arg Leu Ser Asp Arg Val Lys Lys Ile Phe Val Ser Ile Gln Asp
    130                 135                 140
Ser Gly Ala Ser His Leu Lys Arg Thr Leu Ala Lys Glu Ala Leu Glu
145                 150                 155                 160
Thr Leu His Tyr Arg Ile Ile Asn Ser Val Arg Ser Lys Pro Leu Pro
                165                 170                 175
Lys Lys Thr Ile Ala Trp Ser Leu Arg Ser
            180                 185
```

<210> 34621
<211> 125
<212> PRT
<213> A.fumigatus

<400> 34621

```
His Pro Val Met Ser Gln Asn Arg Pro Gly Val Phe Ser Asn Leu Arg
1               5                   10                  15
Met Gly Gly Lys Glu His Pro Asn Ala Glu Ser Asn Cys Ser Glu Asn
            20                  25                  30
Ile Thr Gln Glu Pro Val Glu Leu Thr Ala Leu Leu Ser Asp His Thr
        35                  40                  45
Glu Val Val Arg Glu Lys Val Gln Asp Gly Leu Thr Gly Glu Thr Lys
    50                  55                  60
Glu Ile Ser Tyr Ser Gln Cys Lys Ile Val Gly Asn Gly Ser Phe Gly
65                  70                  75                  80
Val Val Phe Gln Thr Lys Met Met Pro Ser Gly Glu Asp Ala Ala Ile
                85                  90                  95
Lys Arg Val Leu Gln Asp Lys Arg Phe Lys Val Cys Val His Tyr Lys
            100                 105                 110
Gly Asn Cys Pro Arg Cys Pro Thr Gln Arg Tyr Cys Arg
        115                 120                 125
```

<210> 34622
<211> 107
<212> PRT
<213> A.fumigatus

<400> 34622

```
Phe Leu Leu Gln Val Trp Tyr Cys His Ala Asp Asp Arg Gln Asp Val
1               5                   10                  15
Trp Ser Thr Gly Cys Val Met Ala Glu Leu Met Leu Gly Gln Pro Leu
            20                  25                  30
Phe Pro Gly Glu Ser Gly Ile Asp Gln Leu Val Glu Ile Ile Lys Val
        35                  40                  45
Leu Gly Thr Pro Thr Arg Glu Gln Ile Arg Thr Met Asn Pro Asn Tyr
    50                  55                  60
Met Glu His Lys Phe Pro Gln Ile Lys Pro His Pro Phe Asn Lys Val
65                  70                  75                  80
Thr Thr Leu Leu Lys Asn Phe Leu Arg Ile Cys Thr Asp Leu Met Thr
                85                  90                  95
Pro Gly Phe Pro Glu Ser Ser Ser Arg Gly His
            100                 105
```

<210> 34623

<211> 68
<212> PRT
<213> A.fumigatus

<400> 34623
Leu Pro Tyr His Arg Leu Ser Gln Lys Asp Glu Val Tyr Leu Asn Leu
1 5 10 15
Val Leu Glu Tyr Val Pro Asp Ser Val Tyr Arg Ala Ser Pro Tyr Phe
20 25 30
Asn Lys Leu Lys Thr Thr Met Pro Met Ser Glu Val Lys Leu Tyr Ile
35 40 45
Tyr Gln Leu Phe Arg Ser Leu Ala Tyr Ile His Ser Gln Gly Ile Cys
50 55 60
His Arg Asp Ile
65

<210> 34624
<211> 87
<212> PRT
<213> A.fumigatus

<400> 34624
Pro Gln Val Phe Arg Arg Ala Pro His Glu Ala Ile Asp Leu Ile Ser
1 5 10 15
Ala Leu Leu Glu Tyr Thr Pro Thr Gln Arg Leu Ser Ala Ile Glu Ala
20 25 30
Met Cys His Pro Phe Phe Asp Glu Leu Arg Asp Pro Asn Thr Arg Leu
35 40 45
Pro Asp Ser Arg His Pro Gly Gly Ala Ala Arg Asp Leu Pro Asn Leu
50 55 60
Phe Asp Phe Ser Arg His Gly Leu Leu Ser Leu Glu Ala Gln Ile His
65 70 75 80
Ser Ser Arg Trp Leu Ile Arg
85

<210> 34625
<211> 71
<212> PRT
<213> A.fumigatus

<400> 34625
Gly Ala Asp Cys Ser Phe Glu Ser Gln Phe Ser His Ser Leu Thr Glu
1 5 10 15
Gly Asn Pro Ile Met Tyr Lys Cys Gln Gln Ile Gly Ser Phe Trp Gly
20 25 30
Asn Arg Phe Thr Gln His Asn Phe Gln Val Asp Pro Val Tyr Leu Ile
35 40 45
Lys Lys Asn Arg Glu Glu Arg Gln His Glu Glu Met Ile His Val Ser
50 55 60
Val Phe Ile His Thr Ser Glu
65 70

<210> 34626
<211> 543
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (286)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34626

```
Val Gly Arg Glu His Trp Glu His Pro Gly Trp Val Glu Glu Asn Lys
1               5                  10                  15
Val Met Gln Ile Ser Ser Leu Ala Gly Gln Gly Leu Arg Gly Gly Phe
            20                  25                  30
Arg Asn Phe Ile Gly His Asn Phe Arg Lys Gly Asn Gln Ser Gly Glu
        35                  40                  45
Gly Glu Trp Ile Phe Asn Lys Asp Phe Val Ala Asn Val Tyr Val Gly
    50                  55                  60
Leu Thr Ser Leu Leu Lys Gly Gly Lys Pro Asn Leu Ser Leu Leu Leu
65                  70                  75                  80
Asp Gln Leu Phe Gly Leu Lys Ala Ser Ala Gly Val Gly Thr Pro Thr
                85                  90                  95
Ala Lys Arg Glu Pro Thr Ile Leu Ser Asp Leu Ile Cys Ser Ser Asp
            100                 105                 110
Leu Leu Ala Arg Leu Glu Arg Tyr Leu Asn Met His Pro Gln Lys Arg
        115                 120                 125
Gly Glu Asp Leu Leu Ser Ser Leu Arg Ser Tyr Arg Asp Glu Ser Lys
    130                 135                 140
Ala Phe His His Arg Tyr Gln Lys Gln Arg Lys Lys Thr Asp Lys Gly
145                 150                 155                 160
Lys Gly Arg Val Leu Asp Leu Pro Thr Ala Glu Asn Met His Val His
                165                 170                 175
Lys Met Ser Leu Val Thr Gln Val Gln Asp Leu Phe Pro Asp Leu Gly
            180                 185                 190
Ser Gly Tyr Ile Val Arg Leu Leu Asp His Tyr Gly Asp Asn Pro Glu
        195                 200                 205
Ala Val Val Ala His Leu Leu Asp Asp Ser Leu Pro Pro Glu Leu Gln
    210                 215                 220
Glu Leu Asp Gln Ser Glu Gln Leu Pro Val Ser Glu Thr Ser Pro Arg
225                 230                 235                 240
His Asp Pro Val Pro Pro His Ala Thr Pro Pro Glu Ile Pro Ser Pro
                245                 250                 255
Ala Ala Pro Ala Pro Arg Lys Asn Met Phe Asp Asn Asp Val Asp Leu
            260                 265                 270
Ala Glu Ile Ala Arg Ser Ala Asp Gln Ala Arg Gln Gly Xaa Leu His
        275                 280                 285
Phe Gly Arg Arg Asp Ser Asp Leu Thr Ala Asp Thr Ile Leu Ala Asp
    290                 295                 300
Arg Ser Gln His Ala Val Asn Lys Ala Ala Ile Met Ser Ala Leu Ala
305                 310                 315                 320
Ala Phe Asp Ser Asp Asp Asp Glu His Asp Asp Thr Tyr Asp Val Ala
                325                 330                 335
Asp Val Gly Gly Thr Val Asp Gly Leu Thr Ala Val Thr Asp Ala Glu
            340                 345                 350
Ala Asp Ala Asp Ile Arg Asn Arg Arg Ala Glu Asp Leu Asp Met Thr
        355                 360                 365
Leu Phe Gln Ala Tyr Lys Ala Asn Pro Ala Leu Phe Ala Arg Asp Ser
    370                 375                 380
Ala Thr Arg Arg Ser Gln Pro Arg Ala Ser Leu Lys Arg Glu Thr Gly
```

385 390 395 400
Met Thr Asp Glu Ala Ile Glu Gly Trp Ser Val Met Leu Ala Arg Asp
405 410 415
Pro Lys Arg Leu Ala Lys Leu Glu Asp Arg Phe Thr Met Leu Ala Gly
420 425 430
Ala Pro Gly Gly Ala Leu Ala Gln Pro Glu Leu Pro Ser Thr Ala Tyr
435 440 445
Arg Lys Pro Gly Pro Arg Glu Asp Gly Glu Ser Asp Ser Asp Thr Asp
450 455 460
Gln Pro Ser Ser Ala Ser Gly Gly Arg Gly Gly Pro Arg Arg Gly Gly
465 470 475 480
Gly Arg Gly Gly Arg Arg Gly Gly Gly Gly Gly Arg Ala Arg Arg Gly
485 490 495
Gly Thr Asn Ala Gly Ala Ser Gly Asp Gln Asn Pro Thr Val Ala Arg
500 505 510
Gln Arg Lys Glu Glu Asn Lys Ala Ser Arg Ala Asn His Asn Arg Arg
515 520 525
Gln Gln Arg Ala Arg Lys Ile Ala Arg Gly Gly Gly Met Pro Gly
530 535 540

<210> 34627
<211> 128
<212> PRT
<213> A.fumigatus

<400> 34627
Leu Ala Trp Met Thr Glu Leu Ile Phe Cys Pro Leu Gly Met Val Tyr
1 5 10 15
Ile Arg Asn Tyr Arg Leu Ser Arg Asp Thr His His Lys Met Tyr Lys
20 25 30
Met Cys Ser Val Ser Phe Val Leu Arg Asn Arg Ser Thr Trp His Ala
35 40 45
Thr Thr Pro Gly Asn Leu Pro Gly Ser Leu Leu Ala Ser Val Val Ile
50 55 60
Arg Pro Ala Ser Leu Ile Phe Phe Leu Pro Leu Ser Ser His Ser Gly
65 70 75 80
Val Leu Val Ser Arg Ser Ser Ser Ile Ser Pro Ser Ser Ala Arg Pro
85 90 95
Ala Thr Thr Ala Thr Ser Ser Thr Thr Ala Thr Thr Ala Pro Ser Gly
100 105 110
Thr Ser Ser Ala Thr Arg Ser Gly Thr Gly Leu Ile Gly Val Thr Ile
115 120 125

<210> 34628
<211> 75
<212> PRT
<213> A.fumigatus

<400> 34628
Val Gly Leu Ala Ser Phe Gln Gln Arg Gly Gln Ala Asn Ile Asp Val
1 5 10 15
Arg Asn Lys Val Leu Val Glu Asn Pro Leu Ser Leu Ser Gly Leu Ile
20 25 30
Pro Leu Pro Lys Ile Val Ser Tyr Glu Ile Pro Lys Pro Ser Pro Lys
35 40 45
Pro Leu Ala Arg Gln Gly Arg Asn Leu His Asn Leu Ile Phe Leu His

```
    50                  55                  60
Pro Thr Arg Met Phe Pro Met Phe Pro Ser His
65                  70                  75

<210> 34629
<211> 231
<212> PRT
<213> A.fumigatus

<400> 34629
Arg Val Phe Arg Ala Pro Tyr Tyr Asp Arg Ile Met His Phe Asp Ala
1               5                  10                  15
Met Ala Asn Phe Met Leu Arg Tyr Gln Asn Tyr Leu Tyr Tyr Pro Ile
            20                  25                  30
Leu Leu Phe Gly Arg Phe Asn Leu Tyr Arg Leu Ser Trp Glu Tyr Leu
        35                  40                  45
Phe Cys Gly Gln Ala Pro Lys Lys Gly Pro Ala Trp Trp His Arg Trp
    50                  55                  60
Phe Glu Ile Gly Gly Gln Val Phe Phe Trp Tyr Trp Phe Gly Tyr Gly
65                  70                  75                  80
Val Leu Tyr Arg Ser Ile Pro Asn Trp Ser Ser Arg Ile Ala Tyr Ile
                85                  90                  95
Leu Val Ser His Met Val Thr Ala Pro Leu His Val Gln Ile Thr Leu
            100                 105                 110
Ser His Phe Ala Met Ser Thr Ala Asp Leu Gly Ala Gln Glu Ser Phe
        115                 120                 125
Pro Gln Lys Met Leu Arg Thr Thr Met Asp Val Asp Cys Pro Thr Trp
    130                 135                 140
Leu Asp Phe Phe His Gly Gly Leu Gln Phe Gln Ala Ile His His Leu
145                 150                 155                 160
Tyr Pro Arg Ile Pro Arg His Asn Leu Arg Arg Thr Gln Lys Leu Val
                165                 170                 175
Ile Asp Phe Cys Arg Asp Thr Gly Ile Pro Tyr Ala Val Phe Thr Phe
            180                 185                 190
Tyr Asp Gly Asn Lys Lys Val Ile Gly Lys Leu Gly Asp Val Ala Lys
        195                 200                 205
Gln Val Arg Ile Leu Glu Glu Cys Arg Lys Ser Cys Ala Glu Gln Gly
    210                 215                 220
Val Phe Ser Asp His His His
225                 230

<210> 34630
<211> 428
<212> PRT
<213> A.fumigatus

<400> 34630
Ala Val Glu Thr Asn Cys Arg Pro Ser Pro Ser Glu His His Asp Pro
1               5                  10                  15
His Leu Ser Arg Leu Leu Gln Ser Arg Ala Leu Pro Gly Asp Arg Arg
            20                  25                  30
His Ile Ser Gly Ser Val Arg Ala Arg Gly Asp Phe Ser Tyr Gln Cys
        35                  40                  45
Ile Pro Lys Asp Thr Lys Ser Ala Ser Leu Leu Pro Phe Glu Arg Phe
    50                  55                  60
Trp Phe Ser Ile Pro Val Ala Glu Pro Arg Leu Thr Ile Leu Val Asp
```

```
65                  70                  75                  80
Phe Glu Glu Ala Ser His Ile Phe Thr Asp Ile Leu Ile Thr Ser Pro
                85                  90                  95
His Arg Leu Asp Ser Leu Asp His Tyr Ser Asn Ile Leu Tyr Val Met
            100                 105                 110
Gly Ala Arg Pro Gln Leu Ala Phe Val Ala Gln Val Ala Thr Ala Thr
        115                 120                 125
Asp Lys Phe Arg Pro Glu Thr Cys Cys Val Val Gly Asn Tyr Tyr Ser
    130                 135                 140
Leu Lys Ser Glu His Glu Lys Ala Val Met Tyr Phe Arg Arg Ala Leu
145                 150                 155                 160
Thr Leu Asp Arg Asn Phe Leu Ser Ala Trp Thr Leu Met Gly His Glu
                165                 170                 175
Tyr Ile Glu Met Lys Asn Thr His Ala Ala Ile Glu Ser Tyr Arg Arg
            180                 185                 190
Ala Val Asp Val Asn Arg Lys Asp Tyr Arg Ala Trp Tyr Gly Leu Gly
        195                 200                 205
Gln Ala Tyr Glu Val Leu Asp Met Ser Phe Tyr Ala Leu Phe Tyr Tyr
    210                 215                 220
Gln Arg Ala Ala Ala Leu Arg Pro Tyr Asp Pro Lys Met Trp Gln Ala
225                 230                 235                 240
Val Gly Ser Cys Tyr Ala Lys Met Gly Arg Val Glu Gln Ser Ile Lys
                245                 250                 255
Ala Leu Lys Arg Ala Leu Val Ala Gly Ser Tyr Tyr Ala Asp Asp Ala
            260                 265                 270
Ser Gln Gly Gly Gly Met Gly Gly Pro Gly Arg Lys Ile Leu Asp Pro
        275                 280                 285
Glu Thr Leu His Gln Ile Ala Thr Leu Tyr Glu Arg Leu Gly Asp Glu
    290                 295                 300
Glu Glu Ala Ala Ala Tyr Met Glu Leu Thr Leu Gln Gln Glu Thr Gly
305                 310                 315                 320
Gln Gly Pro Glu Asp Glu Ser Phe Ala Ser Asp Asn Asp Asn Asp Asp
                325                 330                 335
Asp Gln Ser Gly Gly Glu Gly Gln Gln Gly Ser Arg Arg Ala Arg Gln
            340                 345                 350
Ser Ser Ser Phe Gly Asn Gln Asn Asp Ser Glu Asp Gly Thr Tyr His
        355                 360                 365
Gly Thr Gly Val Thr Ala Thr Thr Ser Lys Ala Arg Leu Trp Leu Ala
    370                 375                 380
Arg Trp Ala Leu Arg His Gly Asp Leu Glu Arg Ala Asp Gln Leu Ala
385                 390                 395                 400
Gly Glu Leu Cys Gln Asp Gly Val Glu Val Glu Glu Ala Lys Ala Leu
                405                 410                 415
Met Arg Asp Val Arg Ala Arg Arg Glu Gly Gly Gly
            420                 425
```

<210> 34631
<211> 149
<212> PRT
<213> A.fumigatus

<400> 34631

```
Phe Ala Gly Lys Ala Lys Pro Gly Asn Leu Tyr Ser Arg Ser Lys Arg
1               5                   10                  15
Ile Ala Arg Pro Arg Phe Gln Phe Pro Ser Ser Val Lys Ser Pro Trp
            20                  25                  30
```

```
Phe Leu Pro Leu Tyr Ala Lys Tyr Leu Ala Gly Glu Lys Arg Lys Asp
        35                  40                  45
Glu Glu Thr Glu Met Val Leu Ala Pro Ala Asp Gly Gly Met Thr Phe
    50                  55                  60
Asn Arg Glu Leu Pro Gly Leu Ala Trp Gly Leu Glu Gly Trp Phe Ala
65                  70                  75                  80
Glu Arg Arg Glu Arg Gly Leu Glu Glu Arg Asn Gln Gly Trp Leu Glu
                85                  90                  95
Tyr Leu Tyr Gly Val Val Leu Leu Lys Gly Arg Asn Glu Glu Glu Ala
            100                 105                 110
Lys Lys Trp Leu Ile Arg Ser Val His Leu Asn Pro Phe His Trp Gly
        115                 120                 125
Ala Trp Gln Glu Leu Asn Asp Leu Leu Ser Ser Thr Glu Asp Val Arg
    130                 135                 140
Cys His Ala Ala Asp
145

<210> 34632
<211> 429
<212> PRT
<213> A.fumigatus

<400> 34632
Arg Arg Ile Phe Gly Pro Leu Val Lys Ile Gln Leu Ser Ala Glu Glu
1               5                   10                  15
Ala Arg Met Val Pro Ala Glu Asp Leu His His Glu Glu Glu Trp Arg
            20                  25                  30
Arg Gln Leu Gln Gln Gly Gln Val Ser Ser Tyr Tyr Ile Val Thr Lys
        35                  40                  45
Ser Gln Thr Thr Ser Ser Gly Thr Ser Ser Cys Pro Met Thr Ala Ser
    50                  55                  60
Ser Pro Ser Lys Gly Pro Ser Phe Glu Ala Ile Ala Thr Thr Val Ile
65                  70                  75                  80
Arg Thr Gln Pro Gln His Leu Ser Gly Asp Ser Ile Gln Gln Trp Asn
                85                  90                  95
Arg Val Asp Asp Glu Arg Val Pro Ala Asp Ala Ile Ser Ile Phe Val
            100                 105                 110
Asp Asp Ser Met Ala Thr Val Ser Ser Pro Glu Ser Ser Glu Pro Pro
        115                 120                 125
Arg Lys Leu Leu Arg Ser Asn Asp Asn Leu Ser Ser Ile Gln Gly Ser
    130                 135                 140
Ser Lys Lys Arg Asn Gln Glu Ser Ser Ser Asn Pro Ser Lys Gly Asn
145                 150                 155                 160
Ser Ala Ser Tyr Gly Glu Glu Asn Gly Thr Thr Phe Pro Ser Asn Asp
                165                 170                 175
Ser Asn Ala Ser Ile Glu Leu Glu Ala Cys Ile Thr Leu Pro Leu Gln
            180                 185                 190
Pro Arg Lys Arg Arg Arg Leu Thr Glu Asn His Ala Ser Asn Val Ala
        195                 200                 205
Pro Val Val Pro Ser Ser Cys Ser Asn Gln Pro Arg Cys Val Lys Ala
    210                 215                 220
Pro Leu Thr Met Ile Pro Leu Tyr Phe Arg Gln Asp Leu Asp Arg Gly
225                 230                 235                 240
Asp Ser Thr Asn Thr Leu Ile Pro Pro Asn Ser Ser Asn Leu Ala Gly
                245                 250                 255
Asp Leu Gln Thr Phe Val Gln Lys Val Cys Leu Asn Lys Pro Tyr Pro
```

```
            260                 265                 270
Thr Lys Ser Ser Asn Ser Asn Thr Gly His Leu Asn Pro Ala Leu Gly
        275                 280                 285
Leu Leu Ile Ala Thr Ile Ser Gln Asp Ser Leu Gly Arg Leu Leu Leu
    290                 295                 300
Glu Val Ser Gln Gln Val Ser Thr Ala Leu Lys Ser Asn Arg His Lys
305                 310                 315                 320
Ala Pro Arg Ser Gly Lys Ile Phe Ile Leu Asp Ala Lys Phe Leu Val
                325                 330                 335
Leu Lys Ala Arg Leu Asp Asp Pro Arg Phe Leu Phe Arg Met Thr Trp
            340                 345                 350
Glu Ser Ile Gly Arg Glu Tyr Phe Tyr Ala Cys Val Ser Trp Ser Leu
        355                 360                 365
Glu Leu Gly Val Glu Tyr Ala Asp Gly Gly Ala Ser Glu Ile Arg Gly
    370                 375                 380
Thr Pro Ala Asn Ser Asp Gly Gly Gln Arg Ser Cys Leu Arg Glu Leu
385                 390                 395                 400
Ile Lys Ser Gln Ser Ala Ala Arg Ala Pro Arg Val Ser Ile Thr Phe
                405                 410                 415
Asp Ser Arg Glu Leu Gly Asp Leu Gly Asp Leu Gly Ala
            420                 425
```

<210> 34633
<211> 102
<212> PRT
<213> A.fumigatus

<400> 34633

```
Phe Glu Ile Asp Gly Asp Asp Phe Val Ser Arg Gly Gly Ser Cys Ile
1               5                   10                  15
Val Ser Cys Leu Gly Glu Val Leu Ala Gly Pro Ile Trp Glu Val Ser
            20                  25                  30
Ala Asp Asp Ala Pro Asp Ser Thr Val Thr Ala Arg Ala Ala Gly Ala
        35                  40                  45
Asp Thr Asp Gly Asn Ala Val Gly Asp Gly Leu Leu Val Ala Glu Ile
    50                  55                  60
Asp Leu Tyr Asp Cys Glu Arg Gly Arg Leu Asp Met Asp Val Ala Gly
65                  70                  75                  80
Ser Tyr Ser Arg Asn Asp Ala Phe Arg Leu Thr Val Glu Gly Leu Asp
                85                  90                  95
Leu Ser Pro Pro Pro Phe
            100
```

<210> 34634
<211> 526
<212> PRT
<213> A.fumigatus

<400> 34634

```
Leu Phe Leu His Arg Phe Val Ser Lys Asn Leu Val Ile Val Phe Ile
1               5                   10                  15
Arg Thr Thr Ile Tyr Trp Thr Trp Val Glu Val Gly Ile Gly Val Gly
            20                  25                  30
Trp Gly Gly Gly Glu Gly Ser Leu Thr Leu Phe Phe Phe Phe Leu Phe
        35                  40                  45
Phe Phe Phe Leu Pro Gly Phe Phe Phe Arg Pro Pro Gly Thr Ile Ile
```

```
    50                  55                  60
Gly Ser Ile Pro Leu Ser Met Pro Trp Phe Arg Lys Lys His Lys Ser
65                  70                  75                  80
Pro Ser Pro Ala Ala Ser Pro Ala Phe Arg Ser Val Glu Gln Leu Thr
                85                  90                  95
Ile Pro Pro Pro Ser Thr Gly Ser Ser Pro Arg Val Pro Pro Glu Asp
            100                 105                 110
Leu Ala Phe Tyr Gln Arg Phe Ser Asp Val Arg Leu Pro Thr Ser Pro
        115                 120                 125
Ala Asp Pro Pro Asp Asn Ser Tyr Arg Gln Gln Pro Gln His Glu Gln
    130                 135                 140
Gln Gln His His Pro His Gln Leu Tyr Arg His Arg His Arg Gln Asp
145                 150                 155                 160
His Pro Asp His Gln Asn His Ser Glu His Pro Pro Pro His Gln Pro
                165                 170                 175
Thr Ile Thr Arg Thr Gln Ser His His Ser Pro Thr Leu Leu Asn Ser
            180                 185                 190
Val Leu Ala Thr Pro Ala Leu Pro Ala Ala Thr His Phe Ile Asp Ala
        195                 200                 205
Asp Pro Ala Asp Gln Ser Ser Val Asp Arg Ala Ser Glu Gln Pro Ala
    210                 215                 220
Leu Ala Pro Asn Ala His Asn Ser Asn Lys Gln Asp Pro Leu Gln Lys
225                 230                 235                 240
Ser Arg Arg Lys Leu Phe Gly Leu His Ser Ser Ser Ser Ser Ser Ser
                245                 250                 255
Ser Thr Gly Phe Leu Glu Arg Ser Leu Ser Val Lys Gly Thr Ser Ser
            260                 265                 270
Ser Gln Ser Ser Arg Gln Arg Arg His Gln Gln Gln Leu Ser Leu Asp
        275                 280                 285
Thr Gln Arg Thr His Arg Asp Arg Asp His Gln Lys Arg Thr Arg Asn
    290                 295                 300
Ile Asn Tyr His Ser Ser Ser Glu Thr Val Pro Glu Asp His Val Val
305                 310                 315                 320
Asp Pro Asn Arg Ser Ser Ser Gln Ser Leu Leu Met Gln Gln Asp Pro
                325                 330                 335
Ala Ser Ala His Gln Arg Pro Pro Arg Ser Pro Gln Arg Pro Pro Ser
            340                 345                 350
Ile Gln Arg Ser Asn Thr Asp Pro Ser Leu Leu Glu Lys Leu Tyr Ser
        355                 360                 365
Ser Ser Pro Val Asp Ser Ala Ser Arg Gln Pro Ala Asp Pro Ser Arg
    370                 375                 380
Val Ile Ser Asn Gln Ser Gln Thr His Leu Gln Gln Gln Gln Gln Gln
385                 390                 395                 400
Pro Gln Gln Gln Ser Pro Val Ser Gln Leu Gln Val Glu Pro Pro Leu
                405                 410                 415
Ser Ala Arg Pro Pro Ser Arg Gln Ser Met Gly Pro Pro Ser Pro Leu
            420                 425                 430
Pro Pro Phe Ser His Gln Pro Asp Pro His Pro Ser Ser Thr His Gln
        435                 440                 445
Ser Gly Met Ala Ser Ser Ser Asp Arg Pro Ala Gly Pro Pro Gln Thr
    450                 455                 460
Gln Pro Gln Gly His Pro Ala Phe Gln Gly Gly Gly Gln Gln Asn Ala
465                 470                 475                 480
Thr Glu Ser Gly Arg Ser Thr Pro Pro Val Asn Ser Ser Arg Arg Asp
                485                 490                 495
Asp Leu Gly Asp Ile Asp Val Arg Ala Leu Leu Gln Lys His Asp Glu
```

```
            500                 505                 510
Leu Arg Lys Arg Cys Thr Gly Ala Pro Val Gly Gln Thr Tyr
        515                 520                 525

<210> 34635
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34635
Ser Ala Asp Asp Gly Glu Gln Leu Thr Val Ile Ser Thr Glu Val Ser
1               5                   10                  15
Gly Asp Val Thr Thr Leu Asp Pro Phe Ser Leu Ile Gly Phe Asp Cys
            20                  25                  30
Gly Gly Leu Ser Leu Pro Gly Pro Gln Val Gly Gln Cys Pro Leu Val
        35                  40                  45
Ser Trp Ser Phe Pro Tyr Cys Asp Ile Ala Glu Lys Arg
    50                  55                  60

<210> 34636
<211> 149
<212> PRT
<213> A.fumigatus

<400> 34636
Glu Ile Val Asn Met Gly Ala Gly Gly Val Val Ile Arg Phe Phe Asn
1               5                   10                  15
Leu Ala Ile Arg Val Leu Gln Phe Leu Asp Ala Ala Val Ile Leu Gly
            20                  25                  30
Ile Phe Ser Tyr Phe Leu Ala Val Gln Ser Gln His Asn Gln Pro Ile
        35                  40                  45
Pro Thr Trp Met Lys Ala Val Glu Gly Leu Ser Gly Ala Ala Thr Leu
    50                  55                  60
Tyr Gly Leu Leu Gly Ser Leu Phe Thr Cys Cys Val Gly Gly Leu Ala
65                  70                  75                  80
Phe Phe Ala Phe Leu Ala Ile Val Leu Asp Val Cys Phe Ile Gly Ala
                85                  90                  95
Met Ile Ala Ile Ala Val Met Thr Arg Asp Gly Thr Gln Ser Cys Ser
            100                 105                 110
Gly Ile Val Tyr Thr Pro Leu Gly Ser Gly Ala Asp Asn Ile Asp Arg
        115                 120                 125
Ala Ser Gly Val Arg Leu Arg Tyr Ser Cys Met Leu Tyr Lys Ser Thr
    130                 135                 140
Gly Ala Val Ser Phe
145

<210> 34637
<211> 319
<212> PRT
<213> A.fumigatus

<400> 34637
Ile Phe Pro Ser Pro Thr Ser Val Leu Asn Gly Phe Leu Phe Ser Pro
1               5                   10                  15
Pro Cys Phe Ser Ser Pro Cys Leu Ser Val Ser Ser Lys Thr Ala Ser
            20                  25                  30
```

```
Ser Ile Leu Ser Thr Gln Gln Pro Val Met Ser Ser Ser Gln Thr Met
        35                  40                  45
Thr Ala Pro Ala Val Gly His Arg Pro Pro Asp Ala Gly Pro Asp Met
    50                  55                  60
Ser Ser Leu Phe Glu Tyr Gly Arg Pro His His His His His Gln Glu
65                  70                  75                  80
Gly Gln Glu Pro Gln Gln Gln Gln Gln Glu Gln Gln Asn His Gln Gln
                85                  90                  95
Gln Arg Asp Asn Gly Ser Phe Ser Pro Arg Ser Asp Ser Ala Asn Arg
            100                 105                 110
Ala Leu His Asp Ser Thr Ser Asn Asn Ser Val Ser Pro Arg Gly Leu
        115                 120                 125
Pro Ser Ser Ser Gly Met Asn Gly Ile Lys Ser Glu Ser Ser Asp Ala
    130                 135                 140
Gly Asn Asp Phe Ala Gly Ala Gln Pro Asp Tyr Gln Asn Asp Leu Arg
145                 150                 155                 160
Arg Gln Ser Ala Ala Ser Ala Leu Leu Ala Gln Leu Leu Gly Asn Gln
                165                 170                 175
Ser Ser Ala Pro Pro Ala Ser Thr Glu Thr Gln Pro Ala Glu Ser Ser
            180                 185                 190
Ser Ser Thr Asn Asn Pro Leu Asn Pro Thr Glu Asn Ser Glu Asn Asn
        195                 200                 205
Pro Ser Asp Gln Ile Ala Gly Gly Gln Gly Ser Thr Ser Val Ser Thr
    210                 215                 220
Glu Ile Thr Ala Pro Ala Glu Ser Ala Ala Ser Gln Asp Gln Phe Ser
225                 230                 235                 240
Thr Ser Thr Asp Leu Pro Arg Leu Pro Gly Asp Gly Glu Lys Asn Arg
                245                 250                 255
Glu Glu Arg Pro Ala Asp Met Ser Phe Ser Lys Ser Glu Glu Ser Gly
            260                 265                 270
Asn His Gly Val Asn Thr Val Met Asn Thr Pro Asp Pro Ala Glu Gly
        275                 280                 285
Leu Thr Asp Pro Met Met Phe Ser Gln Asp Gly Leu Glu Arg Leu Arg
    290                 295                 300
Ser Cys Ile His Thr Arg Ser Leu Glu Gly Thr Ala Ile Cys Gly
305                 310                 315
```

<210> 34638
<211> 204
<212> PRT
<213> A.fumigatus

<400> 34638

```
Ala Asp Cys His Asp Leu Pro Lys Thr Ser Val Lys Thr Ile Ser Asn
1               5                   10                  15
Leu Gly Ala Asn Asn Gln Thr Lys Arg Glu Thr Lys Met Pro Pro Lys
            20                  25                  30
Ser Lys Lys Gln His Pro Lys Pro Lys Ser Gln Pro Pro Asp His Pro
        35                  40                  45
Lys Pro Asn Trp Pro Pro Leu Arg Pro Leu Ile Pro Ser Ser Asn Leu
    50                  55                  60
Ser Leu Glu Ser Leu Leu His Asp Gln Ile Tyr Leu Ile Arg Asn Phe
65                  70                  75                  80
Leu Pro Ser Ser Leu Cys Lys Thr Tyr Ala Phe Phe Leu Ala Ser Leu
                85                  90                  95
Pro Leu Thr Thr Thr Pro Ser Lys Pro Lys Lys Gly Glu Ala Val Arg
```

```
            100                 105                 110
Val Asn Asp Arg Phe Gln Ile Gln Asp Ala Asp Phe Ala Glu Arg Leu
        115                 120                 125
Trp Ser Gly Thr Ala Leu Arg Glu Leu Val Ser Gly Ala Val Asp Glu
    130                 135                 140
Asp Gln Asp Gly Asp Gly Gln Pro Arg Ser Asn Arg Glu Ile Trp Gly
145                 150                 155                 160
Gly Glu Pro Leu Gly Leu Asn Ala Asn Ile Arg Val Tyr Arg Tyr Ser
                165                 170                 175
Arg Gly Gln Phe Phe Ala Gln His Cys Met Ser Pro Pro Pro Pro Leu
            180                 185                 190
Ser Leu Ser Phe Leu Phe Phe Gly Asp Glu Met Gly
        195                 200
```

<210> 34639
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34639

```
Phe Pro Asp Ser Ser Asp Phe Glu Asn Asp Ile Ser Ala Gly Leu Ser
1               5                   10                  15
Ser Arg Phe Phe Ser Pro Ser Pro Gly Lys Arg Gly Lys Ser Val Asp
            20                  25                  30
Val Glu Asn Trp Ser Trp Leu Ala Ala Asp Ser Ala Gly Ala Val Ile
        35                  40                  45
Ser Val Glu Thr Leu Val Asp Pro Trp Pro Pro Ala Ile
    50                  55                  60
```

<210> 34640
<211> 156
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34640

```
Arg His Gly Xaa Gly Leu Met Gly Pro Ser Tyr Phe Phe Trp Pro Leu
1               5                   10                  15
Val Pro Ala Cys Ala Ser Gln Glu Val Gln Val Glu Arg Gly Lys Asp
            20                  25                  30
Thr Leu Lys Pro Leu Gln Gly Leu Ile Pro Leu Val Thr Met Trp Thr
        35                  40                  45
Leu Val Pro Val Tyr Leu Tyr Leu Gln Pro Thr Ile Leu Glu His Tyr
    50                  55                  60
Thr Ile Pro Phe Met Leu Leu Val Gly Leu Ile Asn Ala Tyr Ala Val
65                  70                  75                  80
Gly Asn Met Ile Val Ala His Leu Ile Lys Ala Asp Phe Pro Phe Ser
                85                  90                  95
Arg Ile Phe Ile Gly Ile Val Pro Leu Ala Leu Gly Val Leu Asp Gly
            100                 105                 110
Ala Ala Pro Leu Leu Gly Leu Trp Gln Ser Val Leu Gly Ser Glu Ser
        115                 120                 125
```

```
Gly Gln Val Ala Tyr Leu Phe Gly Cys Leu Gly Leu Ala Ile Gly Val
    130                 135                 140
Tyr Gly Ser Phe Val Val Arg Ser Ala Ala Arg Gln
145                 150                 155

<210> 34641
<211> 72
<212> PRT
<213> A.fumigatus

<400> 34641
Arg Ser Val Lys Leu Leu Phe Ser Trp Arg Gly Val Pro Asp Ile Trp
1               5                   10                  15
His Met Ser Thr Val Gln His Tyr Ile Asn Pro Phe Leu His Ile Phe
            20                  25                  30
Tyr Ser Leu Leu Leu Asn Ser Val Leu Leu Leu Val Leu Thr Ala Leu
        35                  40                  45
Val Asp Ile Val Arg Arg Phe Phe Ser Leu Thr Asp Cys Ile Ser Val
    50                  55                  60
Thr Leu Glu Lys Arg His Gly Arg
65                  70

<210> 34642
<211> 60
<212> PRT
<213> A.fumigatus

<400> 34642
Thr Leu Val Pro Ala Pro Arg Ser Phe Phe Met Asp Val Lys Cys Pro
1               5                   10                  15
Gly Cys Phe Thr Ile Thr Thr Val Phe Ser His Ala Gln Thr Val Val
            20                  25                  30
Val Cys Ala Gly Cys Ser Thr Val Leu Cys Gln Pro Thr Gly Gly Lys
        35                  40                  45
Ala Arg Leu Thr Glu Gly Cys Ser Phe Arg Arg Lys
    50                  55                  60

<210> 34643
<211> 155
<212> PRT
<213> A.fumigatus

<400> 34643
Thr Thr Ser Leu Leu Pro Val Val Cys Leu Ser Ser Pro Asp Gln Phe
1               5                   10                  15
Ser Ser Gln Lys Val Val Lys Val Ser Ser Ala Asn Thr Ile Ser Ser
            20                  25                  30
Phe His Asn Arg Phe Ser Arg Ser Thr Ser Ser Thr Leu Leu Leu Arg
        35                  40                  45
Leu Arg Leu Ala Ser Thr Ser Leu Arg Tyr Asp Thr Ala Ile Arg Thr
    50                  55                  60
Ser Pro Pro Arg Ser Arg Ile Arg Trp Leu Met Leu Gly Ile Ala Ser
65                  70                  75                  80
Thr Asn Arg Pro Leu Cys Leu Leu Pro Val Pro Ser Ser Trp Thr Ser
                85                  90                  95
Ser Ala Pro Ala Ala Ser Pro Ser Pro Pro Ser Ser Pro Met Pro Arg
```

```
          100                 105                 110
Leu Ser Ser Ser Ala Pro Ala Ala Arg Pro Ser Phe Ala Ser Pro Pro
        115                 120                 125
Val Ala Arg Pro Asp Ser Leu Arg Ala Ala Pro Ser Gly Gly Ser Lys
    130                 135                 140
Cys His Ile Thr Met Gln Pro Lys Pro Glu Arg
145                 150                 155
```

<210> 34644
<211> 113
<212> PRT
<213> A.fumigatus

<400> 34644

```
Trp Thr Cys Lys Trp Arg Ala Ala Phe Ala Gly Trp Ile Arg Arg Ser
1               5                   10                  15
Ala Lys Thr His Asn Leu Arg Asp Ala Thr Ser Ser Glu Arg Glu Ala
            20                  25                  30
Gly Thr Pro Asn His Thr Pro Asn Gly Thr Arg Ser Ser Gly Ala Ala
        35                  40                  45
Val Val Lys Val Asn Ala Asp Val Ser Leu Ser Gly Gly Pro Ile Thr
    50                  55                  60
Pro Lys Gly Arg Gly Val Glu Asn Arg Gly Lys Leu Ser Arg Ser Ala
65                  70                  75                  80
Ser Arg Lys Ser Val Val Glu Ile Ile Pro Asp Asp Asp Ala Pro Gln
                85                  90                  95
Glu Asn Asn Ile Ala Asp Ala Asp Thr Asp Gly Asp Ala Val Met Gln
            100                 105                 110
Thr
```

<210> 34645
<211> 752
<212> PRT
<213> A.fumigatus

<400> 34645

```
His Cys Thr Asp Val Gly Pro Trp Arg Cys Pro Thr Cys Val Gly Glu
1               5                   10                  15
Lys Leu Gln Pro Ser Thr Glu Gln Asn Gly Thr Asn Pro Arg Gln Pro
            20                  25                  30
Arg Gln Lys Lys Met Arg Arg Glu Leu Leu Pro Ala His Thr Gly Glu
        35                  40                  45
Lys Gly Pro Gly Phe His Ser Ile Phe Ser Thr Val Asp Val Ser Asp
    50                  55                  60
Asp Leu Leu Thr Ser Ser Arg Ser Leu Arg Lys Arg Lys Ala Ser Ser
65                  70                  75                  80
Thr Asp Val Gly Glu Pro Thr Pro Gly His Arg Lys Leu Arg Arg Gln
                85                  90                  95
Ser Ser Met Arg Ser Ala Arg Ala Glu Ser Arg Asp Gln Gly Phe Gly
            100                 105                 110
Asn Thr Asp Gly Gln Ser Pro Val Arg Thr Arg Ser Arg Arg Thr Arg
        115                 120                 125
Gly Glu Glu Lys Gly Thr Cys Arg Val Val Leu Arg Gln Phe Gly Arg
    130                 135                 140
Leu Val Leu Ala Phe Arg Leu Asn Glu Thr Lys Val Ser Lys Ile Leu
```

```
145                 150                 155                 160
Ser Ser Arg Ser Arg Ser Gln Leu Arg Gly Arg Arg Thr Pro Lys Pro
                165                 170                 175
Pro Pro Ala Val Gln Glu Pro Leu Ser His Phe Ala Pro Ile Thr Pro
            180                 185                 190
Ala Pro Tyr Leu Ser Pro Phe Tyr Ser Phe Asn Asp Arg Glu Thr Asp
        195                 200                 205
Glu Ser Lys Ser Lys Pro Tyr Gly Gly Ile Leu Ser Glu Ala Asp Ala
    210                 215                 220
Asp Thr Ser Arg Thr Leu Pro Thr His Thr Asp Arg Glu Arg Phe Glu
225                 230                 235                 240
Ile Ala Arg Gln Lys Ala Glu Glu Glu Trp Gln Arg Lys Leu Leu Glu
                245                 250                 255
Ile Glu Asn Ser Gly Glu Ala Ala Pro His Ala Ser Gln Lys Leu Ser
            260                 265                 270
Gly Pro Pro Ser Arg Ile Lys Tyr Ile Asn Phe Gly Gly Tyr Glu Ile
        275                 280                 285
Glu Thr Trp Tyr Ala Ala Pro Tyr Pro Glu Glu Tyr Ser Arg Asn Arg
    290                 295                 300
Val Leu Tyr Ile Cys Glu Phe Cys Leu Lys Tyr Met Asn Ser Asp Tyr
305                 310                 315                 320
Val Ala Trp Arg His Lys Leu Lys Cys Pro Ala Lys His Pro Pro Gly
                325                 330                 335
Asp Glu Ile Tyr Arg Asp Gly Ser Ile Ser Ile Phe Glu Val Asp Gly
            340                 345                 350
Arg Lys Asn Pro Val Tyr Cys Gln Asn Leu Cys Leu Leu Ala Lys Leu
        355                 360                 365
Phe Leu Gly Ser Lys Thr Leu Tyr Tyr Asp Val Glu Pro Phe Leu Phe
    370                 375                 380
Tyr Val Met Thr Glu Phe Asp Asp Leu Gly Cys His Phe Val Gly Tyr
385                 390                 395                 400
Phe Ser Lys Glu Lys Arg Pro Ser Ser Ala Asn Asn Val Ser Cys Ile
                405                 410                 415
Leu Thr Leu Pro Ile His Gln Arg Lys Gly Tyr Gly Asn Leu Leu Ile
            420                 425                 430
Asp Phe Ser Tyr Leu Leu Thr Arg Ile Glu Gly Lys Thr Gly Ser Pro
        435                 440                 445
Glu Lys Pro Leu Ser Asp Met Gly Leu Val Ser Tyr Arg Asn Tyr Trp
    450                 455                 460
Arg Leu Ile Leu Ser Tyr Gln Leu Arg Asn Gln Lys Thr Pro Ile Ser
465                 470                 475                 480
Ile Ala Glu Leu Ser Glu Arg Thr Gly Met Thr Ala Asp Asp Val Val
                485                 490                 495
Ser Gly Leu Glu Gly Leu Arg Ala Leu Val Arg Asp Pro Ile Thr Lys
            500                 505                 510
Thr Tyr Ala Leu Arg Leu Asp Cys Lys Tyr Phe Glu Glu Cys Ile Arg
        515                 520                 525
Asn Trp Glu Glu Lys Gly Tyr Val Gln Leu Asn Pro Asp Ala Leu Val
    530                 535                 540
Trp Thr Pro Tyr Ile Met Gly Arg Ser Asn Gln Ser Gln Phe Asp Arg
545                 550                 555                 560
Ala Pro Leu His Thr Val Ala Gln Arg Glu Asp Pro Glu Glu Glu Glu
                565                 570                 575
Gly Glu Glu Val Lys Lys Ala Asp Gly Ala Val Ile Pro Thr Ala Ser
            580                 585                 590
Trp Thr Gly His Ala Asp Ser Gly Gly Arg Ser Thr Val Ala Ala Gly
```

595 600 605
Pro Pro Ser Thr Gln Ala Leu Ser Asn Thr Ser Gly Phe His His Pro
610 615 620
Thr Thr Ala Thr Ala Ser Ser Ser Thr Ser Ala Pro Ser Asp Pro Ala
625 630 635 640
Ala Gly Ile Pro Pro Ser Arg Phe Glu Ile Tyr Pro Pro Val Gln Ala
645 650 655
Pro Val Phe Lys Arg Lys Pro Gly Arg Pro Phe Gly Ser Lys Ser Val
660 665 670
Phe Lys Ala Gly Gly Thr Pro Thr Ser Ala Arg Thr Ser Gly Arg Gly
675 680 685
Thr Pro Arg Arg Thr Ser Thr Leu Ala Ser Ala Ala Thr Pro Thr Ser
690 695 700
Asn Pro Gly Ser Val Arg Arg Gly Arg Ser Ala Lys Leu Met Asp Ser
705 710 715 720
Pro Ala Pro Glu Pro Ser Gly Ala Lys Thr Asn Gly Leu Val Asn Gly
725 730 735
Glu Gln His Leu Gln Asp Gly Ser Glu Glu Ala Pro Arg His Ile Thr
740 745 750

<210> 34646
<211> 173
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (150)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34646
Leu His Asp Ser Ser Gly Arg Thr Arg Lys Thr Lys Ala Ile Asp Phe
1 5 10 15
Gly Phe Ser Phe Gly Leu Ala Ser Ala Pro Pro Glu Ser Thr Ser Glu
20 25 30
Pro Ala Pro Gln Thr Ala Thr Thr Val Thr Ala Thr Glu Pro Ala Gly
35 40 45
Ser Ser Gln Thr Thr Ser Val Leu Gly Glu Thr Ala Lys Ser Leu Val
50 55 60
Ser Ala Ala Gln Thr Pro Ser Ser Arg Asn Leu Gly Ser Gly Gln Arg
65 70 75 80
Thr Pro Gly Ser Ala Arg Asn Gly Leu Pro Glu Arg Pro Ser Met Phe
85 90 95
Asp Ile Pro Ser Asp Glu Glu Leu Glu Leu Gly Arg Ser Ser Lys Arg
100 105 110
Arg Lys Ile Gly Met Leu Leu Arg Ala Pro Asp Asp Leu Ile Thr Val
115 120 125
Ser Asn Asn Ala Lys Phe Lys Asn Leu Pro Lys Leu Thr Arg His Arg
130 135 140
Ala Asn Ser Asp Val Xaa Ala Gln Glu Thr Ser Leu Ala Gln Ser Arg
145 150 155 160
Ala Gly Gln His Glu Glu Lys Arg Thr Arg Glu Pro Ser
165 170

<210> 34647
<211> 559

<212> PRT
<213> A.fumigatus

<400> 34647

```
Ala Thr Arg Ile Pro Ile Val Cys Ala Ile Ile Val Leu Phe Tyr Leu
1               5                  10                  15
His Arg Arg Asn Val Lys Lys Leu Arg Gln Glu Asp Ala Asn Asp Lys
            20                  25                  30
His Lys Ser Leu Asp Phe Gly Leu Asp Leu Glu Pro Arg Ala Gly Ser
        35                  40                  45
Lys Pro Met Thr Gln Ala Glu Lys Gly Ser Asn Met His Ser Lys Gly
    50                  55                  60
Met Ser Leu Asp Ile Gly Gln Ser Pro Tyr Leu Leu Pro Pro Gly Leu
65                  70                  75                  80
His Gly Ser Arg Glu Ser Leu His Ser Leu Ser Arg Ser Ile Ile Gly
                85                  90                  95
Asp Asp Asp Lys Tyr Arg His Ala Ser Ser Phe Leu Gly Asp Asn Ala
            100                 105                 110
Ser Val Arg Ser Gln Pro Arg Gly Phe His Asp Glu Thr Ser Ala Phe
        115                 120                 125
Ser Arg Ser Gln Ser Lys Ala Ser Leu Arg Gly Asp Asp Met Asn Gln
    130                 135                 140
Gly Leu Leu Gln Asn Ala Gln Arg Met Ser Arg Ser Ser Pro Pro Leu
145                 150                 155                 160
Tyr Asn Ala Pro Ser Asp Gly Gly Ser Ser His Ser Pro Arg Gly Gln
                165                 170                 175
Gly Asn Gly Gln Asp Met Gly Leu Gln Leu Asn Leu Pro Arg Ser Leu
            180                 185                 190
Ser Pro Val His Ile Pro Gly Val Asn Gly Ser Arg Gly Thr Ser Pro
        195                 200                 205
Ala Pro Gly Gly His Ala Asp Gly Ser Glu Asp Ile Ser Ser Ser Glu
    210                 215                 220
Thr Arg Asn Ala Asn Leu Pro Gln Gln Pro Leu Lys Asn Ala Met Asp
225                 230                 235                 240
Pro Ser Leu Glu Leu His Leu Asp Thr Arg Glu Gln Gln Gly Arg Pro
                245                 250                 255
Ile Gln Glu Asp Leu Ser Thr Lys Leu Gly Ser Thr Ser Pro Ser Lys
            260                 265                 270
Gln Ser Pro Ser Val Pro Thr Pro Arg Ile Ser Leu Pro Val Ser Asp
        275                 280                 285
Ala Ala Ser Asp Tyr Gly Asp Asn Arg Asn Ser His Ala Glu Ile Pro
    290                 295                 300
Ala Val Asn Val Asp Gly Ala Glu Asp Ala Gln Lys Arg Asp Gly Ala
305                 310                 315                 320
Pro Asn His Ala Ala Ala Pro Pro Ile Pro Gln Glu Pro Leu Gln Ser
                325                 330                 335
Gln Asn Gln Ser Leu Asp Val Arg Arg Asp Thr Arg Arg Phe Thr Leu
            340                 345                 350
Gly Leu Arg Pro Leu Pro Pro Glu Asp Pro Ser Asp Asn Pro Glu Gln
        355                 360                 365
Arg Ala Asn Arg Ile Arg Ser Phe Tyr Lys Glu Tyr Phe Asp Glu Ser
    370                 375                 380
Lys Thr Gly Arg Glu Thr Ile Tyr Glu Asp Tyr Gly Pro Glu Tyr Phe
385                 390                 395                 400
Gln Asp Asp Gly Tyr Val Tyr Asp Pro Ala Thr Gly Glu Tyr Tyr Asp
                405                 410                 415
```

```
Ala Val Pro Ala Pro Phe Ala Glu Pro Val Asn Arg Arg Ala Met Thr
            420                 425                 430
Pro Pro Pro Arg Ala Pro Pro Arg Phe Gln Gly Ala Ala Arg His Met
        435                 440                 445
Ala Thr Gly Ser Val Gly Gly Gly Ala Ser Asp Arg Ser Asn Tyr Pro
    450                 455                 460
Gly Pro Arg Ala Phe Ser Ser Ala Ser His Arg Leu Pro Gly Pro Arg
465                 470                 475                 480
Ala Pro Arg Lys Pro Met Pro Pro Pro Ser Pro Leu Gln Val Leu Pro
                485                 490                 495
Ser Pro His Leu Leu Lys Glu Asp Ser Leu Met Asn Ala Ala Glu Tyr
            500                 505                 510
Ala Pro Gly Met Asn Tyr Lys Asp Lys Arg Glu Gly Arg Ala Glu Thr
        515                 520                 525
Pro Leu Gly Gly Leu Arg Pro Tyr Thr Pro Val Thr Pro Ala Arg Thr
    530                 535                 540
Pro Leu Val Ser Ala Phe Asp Glu Leu Ala Pro Ile Pro Ser Pro
545                 550                 555
```

<210> 34648
<211> 71
<212> PRT
<213> A.fumigatus

<400> 34648

```
Arg Ser Ile Asp Leu Gly Asp Phe Cys Ile Gly Arg Pro Thr Gln Lys
1               5                   10                  15
Ser Leu Arg Pro Asp Glu Leu Gly Arg Pro Cys Ile Ile Ile Thr Asn
            20                  25                  30
Ile Tyr Ile Phe Pro Val Met Glu Ser Thr Trp Pro Cys Val Pro Arg
        35                  40                  45
Arg Val Asp Gln Thr Leu Tyr Leu Glu Thr Val Cys Leu Ser Trp Leu
    50                  55                  60
Ala Pro Lys Ile Gln Pro Leu
65                  70
```

<210> 34649
<211> 73
<212> PRT
<213> A.fumigatus

<400> 34649

```
Met Ala Glu Ser Lys Ser Gly Ser Pro Tyr Ala Val Gly Ala Ser Pro
1               5                   10                  15
Gly Thr Arg Met Arg Gly Ser Val Lys Arg Phe Ala Pro Ala Ser Arg
            20                  25                  30
Thr Ser Thr Trp Val Phe Gly Ser Ala Thr Asn Leu Leu Ala Thr Thr
        35                  40                  45
Asn Pro Asp Met Ser Pro Pro Leu Asn Asp Gln Ile Lys Gly Cys Asp
    50                  55                  60
Val Tyr Gln Gln Pro Ser Trp Tyr Leu
65                  70
```

<210> 34650
<211> 70
<212> PRT

<213> A.fumigatus

<400> 34650
Val Gln Ser Leu Val Arg Ser Ser Val Ser Ser Gln Leu Leu Tyr Gln
1 5 10 15
Ser Gln Cys Leu Ile Leu Trp Lys Ala Thr Thr Ser Ser Glu Leu His
20 25 30
Met Ser Lys Gly Leu Pro Ala Leu Leu Asp Ala Ile Asn Ile Ser His
35 40 45
Gln Gln Thr Leu Asn Pro Ala Asn Thr Pro Leu Arg Val Asp Leu Gln
50 55 60
Asp Lys Met Glu Thr Ala
65 70

<210> 34651
<211> 238
<212> PRT
<213> A.fumigatus

<400> 34651
Gly Tyr Leu Cys Ser Phe Asp Arg Arg Asp Ala Arg Arg Cys Asp Pro
1 5 10 15
Gly Ser Val Ser Phe Cys Ser Ser Arg Pro Gly Val Cys Val Val Arg
20 25 30
Leu Arg Ala Phe Ser Pro Arg Leu Arg Arg Leu Lys Arg Cys Glu Lys
35 40 45
Lys Tyr Gly Glu Met Thr Lys Thr Tyr Ile Lys Cys Leu Cys Arg Arg
50 55 60
Thr Phe Leu Arg Ala Thr Leu Pro Gln Ala Gly Lys Leu Phe Ile Thr
65 70 75 80
Arg Arg Ser Ser Val Gly Leu Gly Ser Thr Asn Ser Cys Gly Arg Ser
85 90 95
Ser Arg Gly Arg Ser His Gly Gly Trp Arg Gly Arg Ser Arg His Arg
100 105 110
Ser Arg Gly Cys Ser Cys Arg Leu Arg Arg Arg Leu Leu Leu Arg Asp
115 120 125
Arg Cys Arg His Arg Ser Arg Arg Cys Arg Arg Arg Ser Ser Cys Val
130 135 140
Val Val Gly Cys Gly Ile Leu Val Phe Arg His Cys Ala Lys Thr Asp
145 150 155 160
Phe Leu Ser Leu Phe Leu Gly Ala Ala Glu Asn Glu Gly Arg Ile Ser
165 170 175
Arg Gln Val Asn Cys Asp Glu Ser Cys Phe Pro Thr Gln Gly Glu Lys
180 185 190
Gly Arg Lys Gly Glu Gly Ile Lys Arg Val Arg Glu Ser Val Cys Trp
195 200 205
Arg Ser Asn Gly Arg Arg Leu Pro Glu Asn Asn Gln Gln Asp Ser Val
210 215 220
Asn Arg Cys Ala Asn Asp Asn Ala Lys Gln Ala Val Lys Ser
225 230 235

<210> 34652
<211> 62
<212> PRT
<213> A.fumigatus

<400> 34652
Thr Pro Arg Tyr Arg Asn Gln Gln Gln His Asn Cys Phe Ala Phe Gly
1 5 10 15
Asn Gly Gly Ser Tyr Ala Cys Thr Tyr Leu Ala Gly Ala Ala Phe Val
20 25 30
Ala Ala Cys Ser Tyr Asn Pro Gly Ser Cys Val Tyr Phe Asp Pro Ser
35 40 45
Ser Leu Arg Asp Cys Asp Arg Gly Cys Cys Asp Arg Ser Cys
50 55 60

<210> 34653
<211> 132
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (58),(61),(83)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34653
Gln Asn Gln Asp His Ile Cys Glu Arg His Val Gly Arg Lys Ser Thr
1 5 10 15
Asn Asn Leu Asn Leu Thr Cys Gln Trp Gly Ser Cys Arg Thr Thr Thr
20 25 30
Val Lys Arg Asp His Ile Thr Ser His Ile Arg Val His Val Pro Leu
35 40 45
Lys Pro His Lys Cys Glu Phe Cys Gly Xaa Ala Phe Xaa Arg Pro Gln
50 55 60
Asp Leu Lys Lys His Val Lys Thr His Ala Asp Asp Ser Val Leu Val
65 70 75 80
Arg Ser Xaa Glu Pro Gly Ala Arg Asn Pro Asp Met Met Phe His Gly
85 90 95
Ala Gly Lys Gly Asn Asp Glu Cys Arg Cys Ser Leu Cys Thr Leu Gly
100 105 110
Ala Asp Met Ile Leu Leu Asp Gln Ala Met Leu Leu Pro Pro Ile Thr
115 120 125
Ser Ser His Pro
130

<210> 34654
<211> 152
<212> PRT
<213> A.fumigatus

<400> 34654
Tyr Pro Pro Phe Ile Leu Arg Cys Ser Gln Glu Lys Gly Gln Glu Ile
1 5 10 15
Ser Leu Gly Thr Met Ser Glu His Gln Asp Thr Ala Thr Asn Asn Asn
20 25 30
Thr Thr Ala Ser Pro Ser Ala Thr Ala Ala Pro Met Pro Ala Pro Ile
35 40 45
Ser Gln Glu Gln Pro Ser Ser Gln Pro Ala Ala Thr Thr Pro Ala Pro
50 55 60
Val Ser Thr Ser Thr Pro Pro Ala Ser Val Thr Ala Thr Ala Ala Ala
65 70 75 80

```
Ala Thr Ala Ala Val Ser Ala Pro Gln Ala Asn Gly Thr Pro Pro Ser
                85                  90                  95
Asp Glu Gln Leu Ser Cys Leu Trp Gln Gly Cys Ser Glu Lys Cys Pro
            100                 105                 110
Ser Ala Glu Ala Leu Tyr Val Ser Leu Cys His Phe Ser Ile Leu Phe
        115                 120                 125
Phe Ala Ser Leu Gln Ser Pro Gln Pro Arg Arg Lys Arg Pro Gln Pro
    130                 135                 140
Asp Asn Thr Asn Ser Trp Pro Thr
145                 150
```

<210> 34655
<211> 247
<212> PRT
<213> A.fumigatus

<400> 34655

```
Pro Gly Tyr Ala Ala Ala Ala His Tyr Phe Glu Pro Ser Leu Asn Ala
1               5                   10                  15
Val Pro Ser Gln Gly Tyr Ala His Gly Ala Pro Gln Tyr Tyr Ser Ser
            20                  25                  30
His Pro Pro His Gln Pro Ser Asn Pro Ser Tyr Gly Asn Val Tyr Tyr
        35                  40                  45
Ala Leu Asn His Gly His Asp Gly His Ala Ser Tyr Glu Ser Lys Lys
    50                  55                  60
Arg Gly Tyr Asp Ala Leu Asn Glu Phe Phe Gly Asp Leu Lys Arg Arg
65                  70                  75                  80
Gln Phe Asp Leu His Ser Tyr Ala Ala Val Gly Gln Arg Leu Leu Gly
                85                  90                  95
Leu Gln Asn Leu Ser Leu Pro Ile Leu Thr Gly Gly Pro Leu Pro Glu
            100                 105                 110
Tyr Gln Pro Met Pro Ala Pro Val Ala Val Gly Gly Gly Tyr Gly Pro
        115                 120                 125
Gly Gly His Gly Ala Pro Val Tyr His Leu Pro Pro Met Ser Asn Ile
    130                 135                 140
Arg Thr Lys Asn Asp Leu Ile Asn Ile Asp Gln Phe Leu Gln Gln Met
145                 150                 155                 160
Gln Asp Thr Ile Tyr Glu Asn Asp Asp His Val Ala Ala Ala Gly Val
                165                 170                 175
Ala Gln Pro Gly Ala His Tyr Val His Gly Gly Met Ser Tyr Arg Thr
            180                 185                 190
Thr His Ser Pro Pro Thr Gln Leu Pro Pro Ser His Ala Val Ala Thr
        195                 200                 205
Thr Ser Ala Ser Thr Ser Met Ser Asn Pro Ala Thr His Ser Pro Pro
    210                 215                 220
Thr Gly Thr Pro Ala Leu Thr Pro Pro Ser Ser Ala Gln Ser Tyr Thr
225                 230                 235                 240
Ser Ala Arg Ser Pro Ile Ser
                245
```

<210> 34656
<211> 544
<212> PRT
<213> A.fumigatus

<400> 34656

```
Phe Ser Phe Tyr Ser Asp Ser Val Val Ala His Gly Ile Ile Thr Gln
1               5                  10                  15
Val Gly Ser Gly Thr Gly His Asn Ser Ser Arg Pro Leu Leu Thr Trp
            20                  25                  30
Gln Cys Leu Leu Ile Val Ser Ser Pro Pro Ser Ser Gly Leu Val Ala
        35                  40                  45
Leu Thr Leu Tyr Ser Phe Leu Tyr Thr Leu Leu Val Phe Cys Pro Val
    50                  55                  60
Val Thr Ser Tyr Asp Leu His Leu Ser Pro Phe Pro Ser Glu Glu Ser
65                  70                  75                  80
Cys Leu Thr Ile Pro Ile Ser Leu Ala Pro Gly Arg Ala Ile Pro Ile
                85                  90                  95
Gly Thr Ser Leu Ser Pro Thr Thr Leu Thr Thr Thr Thr Ser Ile Ala
            100                 105                 110
Ala Lys Ser Thr Ser Thr Ala His Asn Tyr Gln Ala Asp Pro Leu Val
        115                 120                 125
Pro Asp Pro Ser Ser Arg Ala Asn Thr Ser Asn Val Arg Val Val Ser
    130                 135                 140
Leu Ala Val Glu Gln Met Ile Gly Lys Ala Lys Gly Thr Ile Ile Ile
145                 150                 155                 160
Leu Ser Ser Leu Ile Ala Tyr Phe Ser Ile Asn Ser Leu Val Arg Ala
                165                 170                 175
Leu Asn Pro Asp Ala Phe Ile Trp Tyr Asp Glu Asp Arg Glu Glu Gln
            180                 185                 190
Arg Trp Ile Ala Ser Ser Pro Ser Trp Leu Asp Arg Lys Ala Cys Arg
        195                 200                 205
Trp Leu Ser Leu Cys Gly Thr Ala His Phe His Thr Val Gly Pro Arg
    210                 215                 220
Phe Gly Gln Arg Arg Val Leu Thr Glu Pro Asn Ala Ser Val Thr Ala
225                 230                 235                 240
Gln Asp Glu Val Ala Pro Trp Arg Ser Phe Trp Phe Arg Glu Gln Glu
                245                 250                 255
His Leu Ala Asn Gln Trp Asp Asp Ala Glu Arg Ser Leu Arg Glu Ile
            260                 265                 270
Pro Asp Tyr Val Phe Glu Tyr Ala Pro Leu Val His Leu Phe Ser Lys
        275                 280                 285
Glu Gln Phe Trp Pro Cys Asp Ile Ala Glu His Leu Phe His Thr Thr
    290                 295                 300
Pro Met Leu Asn Tyr Thr Pro Val Gln Ser Glu His Ser His Pro Thr
305                 310                 315                 320
Leu Glu Asp Leu Asp Arg Leu Asn Gln Trp Gln Asp Gly Arg Tyr Val
                325                 330                 335
Phe Leu Thr Ser Asn Asp Asn Val Glu Glu Arg Pro Pro Trp Met Glu
            340                 345                 350
Gly Glu Lys Asn Ile Pro Val Ala Pro Asp Glu His Glu Glu Glu Ser
        355                 360                 365
Trp Ser Asp Trp Asp Ser Arg Val Asp Gly Ala Ile Pro Gly Asp Thr
    370                 375                 380
Pro Glu Gly Arg Leu Lys Trp Tyr Asp Thr Asn His Asn Ser Met Ser
385                 390                 395                 400
Lys Asp Glu Ala Ala Asn Leu Pro Trp Glu Asn Leu Gly Tyr Ser Lys
                405                 410                 415
Ser Glu Asp Leu Leu Gln Asp Glu Arg Val Arg Asp Glu Leu Arg Lys
            420                 425                 430
Arg Tyr Gly Gly Glu Pro Val Lys Met Gln Glu Thr Gly Gly Arg Ser
        435                 440                 445
```

```
Glu Ala Pro Ala Val Leu Leu Val Val Asp Lys Gly Asn Gly Ile Val
    450                 455                 460
Asp Ala Phe Trp Phe Phe Phe Tyr Ser Phe Asn Leu Gly Asn Val Val
465                 470                 475                 480
Leu Asn Val Arg Phe Gly Asn His Ile Gly Asp Trp Glu His Cys Leu
                485                 490                 495
Val Arg Phe Tyr Asn Gly Gln Pro Lys Ala Leu Phe Phe Ser Ala His
            500                 505                 510
Ser Ala Gly Glu Ala Tyr Ser Tyr Glu Ala Val Glu Lys Ile Gly Gln
        515                 520                 525
Arg Val Ser Cys His Ser His Thr Gly Asp Phe Gly Trp Val Arg Gly
    530                 535                 540
```

<210> 34657
<211> 171
<212> PRT
<213> A.fumigatus

<400> 34657

```
Val Ala Thr Pro Thr Leu Val Ile Leu Val Gly Leu Glu Ala Asp Gln
1               5                   10                  15
Leu Phe Pro Met Cys Ile Gln Pro Val Ile Tyr Ser Ala Val Gly Thr
            20                  25                  30
His Ala Met Tyr Ala Thr Pro Gly Val His Ser Tyr Val Leu Pro Trp
        35                  40                  45
Gly Leu Leu His Asp Gln Thr Asp Arg Gly Pro Leu Trp Asp Pro Leu
    50                  55                  60
Leu Asn Ser His Met Tyr Thr Tyr Asp His Val Asn Asp Thr Leu Arg
65                  70                  75                  80
Ala Ser Thr Ala Ser Pro Leu Ala Pro Thr Glu Trp Phe Tyr Phe Asn
                85                  90                  95
Gly His Trp Gly Asp Lys Phe Tyr Pro Leu Gly Asp Arg Arg Gln Tyr
            100                 105                 110
Arg Phe Ala Gly Gln Tyr His Tyr Val Asn Gly Pro Leu Gly Pro Arg
        115                 120                 125
Phe Lys His Leu His Arg Arg Lys Val Cys Gln Gly Pro Asp Glu Asp
    130                 135                 140
Pro Cys Val Ile Lys Asp Trp Val Gly Glu Lys Met Arg Pro Lys Arg
145                 150                 155                 160
Leu Pro Asn Pro Arg Pro His Glu Asn Pro Val
                165                 170
```

<210> 34658
<211> 97
<212> PRT
<213> A.fumigatus

<400> 34658

```
Pro Leu Leu Pro Gln Ser Ile Pro Leu Ile Ser Arg Leu Ala Gly Val
1               5                   10                  15
Leu Ser His Gln Ala Ser Asp Asn Val Lys Lys Leu Gly Lys Asn Asn
            20                  25                  30
Asp Leu Ile Glu Arg Val Arg Arg Thr Ala Phe Phe Ala Pro Ile Leu
        35                  40                  45
Asp Glu Leu Asp Thr Leu Leu Asp Pro Ser Thr Phe Ile Gly Arg Ala
    50                  55                  60
```

```
Pro Gln Gln Val Glu Lys Phe Thr Ser Thr Glu Val Lys Lys Ala Leu
65                  70                  75                  80
Glu Pro Tyr Glu Glu His Leu Leu Asn Ala Glu Thr Ala Ala Leu Tyr
                85                  90                  95
Val
```

<210> 34659
<211> 138
<212> PRT
<213> A.fumigatus

<400> 34659

```
Thr Val Gly Lys Arg Ala Cys Leu Trp Ile Gln Asp Leu Leu Met Asp
1               5                   10                  15
Leu Arg Asn Leu Glu Arg Ala Arg Asn Asp Leu Arg Phe Arg Gly Val
            20                  25                  30
Lys Gly Thr Thr Gly Thr Gln Ala Ser Phe Leu Gln Ile Phe Asn Gly
        35                  40                  45
Asp His Asp Lys Val Glu Gln Leu Asp Glu Leu Val Thr Lys Lys Ala
    50                  55                  60
Gly Phe Asp Ser Ala Phe Ile Ile Ser Ser Gln Thr Tyr Ser Arg Lys
65                  70                  75                  80
Ile Asp Val Asp Val Ala Asn Ala Leu Gly Ser Phe Gly Ser Thr Cys
                85                  90                  95
Glu Arg Ile Gly Ile Asp Ile Arg His Leu Ala Met Leu Lys Glu Val
            100                 105                 110
Glu Glu Pro Phe Glu Lys Asp Gln Ile Gly Ser Ser Ala Met Val Ser
        115                 120                 125
Arg Thr Leu Ala His Lys Val Arg Ser Met
    130                 135
```

<210> 34660
<211> 85
<212> PRT
<213> A.fumigatus

<400> 34660

```
Thr Tyr His Ala Met Gln Ala Tyr Lys Arg Asn Pro Met Arg Ser Glu
1               5                   10                  15
Arg Leu Cys Ser Leu Gly Arg His Leu Gln Asn Leu Pro Lys Asp Ala
            20                  25                  30
Leu Asp Thr Tyr Ser Ala Gln Trp Phe Glu Arg Ser Leu Val Ser Tyr
        35                  40                  45
Thr Pro Gln Arg Arg Arg Met His Ala Thr Phe Ser Leu Thr Phe Ser
    50                  55                  60
Arg Met Thr Ala Leu Ser Ala Val Ser Ala Phe Pro Ser Phe Thr Phe
65                  70                  75                  80
Arg Pro Met Pro Ala
                85
```

<210> 34661
<211> 203
<212> PRT
<213> A.fumigatus

<400> 34661
Ser Glu Ser Val Pro Ala Arg Ile Cys Phe Ser Gln Ala Thr Asn Leu
1 5 10 15
Gly His Gly Ala Leu Met Pro Ala Gln Pro Val Ser Cys Gln Leu Gln
20 25 30
Glu Asp Ile His Ile Gly Ala Asp Phe Leu Cys His Ser Asp Val Pro
35 40 45
His Val Phe Val Lys Val Leu Gly Ser Pro Ala Ser Arg Asp Ser Arg
50 55 60
Glu Lys Val Gln Lys Leu Leu Ala Arg Ser Asp Ser Gln Lys Lys Leu
65 70 75 80
Val Pro Val Ile His Ser Val Ser Leu Ser Thr Ser Phe Ser Leu Ser
85 90 95
Ala Ala Glu Ser Ser Met Asp Glu Trp Leu Ala Leu Pro Glu Val Asn
100 105 110
Lys Gln Tyr Thr Pro Leu Leu Trp Val Gly Pro Thr Ala Pro Gly His
115 120 125
Glu Lys Leu Ser Thr Asp Thr Asn Ile Pro Ala Asn Ser Ala Val Trp
130 135 140
Gln Tyr Ala Leu Asp Thr Thr Lys Ala Ala Arg Ser Arg Gly Met Glu
145 150 155 160
Val Leu Gly Met Tyr Asn Ala Thr Leu Gln Ala Ala Ser Trp Asp Gly
165 170 175
Lys His Tyr Gly Glu Lys Val Ala Met Met Gln Ala Met Met Val Ser
180 185 190
Ser Arg Leu Cys Ser Glu Ala Asp Tyr Leu Ile
195 200

<210> 34662
<211> 139
<212> PRT
<213> A.fumigatus

<400> 34662
Lys Val Gly Arg Ala Glu Phe Glu Asp Met Leu Pro Arg Lys Leu Ile
1 5 10 15
Cys Pro Asp Thr Asp Leu Leu Ala Ala Gln Ser Asn Gly Tyr Arg Arg
20 25 30
Met Ser Ala Asn Leu Tyr Arg Thr Lys Asn Glu Gly Glu Phe Phe His
35 40 45
Ile His Gly Ser Leu Glu Ala Thr Thr Thr Leu Asn Met Ile Gly Leu
50 55 60
Glu Gly His Arg Pro Asp Leu Thr Asp Tyr Glu Glu Ile Ile Glu Val
65 70 75 80
Ile Glu Ser His Val Gln Lys Tyr Ser Ala Ala Glu Leu Glu Glu Met
85 90 95
Asn Lys Glu Arg Arg Gln Ala Gly Val Thr Ala Phe Lys Tyr Glu Asp
100 105 110
Phe Ile Asn Thr Pro His Val Arg Leu Val Asn Arg Ser Val Ala Thr
115 120 125
Gly Pro Gln Ala Asp Cys Phe Ala Gly Thr Ala
130 135

<210> 34663
<211> 126
<212> PRT

<213> A.fumigatus

<400> 34663
Ser Ile Val Pro Ser Leu Leu Asp His Lys Leu Ile Val Leu Gln Gly
1 5 10 15
Arg Leu Asn Val Gln Glu Pro Pro Trp Lys Val Lys Arg Leu Thr Gly
20 25 30
Asp Leu Pro Pro Thr Pro Phe Pro Ala Ser Arg Ser Ala Ser Arg Lys
35 40 45
Ile Leu Glu Gly Ile Lys Val Leu Glu Leu Cys Arg Ile Ile Ala Gly
50 55 60
Pro Thr Val Thr Arg Ile Leu Ser Glu Tyr Gly Ala Asp Val Leu Lys
65 70 75 80
Ile Thr Ser Pro Asn Leu Pro Asp Val Pro Phe Phe Gln Val Asp Gly
85 90 95
Asn Met Gly Lys His Ala Ala Asp Leu Asp Leu Lys Thr Thr Glu Gly
100 105 110
Arg Arg Gln Phe Val Phe Thr Ala Gly Leu Gln Arg Ala Leu
115 120 125

<210> 34664
<211> 135
<212> PRT
<213> A.fumigatus

<400> 34664
Thr Arg Lys Leu Arg Val Asn Met Thr Asp Thr Glu Thr Asp Asn Pro
1 5 10 15
Tyr Ser Pro Val Asp Glu Ala Arg Leu Ile Phe Ser Tyr Leu Cys Asp
20 25 30
Gln Ala Glu Arg Leu Ser Leu Pro Pro Gln Ile Val Glu Asn Lys Asp
35 40 45
Ala Val Ser Phe Ser Ser Ser His Asn Glu Ile Tyr Tyr Pro Ile Pro
50 55 60
Phe Lys Glu Thr Glu Thr Leu Ala Ala Leu Lys Gly Val Glu Gly Ala
65 70 75 80
Val Ala Ser Ala Ile Ala Asp Leu Arg Phe Gly Glu Gln Lys Arg Asn
85 90 95
Val Lys Ile Asn Leu Glu Lys Ala Thr Ala Phe Gly Cys Gln Ala Tyr
100 105 110
Met Ala Lys Leu Asp Gly Leu Ser Lys Leu Asp Pro Ala Val Lys Ser
115 120 125
Lys Leu Lys Gly Arg Ser Ser
130 135

<210> 34665
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34665
Gly Val Phe Glu Ile Arg Ser Ile Leu Leu Leu Ser Phe Gly Tyr Gln
1 5 10 15
Phe Leu Val Trp Ile Trp Gln Ser Ser Ser Asp Ala Leu Ser Lys Ala
20 25 30
Gln Ser Asn Phe Phe Val Asn Gly Ala Arg Asn Glu Arg His Ser Trp

```
        35                  40                  45
Val Asp Lys Arg Glu Leu Glu Val Leu Asn Pro Glu Thr Asn Arg
    50                  55                  60

<210> 34666
<211> 277
<212> PRT
<213> A.fumigatus

<400> 34666
Phe Gly Ala His Ala Pro Ile Leu Gly Leu Val Arg Ser Ser Pro Glu
1               5                  10                  15
Gln Leu Trp Ile His Val Glu Met Glu Arg Met Val Gly Glu Leu Gly
            20                  25                  30
Pro Asn Ile Ile Val Cys Met Leu Thr Val Gly Phe Arg Ile Glu Asp
        35                  40                  45
Leu Glu Leu Pro Leu Val His Pro Arg Met Ala Phe Ile Thr Gly Ala
    50                  55                  60
Ile Asp Lys Glu Ile Arg Leu Ser Phe Ala Gln Arg Ile Arg Gly Thr
65                  70                  75                  80
Leu Pro Asp Pro Tyr Gln Glu Leu Ile Thr Glu Gly Lys Glu Lys Asp
                85                  90                  95
Thr Pro Asp Phe Lys Tyr Ser Ser Asp Ser Glu Ser Tyr Leu Ile Cys
            100                 105                 110
Cys Pro Arg Ser Ala Tyr Ser Lys Gly Leu Thr Lys Ile Leu Ile Pro
        115                 120                 125
Thr Ala Thr Pro Tyr Ala Lys Glu Gly Arg Glu Ile Met Gln Leu Ile
    130                 135                 140
Arg Arg Lys Ala Gly Asp Glu Glu Ile Gln Pro Leu Ile Thr Ala Ile
145                 150                 155                 160
Glu Glu Gln Ala Lys Ala Leu Gly Val Asp Asp Pro Met Leu Pro Ser
                165                 170                 175
Thr Asp Ala Phe Val Thr Ser Ile Cys Phe Val Gly Ser Lys Ser Leu
            180                 185                 190
Ser His Val Leu Ser Cys Ile Glu Arg Asn Lys Glu Arg Leu Leu Ala
        195                 200                 205
Ile Gly Pro Lys Ser Ala Arg Ala Arg Cys Gln Ile Ile Thr Ser Val
    210                 215                 220
Met Glu Tyr Trp Val Asp Gln Pro Gly Val Ala Ile Asn Ile Ile Asp
225                 230                 235                 240
Lys Leu Leu Asn Tyr Thr Ile Leu Thr Pro Leu Ser Val Ile Glu Trp
                245                 250                 255
Ala Leu Val Glu Arg Leu Gln Ala Gly Thr Ile Leu Gln Gln Asn Thr
            260                 265                 270
Ser Ser Gln Arg Arg
        275

<210> 34667
<211> 308
<212> PRT
<213> A.fumigatus

<400> 34667
Leu Leu Gly Leu Glu Leu Val Lys Ile Ile Leu Phe Thr Ile Pro Tyr
1               5                  10                  15
Thr Met Ala Ser Pro Ala Thr Gly Phe Glu Ala Gln Ala Ser Ala Leu
```

```
            20                  25                  30
Leu Glu Lys Thr Asp Ile Ile Ala Ser Thr Pro His Ala Leu Val Asp
        35                  40                  45
Leu Val Asn Pro Phe Ala Leu Lys Asp Gly Glu Pro Thr Ala Val Gln
    50                  55                  60
Ser Val Ile Ser Leu Leu Gln Asn Gln Leu Gln Ala Glu Ala Asn Arg
65                  70                  75                  80
Gly Trp Glu Leu Ala Cys Leu Pro Arg Pro Trp Lys Arg Ser Glu Ser
                85                  90                  95
Glu Glu Asp Gly Pro Ile Glu Ala Gly Pro Lys His Ala Phe Pro Gln
            100                 105                 110
Ile Thr Val Pro Asn Pro Val Arg Lys Gly Ala Arg Ala Ile Phe Pro
        115                 120                 125
Glu Ile Tyr Leu Ser Val Tyr Ala Asn Gln Asp Leu Glu Thr Val Pro
    130                 135                 140
Pro Thr Ser Asp Ile Ala Ser Ser Leu Leu Arg Glu Ala Leu Val Asp
145                 150                 155                 160
Thr Ile Asn Ile Leu Asp Phe Asn Arg Ile Ala Thr Ala Lys Phe Leu
                165                 170                 175
Ile Asp Val Asp Cys Tyr Phe Thr Pro Tyr Thr Phe Val Lys Arg Ala
            180                 185                 190
Thr Pro Phe Asp Arg Leu Arg Asp Leu Pro Gly Asp Arg Pro Thr Trp
        195                 200                 205
Lys Pro Glu Asp Val Ala Val Asp Ala Val Phe Ser Gln Leu Phe Gln
    210                 215                 220
Leu Pro Ser Pro Glu His Lys Leu Val Tyr Tyr His Ser Val Leu Thr
225                 230                 235                 240
Glu Cys Cys Lys Ile Ala Pro Ala Ala Ile Ala Pro Ser Leu Gly Arg
                245                 250                 255
Ala Ile Arg Phe Leu Tyr Arg Ser Leu Asp Thr Ile Asp Leu Glu Leu
            260                 265                 270
Met His Arg Phe Leu Asp Trp Phe Ala His His Leu Ser Asn Phe Gly
        275                 280                 285
Phe Thr Trp Lys Trp Ser Glu Trp Leu Val Ser Leu Val Arg Thr Ser
    290                 295                 300
Leu Ser Val Cys
305
```

<210> 34668
<211> 98
<212> PRT
<213> A.fumigatus

```
<400> 34668
Met Ser Gly Ala Asp Met Leu Asn Ala Cys Arg Ser Leu Ile Ala Leu
1               5                   10                  15
Ser Leu Ile Met Ala Leu Leu Gln Phe Lys Pro Ala Pro Met Tyr Ile
            20                  25                  30
Leu Asp Glu Val Asp Ala Ala Leu Asp Leu Ser His Thr Gln Asn Ile
        35                  40                  45
Gly Arg Leu Ile Lys Thr Arg Phe Lys Gly Ser Gln Phe Ile Val Val
    50                  55                  60
Ser Leu Lys Asp Gly Met Phe Gln Asn Ala Asn Arg Ile Phe Arg Thr
65                  70                  75                  80
Arg Phe Ser Glu Gly Thr Ser Val Val Gln Ala Leu Thr Pro Ala Asp
                85                  90                  95
```

Met Lys

<210> 34669
<211> 152
<212> PRT
<213> A.fumigatus

<400> 34669
Met Met Pro Gly Ile Leu Pro Phe Ser Ile Glu Leu Arg Arg Pro Gln
1 5 10 15
Ser Cys Val Ala His Gly Ala Asn Gln Ala Val Cys Ser Ala Gly Arg
20 25 30
Asn Asn Asn Cys Gln Met Ser Pro Ser Ser Val Ile Leu Pro Thr Ala
35 40 45
Thr Leu Ser Leu Trp Val Ser Ile Thr Ile Ser Gly Ile Glu Arg Leu
50 55 60
Pro Gly Thr Leu Ile Gln Ser Phe Ser Asn Val Asn Pro Asp Asn Ser
65 70 75 80
Ser Gly Val Pro Asn Tyr Tyr His Leu His Leu Asn Thr Ile Ser Trp
85 90 95
Val Tyr Leu Val Thr Ser Arg Leu Gln Ile Tyr Gln Pro Trp Ser Tyr
100 105 110
Pro Arg Val Asp Gln Ile Ser His Ser Ala Asp Asn Asn Ala Arg Gly
115 120 125
Arg Thr Ile Ala Gln His Pro Val Ala Ala His Phe Ser Ser Arg Phe
130 135 140
Phe Leu Arg Tyr Gln Met Val Pro
145 150

<210> 34670
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34670
Ile Leu Lys Phe Glu Tyr Ser Ser His Arg Pro Lys Tyr Gln Glu Lys
1 5 10 15
Thr Gly Gln Thr Ala Gly Ser Tyr Pro Leu Val Leu Asn Gly Pro Glu
20 25 30
Cys Ser Val Pro Arg Tyr Glu Asn Thr Ser Ser Gly Thr Met His Gly
35 40 45
Gly Ser Gly Val Arg Asn Asn His His His His His His His His His
50 55 60
Thr His Thr Pro Pro
65

<210> 34671
<211> 179
<212> PRT
<213> A.fumigatus

<400> 34671
Leu Cys Ser Phe Arg Thr Gly Trp Arg Ser Lys Arg Tyr Val Ile Leu
1 5 10 15
Phe Pro Gly Lys Arg Met Pro Leu Gly Gly Arg Ser Cys Leu Ser Gln

```
            20                  25                  30
Gln Asn Glu Val Ala Asn His Leu Asp Asp Glu Asp Pro Gln Glu Gly
        35                  40                  45
Phe Phe Pro Asn Asp Glu Lys Thr Gln Lys Tyr Gly Asn Leu Leu Phe
    50                  55                  60
Leu Leu Gln Ser Glu Pro Arg His Ile Ala His Leu Cys Arg Leu Val
65                  70                  75                  80
Ser Met Ser Glu Ile Asp Ser Leu Leu Gln Thr Val Met Phe Thr Ile
                85                  90                  95
Tyr Gly Asn Gln Tyr Glu Ser Arg Glu Glu His Leu Leu Leu Thr Met
            100                 105                 110
Phe Gln Ser Val Leu Thr Tyr Gln Phe Asp Asn Thr Pro Glu Tyr Ser
        115                 120                 125
Ser Leu Leu Arg Gln Asn Thr Pro Val Ser Arg Met Met Thr Thr Tyr
    130                 135                 140
Thr Arg Arg Gly Pro Gly Gln Ser Tyr Leu Lys Gln Val Leu Ala Glu
145                 150                 155                 160
Gln Ile Asn Ser Leu Ile Glu Leu Arg Asp Val Asp Leu Glu Ile Asn
                165                 170                 175
Pro Leu Lys
```

<210> 34672
<211> 74
<212> PRT
<213> A.fumigatus

```
<400> 34672
Ser Ala Cys Arg Pro Phe Ser Ala Ser Phe Gln Ser Ile Ser Leu Gly
1               5                   10                  15
Ser Pro Ile Ser Ser His Pro Pro Cys Ala Pro Tyr Phe Thr Val His
            20                  25                  30
Asn His Phe Leu Pro Thr Ile Ser Tyr Thr Asn Gly Leu Asp Val Leu
        35                  40                  45
Phe Lys Leu Leu Arg Leu Arg Gln Phe Ser Ser Asp Cys Leu Asn Cys
    50                  55                  60
Phe Pro Ala Pro Arg Asp Arg Phe Leu Pro
65                  70
```

<210> 34673
<211> 72
<212> PRT
<213> A.fumigatus

```
<400> 34673
Val Thr Leu Ile Gly Pro Val Glu Thr Tyr Arg Leu Arg Cys Leu Ile
1               5                   10                  15
Gly Ser Gly Thr Ala Gln Lys Tyr Leu Arg Glu Leu Lys Ala Lys Ile
            20                  25                  30
Ser Ser Gln Ser Lys Lys Asn Phe Val Leu Glu Lys Asp Val Arg Tyr
        35                  40                  45
Leu Asp Ser Arg Ile Ala Leu Leu Ile Gln Asn Arg Met Ala Leu Glu
    50                  55                  60
Glu Val Cys Tyr Ser Ile Ser Arg
65                  70
```

<210> 34674
<211> 113
<212> PRT
<213> A.fumigatus

<400> 34674
Asn Pro Glu Asn Leu Met Glu Leu Leu Asn Gln Leu Asp Gly Phe Asp
1 5 10 15
Tyr Leu Gly Lys Thr Lys Ile Ile Met Ala Thr Asn Arg Pro Asp Thr
20 25 30
Leu Asp Pro Ala Leu Leu Arg Ala Gly Arg Leu Asp Arg Lys Ile Glu
35 40 45
Ile Pro Leu Pro Asn Glu Val Gly Arg Leu Glu Ile Leu Lys Ile His
50 55 60
Ser Ser Thr Val Gln Leu Glu Gly Glu Ile Asp Phe Glu Ser Val Val
65 70 75 80
Lys Met Ser Asp Gly Leu Asn Gly Ala Asp Leu Arg Asn Val Val Thr
85 90 95
Glu Ala Tyr Gly Ser His Leu Arg Thr Pro Leu Phe Thr Gly Ile Asn
100 105 110
Cys

<210> 34675
<211> 222
<212> PRT
<213> A.fumigatus

<400> 34675
Leu Val Glu Ser Leu Gly Tyr Asp Glu Tyr Lys Pro Ile Thr Lys Glu
1 5 10 15
Gly Lys Gln Met Val Pro Gly Gly Leu Gly Trp Ile Ile Val Asp Ala
20 25 30
Leu Asp Thr Leu Met Ile Met Asn Leu Thr Ser Arg Val Gln His Ala
35 40 45
Arg Asn Trp Ile His Asn Ser Leu Gln Tyr Asn Gln Asp His Asp Val
50 55 60
Asn Thr Phe Glu Thr Thr Ile Arg Met Leu Gly Gly Leu Leu Ser Ala
65 70 75 80
His Tyr Leu Ser Thr Ala His Pro Gly Leu Ala Pro Ile Ala Asp Asp
85 90 95
Asp Ala Gly Ser Pro Gly Glu Asp Leu Tyr Ile Glu Lys Ala Thr Asp
100 105 110
Leu Ala Asp Arg Leu Leu Gly Ala Phe Glu Ser Lys Ser Gly Val Pro
115 120 125
Tyr Ala Ser Ile Asn Leu Asn Thr Ser Thr Gly Ile Pro Ser His Ala
130 135 140
Asp Asn Gly Ala Ser Ser Thr Ala Glu Ala Thr Thr Val Gln Leu Glu
145 150 155 160
Phe Lys Tyr Leu Ala Lys Leu Thr Gly Glu Ala Glu Tyr Trp Arg Val
165 170 175
Val Glu Lys Val Met Gln Val Val Asp Asp Gln Lys Met Glu Asp Gly
180 185 190
Leu Leu Pro Ile Tyr Ile Tyr Pro Asp Ser Gly His Phe Arg Gly Asp
195 200 205
Asn Ile Arg Leu Gly Ser Arg Gly Asp Ser Tyr Tyr Gly Glu

210 215 220

<210> 34676
<211> 322
<212> PRT
<213> A.fumigatus

<400> 34676
His Ser Gly Phe Leu Glu Tyr Leu Ile Lys Gln Tyr Leu Gln Thr Ser
1 5 10 15
Lys Gln Glu Pro Ile Tyr Lys Glu Leu Trp Asp Glu Ser Leu Met Gly
20 25 30
Val Arg Lys His Leu Ile Ala Tyr Thr Lys Asn Ala Gln Leu Met Ile
35 40 45
Leu Gly Glu Arg Pro Ser Gly Leu His Gly Lys Leu Ser Pro Lys Met
50 55 60
Asp His Leu Val Cys Phe Met Pro Gly Thr Ile Ala Leu Gly Ala Thr
65 70 75 80
Gly Gly Val Pro Leu Ser Glu Ala Arg Lys Ser Pro Asp Trp Asn Gln
85 90 95
Arg Arg Asp Glu Glu Ile Leu Ile Ala Arg Glu Leu Met Lys Thr Cys
100 105 110
Trp Ala Thr Tyr Leu Ala Thr Lys Thr Gly Leu Ala Pro Glu Ile Thr
115 120 125
Tyr Phe Thr Leu Asp Asp Pro Pro Lys Met Phe His Asp Met Tyr Pro
130 135 140
Asp Ser Thr Ala Ser Ala Gly Asn Arg Lys Ser Gln Gly Ala Asp Leu
145 150 155 160
Pro Met Lys Ser Gln Pro Leu Tyr Pro Leu Asp Asp Glu Thr Leu Lys
165 170 175
Trp Arg Glu Asp Ile Gln Ile Gln Ser Gln Asp Arg His Asn Leu Gln
180 185 190
Arg Pro Glu Thr Val Glu Ser Leu Phe Tyr Met Tyr Arg Ile Thr Gly
195 200 205
Asp Glu Ile Tyr Arg Gln Trp Gly Trp Glu Met Phe Lys Ser Phe Ile
210 215 220
Arg His Thr Ala Val Val Glu His Asp His Ser His Glu Thr Asp Ser
225 230 235 240
Pro Ala Asp Ala Ala Ala Gly Ser Gln Ser Glu Lys Val Ala Arg Pro
245 250 255
Ser Arg Ile Thr Gly Phe Thr Ser Leu Ser Asn Ala Asn Thr Val Pro
260 265 270
Pro Val Pro Arg Asp Asn Met Glu Ser Phe Trp Met Ala Glu Thr Leu
275 280 285
Lys Tyr Phe Tyr Leu Leu Phe Ser Arg Pro Gly Leu Tyr Leu Pro Gly
290 295 300
Gly Pro Cys Val Gln His Gly Ser Ala Ser Ala Ala Thr Val Ser Ala
305 310 315 320
Tyr Gly

<210> 34677
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34677
Arg Gly Tyr Gly Ser Val Trp Leu Thr Ser Ser Asn Ser Phe Ile Tyr
1 5 10 15
Arg Asn Lys Leu Leu Thr Leu His Ser Gly Leu Phe Ala Ile Lys Asp
20 25 30
Tyr Arg Asp Ala Ile Ser Gln Asp Asp Phe Asn Lys Ala Val Arg Lys
35 40 45
Val Ala Glu Ala Lys Lys Leu Glu Gly Lys Leu Glu Tyr Gln Lys Leu
50 55 60

<210> 34678
<211> 68
<212> PRT
<213> A.fumigatus

<400> 34678
Ala Thr Pro Thr Pro Cys Pro Leu Tyr Pro Glu Thr Thr Trp Arg Val
1 5 10 15
Ser Gly Trp Gln Arg Arg Ser Ser Ile Ser Thr Cys Cys Phe Pro Asp
20 25 30
Arg Asp Phe Ile Ser Leu Glu Asp His Val Phe Asn Thr Glu Ala His
35 40 45
Pro Leu Pro Arg Phe Gln Pro Thr Gly Asp Leu Lys Thr Gly Trp Thr
50 55 60
Arg Lys Pro Arg
65

<210> 34679
<211> 217
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34679
Phe Leu Ala Glu Xaa Thr Glu Leu Ala Leu Val Pro Gly Pro Lys Gly
1 5 10 15
Met Leu Gly Phe Glu Val Ala Ala His Gly His Pro Ala His Ser Gly
20 25 30
Tyr Pro Trp Trp Ala Lys Arg Ala Ile Ser Ala Ile Leu Pro Ala Leu
35 40 45
Gly Arg Val Asp Gln Leu Gly Asp Ile Pro Val Glu Glu Gly Gly Leu
50 55 60
Pro Pro Ser Asp Lys Tyr Gly Arg Thr Thr Val Asn Ile Gly Arg Met
65 70 75 80
Glu Gly Gly Val Ala Thr Asn Val Val Pro Ser Lys Ala Arg Ala Gly
85 90 95
Val Ala Val Arg Leu Ala Ala Gly Thr His Asp Glu Ala Arg Glu Val
100 105 110
Val Leu Lys Ala Val Arg Asp Val Thr Gly Gly Asp Asp Arg Val Val
115 120 125
Val Asn Phe Ser Leu Glu Gly Tyr Gly Pro Gln Asp Leu Asp Thr Asp
130 135 140

```
Val Pro Gly Phe Asn Ile Thr Thr Val Asn Tyr Gly Thr Asp Val Pro
145                 150                 155                 160
Asn Leu Gln Leu His Pro Arg Pro Asp Gly Lys Val Arg Arg Tyr Leu
                165                 170                 175
Tyr Gly Pro Gly Thr Ile His Val Ala His Gly Asp Asn Glu Ala Leu
            180                 185                 190
Thr Val Ala Gln Leu Glu Glu Ala Val Arg Gly Tyr Lys Lys Leu Ile
        195                 200                 205
Gln Ala Ala Leu Asp Arg Ser Ala Ser
    210                 215
```

<210> 34680
<211> 145
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (31)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34680

```
Glu Thr Ala Gly Asp Ala Met Arg Pro Phe Thr Ser Pro Pro Pro Gln
1               5                   10                  15
Pro Leu Pro Arg Arg Phe Pro His Arg Asn Phe Trp Arg Asn Xaa Pro
            20                  25                  30
Ser Trp Pro Trp Ser Pro Ala Gln Arg Ala Cys Trp Ala Leu Arg Ser
        35                  40                  45
Pro Arg Met Ala Thr Pro Pro Thr Pro Asp Thr Arg Gly Gly Arg Arg
    50                  55                  60
Gly Pro Phe Pro Pro Ser Cys Arg Arg Trp Gly Ala Trp Ile Asn Trp
65                  70                  75                  80
Val Ile Ser Pro Ser Arg Arg Val Ala Cys Pro Pro Ala Ile Ser Thr
                85                  90                  95
Val Ala Arg Arg Ser Thr Ser Gly Gly Trp Arg Ala Ala Ser Arg Arg
            100                 105                 110
Thr Trp Cys Arg Ala Arg His Gly Gln Gly Ser Pro Cys Gly Trp Arg
        115                 120                 125
Arg Ala Arg Thr Thr Arg Arg Ala Arg Trp Cys Ser Arg Leu Ser Gly
    130                 135                 140
Met
145
```

<210> 34681
<211> 201
<212> PRT
<213> A.fumigatus

<400> 34681

```
Thr Thr Gln Val Pro Gln His Val Thr Ala Leu Leu Ser His Leu Thr
1               5                   10                  15
Ser Arg Pro Gly Val Gln Ser Thr Phe Ile Leu Ser Arg Lys Asp Gly
            20                  25                  30
Ser Ile Ile Gln Ser Thr Gly Leu Leu Ala Ser Pro Pro Pro Arg Asn
        35                  40                  45
Ser Thr Thr Ser Glu Thr Gln Thr Pro Pro Ala Pro Asn Asp Ala Asn
```

```
    50                  55                  60
Ser Thr Thr Thr Ile Pro Thr Glu Ser Leu Asp Pro Ser Ser Pro Ala
65                  70                  75                  80
Gly Ala Ser Thr Ala Arg Ala Pro Thr Ala Gln Lys Pro Tyr Gln Pro
                85                  90                  95
Ser Gln Ala Glu Ala Leu Ala Ala Arg Ile Phe Ala Phe Val Glu Ser
            100                 105                 110
Ala Ser Glu Leu Gly Met Thr Leu Ser Cys Pro Arg Ala Glu Asp Met
        115                 120                 125
Asp Ser Tyr Gln Thr Gly Leu Asn Gly Asp Gly Ala Gly Arg Asp Asp
    130                 135                 140
Ala Arg Ser Glu Gly Val Asp Arg Glu Glu Glu Asp Glu Val Lys Leu
145                 150                 155                 160
Leu Arg Leu Arg Thr Lys Lys His Glu Ile Val Val Val Pro Asp Arg
                165                 170                 175
Lys Tyr Leu Leu Cys Val Val His Asp Ala Ala His Ala Ser Gly Gly
            180                 185                 190
Ser Gly Val Ala Gly Val Arg Ser Arg
        195                 200
```

<210> 34682
<211> 92
<212> PRT
<213> A.fumigatus

<400> 34682

```
Ser Arg Ser Asp Val Gln Gly Arg Ile Thr Ser Tyr Leu Ser Thr Thr
1               5                   10                  15
Asn Val Gln Leu Gly Ala Thr Tyr Gly Ile Ser Arg Ala Ala Thr Thr
            20                  25                  30
Ala Phe Ser Lys Gly Tyr Glu Ala Ala Ala Lys Phe Val Asn Ala Ser
        35                  40                  45
Pro Asp Glu Val Cys Ser Leu Thr Leu Val Ala Pro Ala Cys Ser Asp
    50                  55                  60
Pro Ile Thr Ser Asp Leu Leu Gly Tyr Ile Asn Asn Ser Ala Leu Ala
65                  70                  75                  80
Gln Pro Phe Asp Arg Ala Gln Val Arg Thr Arg Arg
                85                  90
```

<210> 34683
<211> 128
<212> PRT
<213> A.fumigatus

<400> 34683

```
Leu Arg Leu Ala Leu Thr Pro Leu Pro Gln Ile Cys Leu Gly Ile Ser
1               5                   10                  15
Thr Thr Gln Leu Leu His Asn Leu Ser Thr Ala Leu Lys Phe Glu Pro
            20                  25                  30
Gly Asp Glu Leu Val Leu Ser Lys Leu Asn His Glu Ala Asn Thr Ala
        35                  40                  45
Pro Trp Val Arg Ile Ala Glu Arg Leu Gly Leu Gln Val Lys Trp Trp
    50                  55                  60
Ser Ala Ser Asp Thr Arg Asn Pro Val Cys Asp Leu Asp Glu Leu Gly
65                  70                  75                  80
Gln Leu Leu Ser Glu Lys Thr Arg Leu Val Ala Cys Pro His Ala Ser
```

```
                85                  90                  95
Asn Ile Thr Gly Thr Ile Thr Lys Val Lys Glu Ile Ala Lys Leu Val
            100                 105                 110
His Gln Tyr Pro Arg Val Ser Ser Leu Val Ala Ser Ser Cys His Cys
        115                 120                 125
```

<210> 34684
<211> 238
<212> PRT
<213> A.fumigatus

<400> 34684

```
Asn Lys Leu Cys Ala Gly Leu Ser Leu Pro Glu Val Lys Ser Ser Cys
1               5                   10                  15
Gln Asp Leu Ala Lys Ser His Arg Asn Glu Asp Glu Ser Tyr Thr Arg
            20                  25                  30
Ser Ser Thr Pro Gly Arg Ala Leu Phe Glu Phe Trp Thr Ser Thr Phe
        35                  40                  45
Ser Lys Asn Gln Ser Leu Tyr Asn Ala Val Leu Glu Asp Cys Tyr Asp
    50                  55                  60
Gln Ser Thr Ser Ile Cys Leu Leu Cys Ala Arg Gly Glu Ser Arg Val
65                  70                  75                  80
Ser Ala Phe Phe Lys Leu Leu Thr Asn His Val His Ala Ser Glu Thr
                85                  90                  95
Asp Ile Ser Ile Val Gly Ser Leu Pro Lys Asp Ala Pro Asp Val Gly
            100                 105                 110
Leu Gly Leu Val Gly Ala Pro Ala Cys Gly Asp Val Met Lys Leu Gln
        115                 120                 125
Ile Arg Val Asp Lys Asp Thr Ser Lys Ile Thr Asp Val Lys Phe Lys
    130                 135                 140
Thr Phe Gly Cys Gly Ser Ala Ile Ala Ser Ser Ser Tyr Leu Thr Glu
145                 150                 155                 160
Leu Val Arg Gly Met Thr Leu Asp Glu Ala Ala Lys Ile Arg Asn Thr
                165                 170                 175
Asp Ile Ala Lys Glu Leu Cys Leu Pro Pro Val Lys Leu His Cys Ser
            180                 185                 190
Met Leu Ala Glu Asp Ala Ile Lys Ser Ala Ile Asn Asp Tyr Tyr Thr
        195                 200                 205
Lys Asn Pro Lys Ala Ala Lys Thr Asp Leu Ser Gly Thr Ala Ala Ser
    210                 215                 220
Ile Ser Asn Val Glu Lys Thr Asp Gly Ser Thr Ala Ser Leu
225                 230                 235
```

<210> 34685
<211> 186
<212> PRT
<213> A.fumigatus

<400> 34685

```
Leu Val Arg Ile Phe Gln Pro Val Val Lys Thr Val Phe Leu Glu Lys
1               5                   10                  15
Asn Gly Ser Ile Phe Ile Lys Leu Gly Gln His Leu Ser Ser Met Gly
            20                  25                  30
Tyr Leu Leu Pro Leu Glu Trp Thr Thr Thr Phe Val Pro Leu Gln Asp
        35                  40                  45
Lys Cys Pro Val Ser Ser Ile Glu Ser Val Glu Glu Met Phe Val Thr
```

```
    50                  55                  60
Asp Thr Gly His Arg Ile Asp Glu Leu Phe Ser Ser Phe Glu Pro Leu
65                  70                  75                  80
Pro Ile Gly Ala Ala Ser Leu Ala Gln Val His Ile Gly Thr Leu Lys
                85                  90                  95
Glu Thr Gly Gln Lys Val Ala Val Lys Val Gln His Pro Ala Leu Ala
            100                 105                 110
Glu Trp Val Pro Leu Asp Leu Ala Leu Thr Arg Phe Thr Phe Ser Met
        115                 120                 125
Leu Lys Arg Phe Phe Pro Glu Tyr Asp Leu Glu Trp Leu Ser Asn Glu
    130                 135                 140
Met Asp Phe Ser Leu Pro Gln Glu Leu Asp Phe Arg Met Glu Ala Glu
145                 150                 155                 160
Asn Ala Arg Arg Ala Ser Glu Tyr Phe Lys Asn His Ser Asp Ala Pro
                165                 170                 175
Leu Val Ile Pro Glu Gly Ser Phe His Leu
            180                 185
```

<210> 34686
<211> 338
<212> PRT
<213> A.fumigatus

<400> 34686

```
Val Phe Gln Lys Ser Leu Arg Cys Ser Val Ser Asp Ser Gly Arg Phe
1               5                   10                  15
Val Pro Phe Ile Thr Ile Lys Lys Glu Ser Ser Ala Ala Leu Leu Thr
            20                  25                  30
Pro Gln Ala Val Met Trp Ala Gln Lys Arg Ile Leu Val Met Glu Phe
        35                  40                  45
Leu Ser Gly His Arg Pro Asp Asp Leu Glu Tyr Leu Asp Ser Asn His
    50                  55                  60
Ile Asp Arg Asp Glu Val Ser Ala Ala Phe Ala His Ile Phe Asn Glu
65                  70                  75                  80
Met Ile Phe Gly Asp Asn Ala Pro Leu His Cys Asp Pro His Gly Gly
                85                  90                  95
Asn Ile Ala Ile Arg Lys Asn Pro Asn Arg Arg Arg His Asn Phe Asp
            100                 105                 110
Ile Ile Leu Tyr Asp His Gly Leu Tyr Arg Asp Ile Pro Arg Asp Leu
        115                 120                 125
Arg Arg Asn Tyr Ala Lys Leu Trp Leu Ala Val Ile Glu Ala Asp Glu
    130                 135                 140
Gly Arg Met Arg Glu Tyr Ala Arg Lys Val Ala Gly Ile Thr Asp Glu
145                 150                 155                 160
Gln Phe Pro Leu Phe Ala Ser Ala Ile Thr Gly Arg Asp Tyr Thr Val
                165                 170                 175
Leu Ala Asn Lys Asp Val Ala Ser Pro Arg Thr Ala Ala Glu Lys Glu
            180                 185                 190
Asn Ile Ser Gly Ala Leu Gly Glu Gly Met Leu Gln Gln Leu Val Glu
        195                 200                 205
Leu Leu Gly Gln Val Pro Arg Ile Ile Leu Leu Ile Leu Lys Thr Asn
    210                 215                 220
Asp Leu Ser Lys Leu Tyr Ser Leu Thr Met His Ser Phe Pro Ser Phe
225                 230                 235                 240
Cys Phe Leu Leu Glu Phe Pro Ala Asn Ile Ala Cys Ser Pro Pro Ser
                245                 250                 255
```

```
Ala Arg Ser Leu Asp Glu Asn Leu His Thr Arg Gln Gly Pro Ile Arg
            260                 265                 270
Thr Phe Leu Ile Leu Ala Arg Tyr Ala Thr Arg Thr Val Phe Glu Glu
        275                 280                 285
Lys Met Glu Asn Ile Asn Glu Thr Gly Gly Met Leu Arg Pro Leu Asn
    290                 295                 300
Phe Leu Arg Phe Leu Trp Ala Trp Thr Gly Tyr Leu Arg Val Glu Leu
305                 310                 315                 320
Lys Leu Ser Ile Tyr Glu Thr Leu Leu Ser Met Lys Ser Arg Phe Gly
                325                 330                 335
Leu Ile
```

<210> 34687
<211> 322
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (306)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34687

```
Leu Gly Ile Gly Phe Pro Pro Leu Ala Leu Gly Leu His Gly Pro Asn
1               5                   10                  15
Lys Leu Ser Arg His Tyr Glu Ala Glu Asp Ile Glu Trp Asp Leu Asp
            20                  25                  30
Pro Ser Arg Thr Ile Leu Ala Ser Leu Ser Ile Gly Ile Leu Ala Gly
        35                  40                  45
Ala Ala Val Ala Leu Ser Ser Ser Leu Ala Asp Val Ser Lys Val Gly
    50                  55                  60
Ala Glu Ser Val Arg Val Ser Phe Arg Leu Gly Val Tyr Val Ala Asp
65                  70                  75                  80
Ile Ser Thr Lys Leu Glu Ala Pro Gln Ser Asp Gly Thr Leu Gln Ser
                85                  90                  95
Trp Ala His Val Val Thr Gly Met Ser His Glu Ala Val Gln Glu Glu
            100                 105                 110
Leu Ser Gln Tyr Asn Ala Val Thr Gln Asn Pro Glu Ile Thr Lys Val
        115                 120                 125
Phe Val Ser Ala Ala Asp Lys Thr Ser Val Ser Val Thr Gly Pro Pro
    130                 135                 140
Ser Arg Ile Lys Ala Ala Phe Gln His Ser Pro Ser Leu Arg Tyr Ser
145                 150                 155                 160
Lys Ser Leu Pro Leu Pro Val Tyr Asp Gly Leu Cys His Ala Ala His
                165                 170                 175
Leu Tyr Ser Gln Asp Asp Ile Glu Ile Val Ile Asn Ser Ala Lys Ser
            180                 185                 190
Val Ile Pro Thr Ser Arg Pro Val Arg Leu Pro Leu Ile Ser Ser Gln
        195                 200                 205
Thr Gly Lys Pro Phe Ala Ala Lys Thr Ala Gly Glu Leu Phe Leu Glu
    210                 215                 220
Ile Gly Thr Glu Leu Leu Thr Gly Thr Ile Phe Leu Asp Asn Val Thr
225                 230                 235                 240
Ala Gly Ile Leu Glu His Val Lys Leu Gln Glu Pro Thr Gly Asn Tyr
                245                 250                 255
```

```
Glu Ile Val Ser Phe Arg Met Ser Gln Val Leu Asn Gly Ile Leu Thr
            260                 265                 270
Ala Ile Glu Thr Asp Phe Pro Glu Leu Gly Arg Ala Arg Arg Asp Met
        275                 280                 285
Val Ser Trp Val His Gly Asp Tyr Gly Ala Arg Arg Pro Leu Ser Thr
    290                 295                 300
Arg Xaa Gln Ser Ser Pro Phe Leu Tyr Gly Leu Gln Ala Asn Gly Lys
305                 310                 315                 320
Arg Gln
```

<210> 34688
<211> 280
<212> PRT
<213> A.fumigatus

<400> 34688

```
Pro Ser Met Ser Leu Gln Leu Asn Gly Lys Ser Arg Gly Thr Ser Pro
1               5                   10                  15
Gly Asn Ala Gln Pro Leu Pro Ile Phe Asp Ala Leu Cys Arg Ser Leu
            20                  25                  30
Pro Val Gly Thr Ala Asp Glu Gln Phe Trp Trp Lys Leu Thr Gly Arg
        35                  40                  45
His Leu Ala Arg Met Met Leu Glu Ala Gly Tyr Pro Glu His Arg Gln
    50                  55                  60
Val Glu Cys Leu Val Phe His Arg Phe Lys Val Val Pro Thr Phe Gly
65                  70                  75                  80
Pro Gln Pro Arg Ser Ala Glu Pro Trp Tyr Arg Ser Arg Val Ala Ala
                85                  90                  95
Ser Ala Gly Asp Gly Ala Pro Ile Ser Tyr Ser Trp Arg Phe Gly Thr
            100                 105                 110
Ala Asp Arg Lys Pro Tyr Ile Arg Asn Tyr Ile Glu Pro Leu Gly Pro
        115                 120                 125
Leu Thr Gly Thr Ala Ala Asp Pro Asn Asn Asp Val Ala Thr Arg Ala
    130                 135                 140
Phe Leu Gln Asp Leu Thr Thr Thr Leu Pro Asn Leu Asp Leu Ser Leu
145                 150                 155                 160
Phe Trp Thr Phe Glu Pro His Leu Val Ser Arg Phe Ser Asp Lys Ala
                165                 170                 175
Asp Arg Glu Lys Tyr Ala Gly Pro Ser Val Leu Thr Gly Val Glu Leu
            180                 185                 190
Ser Pro Asp Ser Asp Ala Ile Asp Ile Lys Met Tyr Leu Tyr Pro Arg
        195                 200                 205
Asn Pro Glu Gln Ile Ser Gln Leu Leu Ser Thr Ile Ile Pro Lys Ala
    210                 215                 220
Met Arg Asp Ala Tyr Gly Glu Asp Val Cys Leu Asp Ser Leu Asn Ile
225                 230                 235                 240
Val Lys His Phe Leu Thr Gly His Pro Asp Gly Arg Gln Leu Lys Pro
                245                 250                 255
Arg Gly Thr Thr Gly Ile Asp Cys Cys Gln Val Gln His Ser Lys Val
            260                 265                 270
Lys Phe Tyr Val Ala Thr Asp Asn
        275                 280
```

<210> 34689
<211> 100

<212> PRT
<213> A.fumigatus

<400> 34689
Asp Ser Asp Gly Asp Thr Leu Gln Glu Gly Lys Ser Leu Ser Phe Pro
1 5 10 15
Phe Tyr Asp Leu Asn Leu Thr Asp Glu Arg Gln Val Met Val Asp Gly
20 25 30
Ala Glu Lys Leu Thr Pro Cys Ser Pro Gly Asp Ser Gly Ala Ile Glu
35 40 45
Met Ser Trp Val Asp Ile Glu Ala Asp Gln Leu Leu Glu Pro Pro Leu
50 55 60
Met Leu Lys Asp Phe Ile Lys Ala Val Arg Asn Ser Arg Pro Thr Val
65 70 75 80
Ser Gln Glu Asp Leu Gln Arg Asn Ala Glu Trp Thr Lys Glu Phe Gly
85 90 95
Ser Glu Gly Ala
100

<210> 34690
<211> 170
<212> PRT
<213> A.fumigatus

<400> 34690
Ile Glu Leu Arg Arg Ser Phe Gln Pro Arg Gly Glu Asp Gln Leu Phe
1 5 10 15
Asn Met Ala Arg Glu Asn Lys Pro Ala Ile Ile Phe Ile Asp Glu Val
20 25 30
Asp Ala Leu Cys Gly Pro Arg Gly Glu Gly Glu Ser Glu Ala Ser Arg
35 40 45
Arg Ile Lys Thr Glu Leu Leu Val Gln Met Asp Gly Val Gly Lys Asp
50 55 60
Ser Arg Gly Val Leu Ile Leu Gly Ala Thr Asn Ile Pro Trp Gln Leu
65 70 75 80
Asp Ala Ala Ile Arg Arg Arg Phe Gln Arg Arg Val His Ile Ser Leu
85 90 95
Pro Asp Leu Asn Ala Arg Met Lys Met Phe Met Leu Ala Val Gly Gln
100 105 110
Thr Pro Cys Gln Met Thr Gln Ala Asp Tyr Arg Thr Leu Ala Glu Met
115 120 125
Ser Glu Gly Tyr Ser Gly Ser Asp Ile Ser Ile Ala Val Gln Asp Ala
130 135 140
Leu Met Gln Pro Ile Arg Lys Ile Gln Thr Ala Thr His Tyr Lys Lys
145 150 155 160
Val Arg Ala Ser Leu Phe Pro Phe Thr Thr
165 170

<210> 34691
<211> 92
<212> PRT
<213> A.fumigatus

<400> 34691
Lys Ile Arg Ile Ser Thr Arg Leu Phe Val Val Ser Glu Arg Leu Leu
1 5 10 15

```
Phe Lys Lys Gln Leu Lys Leu Met Asp Ala Leu Leu Gln Thr Leu Tyr
            20                  25                  30
Phe Thr Phe Ser Gln Arg Gln Phe Ser Val Ser Pro Thr Gly Gly His
        35                  40                  45
Met Gln Leu Ile Leu Lys Leu Ile Asn Phe Gly Arg Gln Ser Val Leu
    50                  55                  60
Phe Leu Arg Gly Thr Leu Asn Phe Gly Ala Gln Leu Leu Phe Lys Arg
65                  70                  75                  80
Phe Phe Arg Phe Gln Lys Gly Ser Leu Ile Val Leu
                85                  90
```

<210> 34692
<211> 624
<212> PRT
<213> A.fumigatus

<400> 34692

```
Thr Asp Glu Ser Gly Ser Leu Gln Arg Glu Leu Ser Gln Glu Arg Ser
1               5                   10                  15
Gln Val Arg Glu Leu Gln Arg Ala Leu Asp Glu Glu Lys Gln Arg Ser
            20                  25                  30
Ser Glu Asn Gly Arg Ile Ile Arg Ala Gln Tyr Lys Glu Glu Val Glu
        35                  40                  45
Arg Leu Gln Glu Glu Ile Glu Ser Leu Gln His Glu Ile Glu Asp Lys
    50                  55                  60
Glu Gly Gln Phe Ala Leu Glu Gln Asp Arg Trp Glu Ser Ala Lys Arg
65                  70                  75                  80
Thr Leu Gln Leu Gln Lys Asp Arg Ala Glu Asp Gln Ala Ala Gly Tyr
                85                  90                  95
Lys Arg Thr Ile Glu Lys Leu Glu Gln Val Glu His Ser Val Ser Ala
            100                 105                 110
Arg Glu Val Lys Leu Gln Glu Val Ile Asp Ser Glu Lys Ala Arg His
        115                 120                 125
Phe Asn Ala Glu Ala Val Leu Ser Arg Gln Val Lys Glu Leu Asn Asp
    130                 135                 140
Asp Ile Ala Ser Lys Arg Glu Val Ile Asp Glu Leu Arg Asn Glu Leu
145                 150                 155                 160
Leu Ser Val Lys Glu Glu Leu Arg Val Thr Lys Arg Glu Glu Val Ala
                165                 170                 175
Leu Arg Glu Arg Val Gln Ala Leu Asp Asp Glu Val Val Val Leu Gln
            180                 185                 190
Ala Ser Leu Glu Glu Glu Gln Glu Tyr Thr Lys Ala Arg Leu Gln Lys
        195                 200                 205
Gly Ser Ser Glu Asp Gly His Leu Gln Lys Leu Val Ala Glu Lys Gln
    210                 215                 220
Lys Leu Arg Asp Gln Leu Ala Asn Ala His Val Glu Leu His Asp Leu
225                 230                 235                 240
Arg Thr Ser Val Ala Glu Leu Glu Ala Glu Arg Asp Glu Leu Gln Ser
                245                 250                 255
Gln Leu Asp Asn Val Lys Glu Gln Val Gly Asp Thr Ala Arg Phe Asp
            260                 265                 270
Arg Glu Lys Ile Asp Leu Arg Lys Ser Thr Leu Arg Leu Glu Gly Glu
        275                 280                 285
Val Lys Arg Leu Lys Asp Asp Lys Ala Ser Leu Leu Glu Ala Lys Glu
    290                 295                 300
Ser Leu Glu Lys Gln Leu Ser Ser Glu Ile Glu Arg Ala Thr Gln Glu
```

305 310 315 320
Glu Asn Arg Leu Ser Ala Glu Ile Asp Gln Leu Gln Asp Lys Leu His
325 330 335
Val Ala Ser Gly Gly Arg Asp Arg Glu Leu Thr Leu Ala Lys Gly Lys
340 345 350
Val Gln Arg Leu Glu Lys Arg Ile His Glu Leu Glu Leu Leu Leu Glu
355 360 365
Gln Gln Pro Leu Gly Asp Asn Glu Gln Ser Ser Ala Asn Ala Asp Leu
370 375 380
Ser Met Leu Arg His Asn Leu Asp Glu Ala Arg Lys Arg Glu Arg Val
385 390 395 400
Leu Leu Gln Arg Glu Ala Asp Gln Lys Ser Ser Val Arg Lys Cys Lys
405 410 415
Gln Arg Ile Ser Glu Leu Glu Arg Glu Leu His Asp Ala Leu Met Asn
420 425 430
Lys Tyr Glu Thr Ser Ser Pro His Gly Ser Pro Ser Asp Lys Leu His
435 440 445
Glu Gln Thr Arg Ser Leu Arg Lys Gln Leu Ser Glu Thr His Arg Ala
450 455 460
Leu Lys Glu Leu Arg Ala Lys Asn Arg Asp Leu Glu Arg Ala Ala Met
465 470 475 480
Arg Glu Glu Asp Gln Arg Asp Leu His Glu Leu Leu Lys Ser Ser Thr
485 490 495
Leu Glu Ala Glu Ser Leu Ala Leu Gln Val Ser Glu Arg Asp Ala Arg
500 505 510
Leu Ser Asp Leu Lys Ser Gln Leu Arg Arg Val Arg Glu Glu Arg Ala
515 520 525
Phe Cys Ser Arg Lys Ala Glu Ala Ala Thr Lys Glu Leu Glu Ser Leu
530 535 540
Arg Glu Arg Tyr Asp Arg Ile Val Lys Ser Met Glu Ser His Ala Asp
545 550 555 560
Asn Lys Asn Arg His Asp Lys Glu Ile Ser Gly Leu Gly Arg Glu Ile
565 570 575
Ile Trp Leu Arg Ala Arg Leu Arg Arg Glu Glu Lys Phe Arg Arg Asp
580 585 590
Leu Ala Trp Ser Lys Gly Leu Met Glu Leu Gly Glu Arg Val Arg Val
595 600 605
Ala Trp Tyr Val Val Pro Val Leu Cys Phe Leu Leu Ser Tyr Ser His
610 615 620

<210> 34693
<211> 83
<212> PRT
<213> A.fumigatus

<400> 34693
Leu Ser Thr Ser Asn Glu Ala Asp Leu Arg Met Ile Asn Glu Met Gly
1 5 10 15
Val Lys Pro Leu Asp Arg Thr Tyr Phe Arg Thr Pro Arg Gln Lys Leu
20 25 30
Lys Ala Ala Ile Ser Met Ile Leu Ala Thr Val Arg Met Gln Arg Lys
35 40 45
Ser Arg Glu Trp Ser Lys Thr Lys Lys Leu Gly Glu Gly Leu Lys Arg
50 55 60
Ala Lys Asn Glu Val Leu Lys Lys Arg Arg Glu Ser Ser Gly Lys Ala
65 70 75 80

Ala Met Thr

<210> 34694
<211> 256
<212> PRT
<213> A.fumigatus

<400> 34694
Pro Ser Asn Ile Ser Leu Ala Asn Ala Phe Leu Asp Gly Val Asn Ser
1 5 10 15
Ser Ala Pro Leu Pro Trp Val His Lys Ser Ile Ala Pro Gly Leu Ser
20 25 30
Thr Asp Phe Phe Val Thr Asn Leu Pro Thr Arg Ser Ala Ala Ile Met
35 40 45
Leu Ser Ala Lys Gln Pro Pro Pro Lys Val Leu Val Pro Glu Lys Leu
50 55 60
Ser Pro Asp Gly Leu Ala Leu Leu Arg Ala Ser Leu Glu Val Asp Glu
65 70 75 80
Arg Arg Gly Leu Asp Ala Asp Glu Leu Leu Gln Ile Ile Pro Glu Tyr
85 90 95
Glu Ala Leu Val Val Arg Ser Glu Thr Lys Val Thr Ala Asn Leu Leu
100 105 110
Arg Ala Ala Lys Gln Leu Lys Val Val Ala Arg Ala Gly Val Gly Val
115 120 125
Asp Asn Val Gly Glu Leu Ala Gln Pro Pro Leu Pro Pro Ser Pro Ser
130 135 140
Leu Gly Ser Trp Pro Leu Thr Ser His Arg Thr Asp Val Glu Glu Ala
145 150 155 160
Thr Lys Leu Gly Ile Val Val Val Asn Ser Pro Ser Gly Asn Ile Gly
165 170 175
Ala Ala Ala Glu His Thr Ile Ala Leu Leu Met Ala Met Ala Arg Asn
180 185 190
Ile Pro Glu Ala Cys Ser Ser Leu Lys Ser Gly Lys Trp Glu Arg Ser
195 200 205
Lys Phe Val Gly Val Glu Val Lys Thr Arg Pro Cys Arg Ser Ser Val
210 215 220
Trp Glu Lys Val Ser Phe Leu Gln Ser Gly Asp Glu Ala Phe Ile Ser
225 230 235 240
Ala Thr Met Gly Gly Arg Val Asp Gly Leu Thr Asp Lys Gln Ser Ala
245 250 255

<210> 34695
<211> 282
<212> PRT
<213> A.fumigatus

<400> 34695
Val Ser Pro Thr Pro Pro Pro Pro Phe Pro Gln Pro Trp Phe Met Ala
1 5 10 15
Thr Asp Lys Ser Pro His Arg Cys Arg Gly Ser His Gln Ala Arg His
20 25 30
Arg Arg Cys Gln Leu Ala Val Gly Gln His Trp Gly Cys Arg Gly Thr
35 40 45
Tyr His Cys Pro Ala Asp Gly His Gly Ala Gln His Pro Arg Gly Leu
50 55 60

```
Gln Gln Ser Glu Lys Arg Gln Met Gly Thr Lys Gln Val Cys Arg Arg
65                  70                  75                  80
Arg Gly Glu Asp Lys Thr Leu Ser Ile Ile Gly Leu Gly Lys Gly Glu
                85                  90                  95
Leu Leu Ala Ile Trp Gly Arg Gly Ile His Phe Arg Tyr Asp Gly Gly
            100                 105                 110
Ser Ser Gly Trp Ala Asp Arg Gln Thr Val Gly Leu Thr Val Ala Arg
        115                 120                 125
Leu Ala Lys Gly Leu Gly Met His Val Asn Ala Leu Asp Pro Tyr Ala
    130                 135                 140
Ser Pro Ala Val Ala Ala Ser Ala Ser Val Thr Leu Val Ser Ser Leu
145                 150                 155                 160
Ser Glu Leu Leu Pro Thr Ala Asp Phe Leu Thr Ile His Thr Pro Leu
                165                 170                 175
Ile Ala Ser Thr Lys Gly Met Ile Ser Thr Ala Glu Leu Ala Gln Met
            180                 185                 190
Lys Pro Gly Ala Arg Ile Leu Asn Val Ala Arg Gly Gly Thr Ile Asp
        195                 200                 205
Glu Ala Ala Leu Leu Glu Ser Leu Glu Ser Gly His Leu Ala Ala Ala
    210                 215                 220
Ala Ile Asp Val Phe Thr Thr Glu Pro Pro Gln Pro Glu Ser Thr Ala
225                 230                 235                 240
Ala Arg Leu Val Ala His Pro Arg Ala Val Val Thr Pro His Leu Gly
                245                 250                 255
Ala Ser Thr Val Glu Ala Gln Glu Asn Val Ser Ile Asp Val Cys Glu
            260                 265                 270
Gln Val Leu Gln Ile Leu Asn Gly Ser Leu
        275                 280
```

<210> 34696
<211> 128
<212> PRT
<213> A.fumigatus

<400> 34696

```
Ile Val Val Glu Arg Ser Pro Arg Trp Ser Trp Leu Tyr Asp Thr Met
1               5                   10                  15
Val Gly Val Pro His Ser Thr Gly Cys Ser Met Cys Arg Glu Arg Arg
            20                  25                  30
Ile Lys Val Gly Asp Ser Ser His Thr Ser Arg Phe Asn Pro Thr Glu
        35                  40                  45
Arg Asn Lys Cys Asp Glu Ala Val Pro Gln Cys Ser Gln Cys Arg Lys
    50                  55                  60
Tyr Gly Arg Pro Cys Pro Gly Tyr Arg Arg Thr Phe Arg Phe Gln Asp
65                  70                  75                  80
Glu Gly Pro Ala Leu Gln Arg Arg His Gln Ser Arg Ser Gln Ser Arg
                85                  90                  95
Arg Arg Pro Glu Thr Ala Thr Asp Ala Ala Thr Ala Ala Ala Ala Ala
            100                 105                 110
Val Val Arg Ser Ser Thr Thr Gly Gly Arg Ser Ile Arg Ala Met Arg
        115                 120                 125
```

<210> 34697
<211> 149
<212> PRT
<213> A.fumigatus

<400> 34697
Glu Gly Ala Val Glu Asp Leu Glu Asp Leu Leu Ala Asp Val Asp Gly
1 5 10 15
Asp Val Phe Leu Gly Phe Asp Arg Gly Gly Ala Glu Val Arg Ser Asp
20 25 30
Asp Arg Ala Gly Met Gly Asp Gln Pro Ser Gly Ser Arg Phe Gly Leu
35 40 45
Gly Arg Phe Gly Ser Glu Asp Val Asp Gly Arg Cys Gly Gln Val Ala
50 55 60
Arg Leu Gln Arg Leu Glu Gln Gly Gly Phe Ile Asp Gly Ala Ala Ala
65 70 75 80
Ser Asp Val Glu Asp Thr Gly Thr Gly Leu His Leu Arg Glu Leu Gly
85 90 95
Cys Arg Asp His Pro Leu Gly Arg Arg Asp Gln Arg Arg Val Asp Gly
100 105 110
Glu Lys Val Arg Arg Gly Gln Gln Leu Arg Gln Arg Arg Asp Gln Arg
115 120 125
Asp Arg Cys Arg Arg Cys Asp Ser Arg Gly Arg Val Arg Ile Glu Cys
130 135 140
Ile Asp Val His Ser
145

<210> 34698
<211> 173
<212> PRT
<213> A.fumigatus

<400> 34698
Arg Glu Pro Leu Arg Ile Trp Arg Thr Cys Ser Gln Thr Ser Met Glu
1 5 10 15
Thr Phe Ser Trp Ala Ser Thr Val Glu Ala Pro Arg Cys Gly Val Thr
20 25 30
Thr Ala Arg Gly Trp Ala Thr Ser Arg Ala Ala Val Asp Ser Gly Trp
35 40 45
Gly Gly Ser Val Val Lys Thr Ser Met Ala Ala Ala Ala Arg Trp Pro
50 55 60
Asp Ser Arg Asp Ser Ser Arg Ala Ala Ser Ser Met Val Pro Pro Arg
65 70 75 80
Ala Thr Leu Arg Ile Arg Ala Pro Gly Phe Ile Cys Ala Ser Ser Ala
85 90 95
Val Glu Ile Ile Pro Leu Val Asp Ala Ile Asn Gly Val Trp Met Val
100 105 110
Arg Lys Ser Ala Val Gly Ser Ser Ser Asp Ser Asp Glu Thr Ser Val
115 120 125
Thr Asp Ala Asp Ala Ala Thr Ala Gly Asp Ala Tyr Gly Ser Ser Ala
130 135 140
Leu Thr Cys Ile Pro Ser Pro Leu Ala Ser Arg Ala Thr Val Lys Pro
145 150 155 160
Thr Val Cys Arg Ser Ala His Pro Leu Asp Pro Pro Ser
165 170

<210> 34699
<211> 204
<212> PRT
<213> A.fumigatus

<400> 34699
Leu Val Pro Asn Ala Leu Cys Thr Arg Met Arg Phe Asn Asp Gly Ala
1 5 10 15
Val Asp Ser His Gly Arg Phe Trp Ala Gly Ser Met Asn Asp Pro Lys
20 25 30
Val Gln Lys Pro Thr Asn Glu Gly Val Leu Phe Arg Leu Asp Pro Asp
35 40 45
Leu Gln Leu His Arg Met Val Glu Gly Val Ser Ile Pro Asn Gly Ile
50 55 60
Gly Trp Asn Leu Arg Asp Asp Thr Met Tyr Phe Thr Asp Ser Pro Thr
65 70 75 80
Ala Lys Ile Phe Ala Phe Asp Phe Asp Ala Ser Thr Gly Thr Ile Ser
85 90 95
Asn Arg Arg Val His Tyr Asp Val Gly Glu Pro Met Glu Pro Asp Gly
100 105 110
Phe Ala Ile Asp Glu Glu Gly Cys Ile Trp Ser Ala Ile Tyr Gly Gly
115 120 125
Gly Lys Ile Ile Arg Ile Ser Pro Glu Gly Lys Leu Ile Gly Glu Ile
130 135 140
Ser Phe Pro Thr Arg Asn Ile Thr Cys Pro Thr Phe Val Gly Thr Glu
145 150 155 160
Leu Phe Val Thr Thr Ala Lys Asp Asp Val Asn Asp Glu Gln Phe Pro
165 170 175
Glu Ser Val Arg Tyr Gly Gly Arg Val Tyr Arg Ile Asp Val Gly Val
180 185 190
Arg Gly Lys Pro Lys Asn Glu Phe Arg Phe Gln Lys
195 200

<210> 34700
<211> 120
<212> PRT
<213> A.fumigatus

<400> 34700
Arg Ala Ser Glu Ile Phe Arg Gly Met Ser Asp Glu Asn Gln Asp Phe
1 5 10 15
Ala Ala Arg Pro Val Ser Asp Tyr Asn Ala Ser Val Tyr Val Gln Phe
20 25 30
His Phe Ile Ser Ala Arg Ala His Arg Ala Pro Leu Gln Ser Ser Glu
35 40 45
Phe Arg Asp Cys Glu Ser Thr Asp Glu Ser Asp Gln Gly Asn Gln Asn
50 55 60
Gly Val Ala Lys Ser Trp Tyr Gly Ala Pro Ser Cys Thr Val Gly Leu
65 70 75 80
Ile Thr Val Phe Arg Ala Thr Val Val Ile Ile Val Thr Val Ala Val
85 90 95
Ala Val Ala Val Ala Val Thr Val Asp Arg Gly Ser Arg Gly Met Met
100 105 110
Arg Ile Gly Ala Thr Gly Arg Cys
115 120

<210> 34701
<211> 321
<212> PRT
<213> A.fumigatus

<400> 34701
Pro Pro Gly Arg Leu Gly Pro Arg Ala His His Pro Leu Arg Arg Val
1 5 10 15
Leu Tyr Gly Arg Ala Leu His Glu Gly Arg His Gly Ala Arg Pro Arg
20 25 30
Arg Arg Arg Gly Gly Arg Gly His Arg Pro Gly Arg Pro Ala Pro Glu
35 40 45
Glu Arg Arg Pro Gly Arg Leu Gly Leu Arg Ala Arg Gln Leu Arg Glu
50 55 60
Leu Gln Ala Val Pro Asp Gly Leu Gly Asp Val Leu Ser Arg Ala Gln
65 70 75 80
Val Leu Arg Ile Arg Arg Ser Gly Pro Gly Leu Val Arg Asp Ala Arg
85 90 95
Arg Leu Ala Arg Gly Leu Pro Leu Gln Asp Pro Arg Cys Ala Gln Gln
100 105 110
Pro Gly Arg Gly Ala Ala Asp Val Arg Arg Leu Asp Gly Val Glu Cys
115 120 125
His Arg Gly Arg Arg Ser Glu Ala Arg Val Ala Arg Gly Asp Arg Gly
130 135 140
Asp Arg Gly Pro Gly Pro Ser Gly His Pro Val Cys Gly Gln Asp Gly
145 150 155 160
Leu Arg Gly Gly Cys Val Leu Arg Gln Arg Gln Gln Glu Gly Gly Gly
165 170 175
Asp Glu Ala Gly Arg Val Arg Val Leu Cys Asp Gln Gly Arg His Gly
180 185 190
Ala Gln Gly Arg Gln Ala Val Gly Gln Pro His His His Asp Gln Arg
195 200 205
Ser Ala Arg Leu Glu Ala Ile Pro Ser Asp Ser Ser Ala Gly Arg Gly
210 215 220
His Leu Pro Ser Asp Gly Gly Arg Lys Gly Ser Ala Asn Pro Ile His
225 230 235 240
Ala Ser Ala Arg Gln Arg Asp Pro Tyr Pro Gly Arg Tyr Arg Cys Ser
245 250 255
Ala Pro Val Ala Ser Gly His Ala Arg Leu Cys Gly Thr Pro Arg His
260 265 270
Gln Ala Asp His His Asp Val Ser Asp Glu Arg Gly Arg Asn Pro Gly
275 280 285
Val Ser Gln Asp Ala Ala Gly Trp Gln Asn Glu Ile Ser Trp Gly Phe
290 295 300
Gly Gly Arg Gln Ala Val Ile Ser Ser Ile Ala Ile Val Gly Phe Thr
305 310 315 320
Val

<210> 34702
<211> 347
<212> PRT
<213> A.fumigatus

<400> 34702
Lys Thr Lys Ile Ser Val Tyr Lys Arg Lys Arg Thr Thr Met Gly Phe
1 5 10 15
Asp Phe Thr Val Tyr Lys Gly Ser Ser Asp Gly Ser Ile Lys Lys Ala
20 25 30
Thr Thr His Arg Asp Asp Leu Gln Gly Asp Ser Val Leu Val Arg Ile

```
        35                  40                  45
Thr His Ser Gly Val Cys Phe Thr Asp Val His Tyr Met Lys Ala Asp
    50                  55                  60
Met Ala Leu Gly His Glu Gly Ala Gly Val Val Glu Ala Thr Gly Pro
65                  70                  75                  80
Gly Ala Gln His Leu Lys Lys Gly Asp Arg Val Gly Trp Gly Tyr Glu
                85                  90                  95
His Asp Ser Cys Gly Ser Cys Lys Gln Cys Leu Thr Gly Trp Glu Thr
            100                 105                 110
Phe Cys Pro Glu Arg Lys Phe Tyr Gly Tyr Ala Asp Leu Asp Gln Gly
        115                 120                 125
Ser Phe Ala Thr His Ala Val Trp Arg Glu Ala Phe Leu Phe Lys Ile
    130                 135                 140
Pro Asp Ala Leu Ser Asn Gln Asp Ala Ala Pro Leu Met Cys Gly Gly
145                 150                 155                 160
Ser Thr Val Trp Asn Ala Ile Val Val Gly Glu Val Lys Pro Val Ser
                165                 170                 175
Arg Val Gly Ile Val Gly Ile Gly Gly Leu Gly His Leu Ala Ile Gln
            180                 185                 190
Phe Ala Ala Lys Met Gly Cys Glu Val Val Val Phe Ser Gly Ser Asp
        195                 200                 205
Asn Lys Lys Ala Glu Ala Met Lys Leu Gly Ala Ser Glu Phe Tyr Ala
    210                 215                 220
Thr Lys Gly Ala Thr Glu Leu Lys Val Gly Lys Pro Leu Asp Asn Leu
225                 230                 235                 240
Ile Ile Thr Thr Ser Ala Gln Pro Asp Trp Lys Leu Tyr Leu Pro Ile
                245                 250                 255
Leu Ala Pro Gly Ala Val Ile Ser Pro Leu Thr Val Asp Glu Lys Asp
            260                 265                 270
Leu Gln Ile Pro Tyr Met Pro Leu Leu Val Ser Gly Ile Arg Ile Gln
        275                 280                 285
Gly Gly Ile Val Ala Ala Arg Gln Ser His Arg Asp Met Leu Asp Phe
    290                 295                 300
Ala Ala His His Gly Thr Lys Pro Ile Ile Met Thr Tyr Pro Met Ser
305                 310                 315                 320
Val Glu Gly Ile Gln Glu Cys Leu Lys Thr Leu Gln Asp Gly Lys Met
                325                 330                 335
Arg Tyr Arg Gly Val Leu Val Ala Asp Lys Gln
            340                 345
```

<210> 34703
<211> 127
<212> PRT
<213> A.fumigatus

<400> 34703

```
Tyr Gly Pro Ser Ile Ser Gly Asn Ser Gly His Asp Glu Ala Asp Val
1               5                   10                  15
Leu Tyr Ile Ala Phe Ala Gly Lys Glu Ala Val Pro Ala Arg Ala Lys
            20                  25                  30
Trp Asp Ala Asp Ser Tyr Glu Ala Phe Glu Glu Ser Ile Thr Ala Gln
        35                  40                  45
Gly Gly Gln Leu Val Ser Gln Leu Phe Gly Asp Arg Ser Thr Ala Thr
    50                  55                  60
Gly Gly Ser Asp Pro His His Thr Ser Ala Ala Pro Ile Asp Ser Asp
65                  70                  75                  80
```

```
Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Asp Asp Asp Asp Gly Ser
                85                  90                  95
Ser Lys His Ser Asp Lys Ser Asp Gly Ala Arg Arg Ser Thr Ile Pro
            100                 105                 110
Arg Leu Cys His Thr Ile Leu Val Ala Leu Ile Ala Leu Val Cys
        115                 120                 125
```

<210> 34704
<211> 77
<212> PRT
<213> A.fumigatus

<400> 34704

```
Leu Asp Thr Thr Thr Lys Leu Ser Ala Asn Tyr Lys Leu Thr Ala Thr
1               5                   10                  15
Phe Ser Val Ser Val Ser Phe Leu Ser Pro Ser Leu Ser Ser Pro Ser
            20                  25                  30
Leu Thr Arg Leu Pro Leu Leu Leu Ala Tyr Phe Ile Val Ile Ala Leu
        35                  40                  45
His Pro Phe Arg Pro Ser Ile Met Glu Glu Ile Ala Pro Glu Tyr Asp
    50                  55                  60
Val Val Val Leu Gly Thr Gly Met Tyr Tyr Pro Ala Val
65                  70                  75
```

<210> 34705
<211> 373
<212> PRT
<213> A.fumigatus

<400> 34705

```
Thr Ser Val Asp Cys Leu Leu Val Leu Gln Leu Phe Lys Lys Tyr Gly
1               5                   10                  15
Asn Val Arg Pro Gly Glu Glu Pro Trp Lys Lys Tyr Gly Arg Val Asn
            20                  25                  30
Asp Trp Asn Ile Asp Leu Val Pro Lys Leu Leu Met Ala Asn Gly Glu
        35                  40                  45
Leu Thr Asn Ile Leu Val Ser Thr Asp Val Thr Arg Tyr Leu Glu Phe
    50                  55                  60
Lys Gln Ile Ala Gly Ser Tyr Val Gln Gln Gly Lys Gly Pro Lys Ala
65                  70                  75                  80
Thr Val Ala Lys Val Pro Ser Asp Ala Gly Glu Ala Leu Arg Ser Ser
                85                  90                  95
Leu Met Gly Met Phe Glu Lys Arg Arg Ala Lys Lys Phe Leu Glu Trp
            100                 105                 110
Val Gly Glu Phe Lys Glu Asp Asp Pro Ala Thr His Gln Gly Leu Ser
        115                 120                 125
Leu His Cys Ser Ile Tyr Ser Ile Ala Asn Val Lys Gly Ser Gly Leu
    130                 135                 140
Asn Val Ala Gln Cys Thr Met Lys Glu Val Tyr Asp Lys Phe Gly Leu
145                 150                 155                 160
Glu Asp Asn Thr Arg Asp Phe Val Gly His Ser Met Ala Leu Tyr Pro
                165                 170                 175
Ser Asp Asp Tyr Ile Thr Thr Pro Gly Met Ala Val Glu Thr Ile His
            180                 185                 190
Arg Ile Arg Leu Tyr Val Asn Ser Met Ala Arg Tyr Gly Lys Ser Pro
        195                 200                 205
```

```
Tyr Ile Tyr Pro Leu Tyr Gly Leu Gly Glu Leu Pro Gln Gly Phe Ala
    210                 215                 220
Arg Leu Ser Ala Ile Tyr Gly Gly Thr Tyr Met Leu Asn Thr Ser Val
225                 230                 235                 240
Asp Glu Val Leu Tyr Asp Glu Ser Gly Lys Val Ser Gly Ile Lys Ala
                245                 250                 255
Thr Met Lys Asp Arg Asp Asp Asn Ser Glu Ala Met Lys Phe Thr Thr
            260                 265                 270
Lys Thr Lys Lys Ile Ile Ala Asp Pro Ser Tyr Phe Pro Gly Lys Val
        275                 280                 285
Arg Val Thr Gly Tyr Leu Leu Lys Ala Ile Cys Ile Leu Asn His Pro
    290                 295                 300
Ile Glu Lys Thr Asp Gly Ser Asp Ser Leu Gln Leu Ile Ile Pro Gln
305                 310                 315                 320
Ser Gln Val Gly Arg Lys His Gly Glu Ser Thr Leu Glu Ser Val Gly
                325                 330                 335
Phe Lys Thr Leu Leu Ile Arg Ile Arg Arg Leu His Cys His Gly Ile
            340                 345                 350
Ile Arg Pro Gln Cys Leu Pro Gln Gly Leu Leu His Arg His Cys Leu
        355                 360                 365
Tyr Tyr Cys Arg Asp
    370
```

<210> 34706
<211> 112
<212> PRT
<213> A.fumigatus

<400> 34706

```
Ser Glu Ser Asp Val Tyr Ile Ala Met Val Ser Ser Ala His Asn Val
1               5                   10                  15
Cys Pro Lys Gly Tyr Tyr Ile Ala Ile Val Ser Thr Ile Ala Glu Thr
            20                  25                  30
Asp Ala Asn His His Leu Glu Leu Glu Pro Gly Phe Glu Arg Leu Gly
        35                  40                  45
Gln Ile Glu Lys Lys Phe Phe Gly Pro Pro Ile Pro Leu Tyr Glu Pro
    50                  55                  60
Leu Asp Ser Gly Glu Lys Asp Asn Ile Phe Ile Ser Lys Ser Tyr Asp
65                  70                  75                  80
Ala Thr Ser His Phe Glu Thr Thr Thr Gly Met Ser Gln Phe Phe Arg
                85                  90                  95
His Ile Met Val Ala Asn Gly Gln Asn Arg Arg Arg Ala Gly Pro Leu
            100                 105                 110
```

<210> 34707
<211> 96
<212> PRT
<213> A.fumigatus

<400> 34707

```
His Gln His Gln Arg Arg Ile Tyr Pro Val Ser Leu Asn Asn Asn Ser
1               5                   10                  15
Lys Thr Asn Lys Gln Thr Asn Ile Pro Ala Cys Asn Ser Thr Ser Ile
            20                  25                  30
Pro Ser Gly Asn Ala Leu Arg Ser Glu Phe Thr Thr Cys Ala Val Gly
        35                  40                  45
```

```
Val Asp Pro Asn Asp Thr Thr Thr Phe Leu Pro Ser Phe Leu Ser Arg
    50                  55                  60
Tyr Pro Ala Ala Arg Thr Thr Pro Ser Asn Ser Leu Phe Ser Thr Ala
65                  70                  75                  80
Ala Ala Ala Ser Ser Val Arg His Ala Tyr Glu Cys Pro Ala Trp Gln
                85                  90                  95
```

<210> 34708
<211> 269
<212> PRT
<213> A.fumigatus

<400> 34708

```
Leu Leu Thr Ser Thr Ala Arg Phe Phe Ser Met Asn Leu Asn Asn Val
1               5                   10                  15
Met Glu Gln Tyr Val Asp His Leu Thr Pro Asn Val Thr Tyr Ala Pro
            20                  25                  30
Thr Ile Ser Gly Gly Ile Gly Ala Arg Asp Leu Arg Arg Phe Tyr Glu
        35                  40                  45
His His Phe Leu Arg Asn Leu Pro Pro Ser Met Arg Leu Arg Leu Leu
    50                  55                  60
Ser Arg Thr Ile Gly Val Asp Arg Val Val Asp Glu Leu Tyr Ala Ser
65                  70                  75                  80
Phe Glu His Thr Gln Glu Ile Pro Trp Met Leu Pro Gly Val Pro Pro
                85                  90                  95
Thr Asn Lys Lys Val Glu Ala Ile Leu Ile Ser Ile Val Ser Leu Arg
            100                 105                 110
Ser Gly Lys Leu Tyr Ser Glu His Val Tyr Trp Asp Gln Ala Ser Val
        115                 120                 125
Leu Val Gln Ile Gly Leu Leu Asp Pro Lys Leu Val Pro Gln Gly Val
    130                 135                 140
Glu Gly Val Tyr Arg Leu Pro Val Val Gly Lys Glu Ala Ala Arg Arg
145                 150                 155                 160
Ile Leu Thr Glu Asp Pro Glu Ser Glu Gln Arg Arg Tyr His Asn Arg
                165                 170                 175
Leu Ile Arg Ala Thr His Ala Lys His Lys Gly Gln His Gly Lys His
            180                 185                 190
Glu Leu Val Glu Gly Ser Gly Ala Glu Leu Arg Ser Glu Ala Gly Asp
        195                 200                 205
Ser Val Lys Thr Gly Asn Val Lys Gly Lys Ser Val Gln Gly Gln Ser
    210                 215                 220
Trp Pro Glu Lys Glu Asp Gly Ala Asp Gly Glu Glu Glu Glu Thr Gly
225                 230                 235                 240
Thr Gly Arg Asn Gly Asn Gly Val Ala Asn Gly Ser Asn Gly Lys Arg
                245                 250                 255
Ala Ala Ser Val Glu Asp Asp Asn Gly Glu Asn Asp Asp
            260                 265
```

<210> 34709
<211> 97
<212> PRT
<213> A.fumigatus

<400> 34709

```
Ala Cys Lys Arg Arg Ser Ala Gly Thr Thr Arg Arg Ile Asn Gln Gly
1               5                   10                  15
```

```
Met Gly Thr Gly Glu Arg Leu Asn Ile Gly His Gln Ala Tyr Thr Tyr
            20                  25                  30
Asp Asn Val Gln Pro Gly Phe Ala Glu His Asp Leu Glu Glu Tyr Asp
        35                  40                  45
Arg Leu Ala Ala Glu Leu Ala Phe Ser Arg Ser Leu Gln Val Ile Arg
    50                  55                  60
Ser Thr Val Thr Asp Lys Ile Asp Leu Glu Lys Arg Trp Glu Asp His
65                  70                  75                  80
Leu Glu Gly Met Ser Pro Cys Val Pro Cys Asn Leu Gln Gly Pro Asp
                85                  90                  95
Cys
```

<210> 34710
<211> 181
<212> PRT
<213> A.fumigatus

<400> 34710

```
Ile Arg Phe Glu Gly Arg Cys Arg Arg Glu Trp Arg Trp Asn Tyr Thr
1               5                   10                  15
Pro Val Cys Leu Phe Val Cys Leu Ser Leu Ser Cys Tyr Ser Lys Lys
            20                  25                  30
Arg Gly Arg Phe Asp Ala Gly Ala Asp Ala Arg Cys Val Gly Asn Phe
        35                  40                  45
Pro Ala Asn Asp Leu Gln Gln Val Cys Thr Gly Leu Val Ala Glu Glu
    50                  55                  60
Gln Gln Ala Val Arg Val Leu Val Glu Val Cys Ser Val Tyr Pro Glu
65                  70                  75                  80
Arg Asn Glu Ala Leu Ile Asn Ala Gly Thr Val Ala Leu Thr Lys Glu
                85                  90                  95
Thr Ser Asp Val Val Gly Phe Gly Arg Val Thr Asp Arg Pro Gly Trp
            100                 105                 110
Ala Val Val Arg Met Ala Gln Glu His Gly Ile Leu Gly Leu Ala Asn
        115                 120                 125
Ala Ser Gly Val Gln Arg Val Glu Glu Thr Phe Arg Val Gly Gln Lys
    130                 135                 140
Val Met Leu Tyr Ile Gln His Ala Cys Ile Thr Ala Ala Gln His His
145                 150                 155                 160
Val Tyr His Val Val Asp Glu Glu Asp Ile Val Arg Glu Thr Trp Val
                165                 170                 175
Pro Trp Lys Gly Trp
            180
```

<210> 34711
<211> 114
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (113)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34711

```
Arg Leu Pro Thr Leu His Leu Leu Thr Ser Ile Pro Arg Leu Gln Asp
```

```
1               5                   10                  15
Arg His Gln Trp Leu Arg Pro His Arg Tyr Pro Ser Ala Phe Ser Pro
            20                  25                  30
Gln Pro Glu Val Ile Leu Thr Ala Gly Pro Leu Pro Gly Arg Asn Val
        35                  40                  45
Leu Arg Ala Ala Leu Asn Arg Pro Asp Leu Gln Ile Val Ala Ile Asn
    50                  55                  60
His Thr Cys Thr Thr Ile Asp Asp Leu Ile His Leu Ile Arg Tyr Asp
65                  70                  75                  80
Ser Ser Met Gly Asn Leu Pro Pro Ser Ile Pro Ile His Ala Leu Ser
                85                  90                  95
Asp Thr Leu Leu Ser Val Phe Thr Thr Gly Leu Glu Gly Ala Ala Pro
            100                 105                 110
Xaa Gly
```

<210> 34712
<211> 269
<212> PRT
<213> A.fumigatus

<400> 34712

```
Pro Ile Leu Ser Trp Ile Leu Pro Asn Thr Val Tyr Arg Lys Leu Gln
1               5                   10                  15
Arg Leu Arg Trp Ile Phe Thr Ser Arg Leu Phe Phe Leu Phe Cys Gln
            20                  25                  30
Thr Phe Pro Trp Met Ala Arg Leu Leu Leu Lys Leu Ser Val Val Arg
        35                  40                  45
Gln Leu Pro Lys Asn Ile Pro His Asp Pro His Phe Lys Pro Arg Tyr
    50                  55                  60
Lys Pro Trp Asp Gln Arg Leu Cys Ile Cys Pro Asp Gly Asp Phe Phe
65                  70                  75                  80
Lys Ser Leu His Thr Gly Arg Ala Asp Val Lys Thr Asp Thr Ile Arg
                85                  90                  95
Gln Val Thr Thr Ser Gly Ile Glu Leu Asn Ser Gly Asp Phe Leu Asp
            100                 105                 110
Ala Asp Ile Ile Val Thr Ala Thr Gly Leu Lys Leu Gln Ile Ala Gly
        115                 120                 125
Gly Thr Ser Ile Thr Val Asp Gly Glu Lys Gln Arg Val Pro Asp Lys
    130                 135                 140
Tyr Leu Trp Asn Gly Val Met Leu Gln Asp Leu Pro Asn Ala Ser Phe
145                 150                 155                 160
Val Ile Gly Tyr Thr Asn Ala Ser Trp Thr Leu Gly Ala Asp Ala Thr
                165                 170                 175
Ala Leu Phe Val Cys Arg Leu Leu Lys Trp Met Glu Gln His His Lys
            180                 185                 190
Ile Ala Ala Val Pro Arg Leu Asn Pro Met Leu Ala Lys Gln Met Gln
        195                 200                 205
Pro Arg Arg Leu Leu Asn Leu Asn Ser Thr Tyr Val Thr Ala Ala Glu
    210                 215                 220
Lys Asp Leu Pro Lys Ala Ala Asp Arg Gly Pro Trp Gln Pro Arg Asp
225                 230                 235                 240
Asn Tyr Leu Ser Asp Leu Met Phe Ala Lys Tyr Gly Arg Leu Asp Glu
                245                 250                 255
Gly Leu Glu Trp Val Asp Gly Gly Trp Lys Lys Gln Gln
            260                 265
```

<210> 34713
<211> 66
<212> PRT
<213> A.fumigatus

<400> 34713
Ala Thr Ile Thr Thr Val His Leu Ser Tyr His Thr Pro Tyr Ile Ile
1 5 10 15
Leu Tyr Ser Ile Val Tyr Thr Thr Ala Met Ala Pro Ser Ile Asn Asp
20 25 30
Phe Pro His Ser Thr Ser Ser Pro Gln Ser Pro Val Cys Lys Ile Gly
35 40 45
Ile Asn Gly Phe Gly Arg Ile Gly Thr Arg Gln Pro Ser His His Asn
50 55 60
Arg Lys
65

<210> 34714
<211> 73
<212> PRT
<213> A.fumigatus

<400> 34714
Val Gln Ser Leu Leu Leu Leu Leu Ala Pro Ala Leu Phe Ala Ala Ser
1 5 10 15
Val Tyr Met Ile Leu Gly Arg Ile Ile Arg Leu Leu Asn Ala Gly Ser
20 25 30
Leu Ser Leu Val Arg Arg Asn Trp Leu Thr Lys Val Phe Val Ala Gly
35 40 45
Asp Val Ile Ser Phe Phe Met Gln Cys Gly Gly Met Arg Phe Leu Gln
50 55 60
Met Tyr Thr Arg His Glu Thr Pro Ser
65 70

<210> 34715
<211> 151
<212> PRT
<213> A.fumigatus

<400> 34715
Ser Gln Tyr Ser Pro Val Gly Gly Gly Leu Leu Ala Gly Ala Lys Thr
1 5 10 15
Gln Asp Lys Val Asn Met Gly Glu His Met Ile Ile Ala Gly Leu Phe
20 25 30
Val Gln Ile Leu Phe Phe Gly Phe Phe Met Leu Val Ser Val Ile Phe
35 40 45
His Arg Arg Met Leu Ala Thr Pro Ile His His Met Met Ser Thr Gln
50 55 60
Leu Pro Trp Asn Tyr Tyr Met Lys Ile Leu Tyr Thr Val Ser Val Leu
65 70 75 80
Ile Met Ile Arg Ser Val Tyr Arg Val Ala Glu Tyr Val Gln Gly Ser
85 90 95
Asp Gly Tyr Leu Gln Ser Lys Glu Ala Phe Ile Tyr Val Phe Asp Ala
100 105 110
Ala Leu Met Phe Ala Cys Cys Val Ile Leu Asn Val Ser His Pro Ser

```
        115                 120                 125
Lys Leu Leu Ser His Ser Gln Ala Asp Gln Lys Val Asp Ser Asp Leu
    130                 135                 140
Glu Met Leu Asn Pro Glu Arg
145                 150
```

<210> 34716
<211> 93
<212> PRT
<213> A.fumigatus

<400> 34716

```
Phe Glu Arg Ser Lys Ile Ser Leu Ser Ala Ser Phe Phe His Gly Leu
1               5                   10                  15
Ile Phe Val Val Val Ile Leu Arg Leu Ser Leu Phe Val Ile Phe Gln
            20                  25                  30
Val Ile Ala Glu Pro Ile Ile Leu Val Ile His Ile Tyr Val Phe Phe
        35                  40                  45
Val Pro Val Ile Phe Ala Thr Ser Ser Phe Ser Ser Ser Phe Gly Leu
    50                  55                  60
Leu Leu Phe Leu Leu Leu Asn Val Phe Ser Leu Leu Leu Leu Ser Leu
65                  70                  75                  80
Phe Leu Leu Leu Leu Leu Leu Gly Pro Ile Leu Ile Gln
                85                  90
```

<210> 34717
<211> 184
<212> PRT
<213> A.fumigatus

<400> 34717

```
Thr Asn Val Ser Lys Gly Thr Cys Leu Thr Val Thr Ala Phe Asp Lys
1               5                   10                  15
Thr Trp Phe Lys Val Gly Val Ala Pro Glu Thr Leu Arg Arg Thr Asn
            20                  25                  30
Leu Gly Ser Leu Glu Lys Gly Ser Arg Val Asn Leu Glu Arg Ala Val
        35                  40                  45
Leu Ala Glu Thr Arg Met Gly Gly His Phe Val Gln Gly His Val Asp
    50                  55                  60
Thr Val Ala Lys Ile Leu Ser Val Thr Pro Asp Gln Asn Ser Leu Val
65                  70                  75                  80
Phe Arg Leu Gln Pro Arg Asp Gln Ser Val Met Arg Tyr Ile Val Glu
                85                  90                  95
Lys Gly Tyr Val Thr Leu Asp Gly Ala Ser Leu Thr Val Thr Lys Val
            100                 105                 110
Val Asp Gly Pro Asp Gly Tyr Phe Glu Ile Met Leu Ile Ala Tyr Thr
        115                 120                 125
Gln Glu Lys Ile Val Thr Ala Ala Lys Lys Pro Gly Asp Tyr Val Asn
    130                 135                 140
Val Glu Ile Asp Ile Val Gly Lys Tyr Val Glu Lys Ser Val Gln Gly
145                 150                 155                 160
Tyr Phe Ala Gly Thr Ala Gly Gly Asp Met Ser Ile Leu Glu Lys Met
                165                 170                 175
Val Ser Arg Ile Val Asp Glu Lys
            180
```

<210> 34718
<211> 189
<212> PRT
<213> A.fumigatus

<400> 34718
Leu Pro Pro Leu Ser Gly Gln Glu Cys Asp Leu Ser Leu Arg Ser Arg
1 5 10 15
Lys Lys Val Asp Leu Ser Glu Gln Ser Arg Gly Gly Ala Arg Ile Asn
20 25 30
Asn Phe Ala Ala Pro Lys Asn Ile Ser Phe Ala Asp Thr Lys Thr Ser
35 40 45
Thr Ser Glu Ile Gln Arg Asn Leu Ser Ile Lys Cys Cys Glu Asn Tyr
50 55 60
Pro Ser Ile Met Arg Asp Val Lys Lys Arg Lys Ile Ala His Glu Ala
65 70 75 80
Pro Glu His Gly Ser Asp Thr Glu Ser Thr Ser Ser His Lys Ser Val
85 90 95
Ala Gln Gln Asp Asp Pro Leu Glu Thr Gln Asp Glu Ala Thr Ala Thr
100 105 110
Glu Ser Arg Pro Ala Pro Lys Ser Phe Lys Asp Leu Gly Ile Ile Asp
115 120 125
Gln Leu Cys Glu Ala Cys Glu Thr Met Gly Tyr Lys Ala Pro Thr Pro
130 135 140
Ile Gln Ala Glu Ser Ile Pro Leu Ala Leu Gln Gly Arg Asp Leu Ile
145 150 155 160
Gly Leu Ala Glu Thr Gly Ser Gly Lys Thr Ala Ala Phe Ala Leu Pro
165 170 175
Ile Leu Gln Gly Met Ile Pro Ser Asp Leu Thr Ile Leu
180 185

<210> 34719
<211> 173
<212> PRT
<213> A.fumigatus

<400> 34719
Ala Ser Trp Ser Ser Ile Asp Val Tyr Phe Pro Val Val Ser Val Ser
1 5 10 15
Asp Lys Pro Pro Thr Ala Leu Met Glu Asn Pro Gln Ser Phe Phe Gly
20 25 30
Leu Ile Leu Ala Pro Thr Arg Glu Leu Ala Phe Gln Ile Ser Lys Ser
35 40 45
Phe Glu Ser Leu Gly Ser Thr Ile Asn Val Arg Cys Ala Val Ile Val
50 55 60
Gly Gly Met Asp Met Val Ser Gln Ser Ile Ala Leu Gly Lys Lys Pro
65 70 75 80
His Ile Ile Val Ala Thr Pro Gly Arg Leu Leu Asp His Leu Glu Asn
85 90 95
Thr Lys Gly Phe Ser Leu Arg Thr Leu Lys Tyr Leu Val Met Asp Glu
100 105 110
Ala Asp Arg Leu Leu Asp Met Asp Phe Gly Pro Leu Leu Asp Lys Ile
115 120 125
Leu Lys Val Leu Pro Arg Glu Arg Arg Thr Phe Leu Phe Ser Ala Thr
130 135 140
Met Ser Ser Lys Val Glu Ser Leu Gln Arg Ala Ser Leu Ser Asn Pro

```
145                 150                 155                 160
Arg Leu His His Gly Ala Gly Arg Thr Arg Ala Lys Ser
                165                 170
```

<210> 34720
<211> 475
<212> PRT
<213> A.fumigatus

<400> 34720

```
Tyr Ser Tyr Leu Asp Leu Tyr Tyr Asn Gly Gln Gly Thr Tyr Glu Glu
1               5                  10                  15
Ala His Thr Cys Ala Gly Ser Lys Cys Phe Cys Arg Arg Gln Lys Gln
            20                  25                  30
His Glu Gln Asn Ser Glu Val Asp Gly His Gln Ser Arg Arg Phe Ala
        35                  40                  45
Gly Arg Leu Gln Cys Gln Pro Thr Gly Gln Gly Cys Pro Phe Asp Asp
    50                  55                  60
Gly Ala Arg Tyr Ser Cys Thr Ile Glu Gly Lys Arg Phe Val Glu His
65                  70                  75                  80
Thr Gly Gly Phe Leu Glu Ser Ala Thr Asp Asp Gly Ser Phe Lys Glu
                85                  90                  95
Arg Lys Ser Asn Arg Leu Arg Asp Tyr Thr Thr Met Ala Gly Pro Leu
            100                 105                 110
Gly Val Thr His Leu Met Leu Phe Ser Lys Ser Ala Thr Gly Asn Thr
        115                 120                 125
Asn Met Arg Leu Ala Leu Thr Pro Arg Gly Pro Thr Leu His Phe Lys
    130                 135                 140
Val Glu Ser Tyr Ser Leu Cys Arg Asp Val Glu Lys Ala Leu Lys Arg
145                 150                 155                 160
Pro Arg Gly Gly Gly Gln Asp His Lys Thr Pro Pro Leu Leu Val Met
                165                 170                 175
Asn Asn Phe Asn Ser Pro Asn Ala Thr Glu Asp Ser Lys Val Pro Lys
            180                 185                 190
Arg Leu Glu Ser Leu Thr Thr Thr Ile Phe Gln Ser Leu Phe Pro Pro
        195                 200                 205
Ile Asn Pro Gln Ala Thr Pro Leu Ser Ser Ile Arg Arg Val Met Leu
    210                 215                 220
Leu Asn Arg Glu Leu Thr Ala Gly Ser Glu Lys Glu Glu Asp Ser Tyr
225                 230                 235                 240
Val Leu Asn Leu Arg His Tyr Ala Ile Ser Thr Lys Lys Thr Gly Ile
                245                 250                 255
Ser Lys Arg Ile Arg Arg Leu Asp Pro Lys Glu Ile Arg Ser Arg Glu
            260                 265                 270
Lys Arg Lys Ser Ala Val Pro Asn Leu Gly Lys Leu Glu Asp Ala Ala
        275                 280                 285
Asp Tyr Leu Leu Asp Pro Ser Ala Ala Gly Tyr Thr Ser Ala Ser Glu
    290                 295                 300
Thr Glu Leu Asp Thr Asp Ala Glu Val Glu Ile Ala Gly Ser Thr Thr
305                 310                 315                 320
Lys Lys Val Leu Thr Lys Arg Glu Leu Gln Arg Met Lys Ser Gly Glu
                325                 330                 335
Lys Ala Lys Ala Gln Lys Ala Asp Thr Pro Glu Val Glu Lys Arg Ala
            340                 345                 350
Val Lys Leu Val Glu Leu Gly Pro Arg Leu Lys Leu Arg Leu Ile Lys
        355                 360                 365
```

```
Val Glu Glu Gly Leu Cys Glu Gly Arg Val Met Trp His Asp Tyr Ile
    370                 375                 380
Lys Lys Ser Glu Glu Glu Val Lys Ser Leu Asp Lys Asn Trp Ala Lys
385                 390                 395                 400
Lys Lys Lys Glu Lys Glu Glu Arg Lys Lys Gln Gln Arg Glu Asn Ile
                405                 410                 415
Glu Lys Lys Lys Gln Glu Lys Ala Lys Ala Arg Ala Glu Gly Arg Gly
            420                 425                 430
Gly Glu Asp Asp Gly Asp Glu Glu Asp Val Asp Met Asp Asp Glu Asp
        435                 440                 445
Asp Trp Leu Ser Asp Asp Leu Glu Asp Asp Glu Glu Gly Gln Ala Gln
    450                 455                 460
Asp Asn Asp Asp Glu Asp Glu Ser Met Glu Glu
465                 470                 475

<210> 34721
<211> 216
<212> PRT
<213> A.fumigatus

<400> 34721
Cys Ala Arg Leu Cys Ile Ser Lys Gly Asn Ile Phe Trp Arg Arg Lys
1               5                   10                  15
Ile Val Asp Pro Ser Ser Ser Ala Ala Leu Leu Arg Gln Ile Tyr Phe
            20                  25                  30
Phe Ser Gly Pro Glu Arg Glu Val Thr Leu Leu Ser Arg Gln Arg Arg
        35                  40                  45
Lys Leu Leu Gly Leu Gly Phe Ile Pro Asn Asn Ile His Ile Trp Thr
    50                  55                  60
Tyr Ile Thr Met Ala Lys Ala Arg Thr Lys Lys Arg Thr His Val Arg
65                  70                  75                  80
Ala Gln Asn Ala Ser Ala Ala Ala Lys Asn Ser Met Ser Lys Thr Pro
                85                  90                  95
Lys Ser Met Val Ile Arg Val Gly Ala Ser Gln Val Gly Ser Ser Val
            100                 105                 110
Ser Gln Leu Val Lys Asp Val Arg Leu Met Met Glu Pro Asp Thr Ala
        115                 120                 125
Val Arg Leu Lys Val Ser Val Ser Trp Ser Thr Leu Ala Gly Phe Trp
    130                 135                 140
Ser Arg Gln Leu Met Met Gly His Leu Arg Asn Gly Asn Pro Ile Asp
145                 150                 155                 160
Ser Glu Thr Thr Arg Gln Trp Arg Ala Leu Trp Val Ser Leu Ile Leu
                165                 170                 175
Cys Phe Ser Gln Asn Gln Leu Gln Glu Ile Leu Ile Cys Asp Trp Arg
            180                 185                 190
Leu His Leu Ala Val Gln Pro Phe Ile Ser Lys Ser Lys Ala Ile Pro
        195                 200                 205
Phe Ala Glu Thr Leu Arg Arg His
    210                 215

<210> 34722
<211> 96
<212> PRT
<213> A.fumigatus

<400> 34722
```

```
Lys Ile Gln Glu Thr Val Asp Thr Met Arg Ser Asn Ile Phe Lys Val
1               5                  10                  15
Ser Glu Arg Gly Glu Arg Leu Asp Ser Leu Gln Asp Lys Thr Asp Asn
            20                  25                  30
Leu Ala Val Ser Ala Gln Gly Phe Arg Arg Gly Ala Asn Arg Val Arg
        35                  40                  45
Lys Gln Met Trp Trp Lys Asp Met Lys Met Arg Val Cys Leu Val Ile
    50                  55                  60
Cys Ile Ile Cys Leu Leu Ile Val Ile Ile Val Pro Ala Gly Met Ser
65                  70                  75                  80
Pro Ser Leu Leu Ala Leu Arg Thr Thr Arg Ala Pro Glu Arg Ala Gly
                85                  90                  95
```

<210> 34723
<211> 76
<212> PRT
<213> A.fumigatus

<400> 34723

```
Ser Tyr Ser Ala Ser Ile Val Ser Met Lys Arg Leu Ser Ile Asp Pro
1               5                  10                  15
Arg Gln Asp Ile Pro Pro Ile Arg Asp Ser Pro Ala Thr Ala Leu Pro
            20                  25                  30
Ala Ser Leu Pro Lys Ala Lys Asn Ile Lys Thr Ser Pro Ala Arg Ala
        35                  40                  45
Gly Glu Glu Asn Ala Ser Val Tyr Phe Val Gly Asn Ala Thr Thr Ile
    50                  55                  60
Leu Ser Val Ala Ser Cys Leu Val Ser Met Arg Cys
65                  70                  75
```

<210> 34724
<211> 251
<212> PRT
<213> A.fumigatus

<400> 34724

```
Ser Arg Ser Arg Ser Ile Ser Ser Ala Gly Pro Ala His His His Tyr
1               5                  10                  15
Gln Pro Cys Gln Val His Ile Asp Val Gln Gly Ser Arg Leu Phe Pro
            20                  25                  30
Ala Ser Val Arg Ala Arg Ala Ile Arg Ala Asp Asp Gly Gln Tyr Gln
        35                  40                  45
Arg Arg Gln Leu Glu Asn Gln Thr Thr Ala His Pro Ser His Arg Asn
    50                  55                  60
Ala Arg Gln Thr His Pro Asp Gln Gln Gly Arg Gly Glu Ile Glu Arg
65                  70                  75                  80
Val Arg Gly Gly Ser Lys Gln Phe Pro Asp Thr Ala Met Thr His Gly
                85                  90                  95
Asn Glu Leu Thr Ile Lys Ile Pro Pro Thr Asn Gly Trp Met Val Glu
            100                 105                 110
Leu Gly Tyr Gly Ser Thr Gln Thr Met Gln Thr Asp Phe Glu Val Gly
        115                 120                 125
Tyr Arg Ile Tyr Ile Ser Gly Asp Thr Leu Met Val Asp Glu Leu Lys
    130                 135                 140
Glu Ile Pro Arg Arg Phe Asp Gly Gln Lys Ile Asp Leu Met Leu Ile
145                 150                 155                 160
```

```
His Leu Gly Ser Thr Thr Val Pro Tyr Pro Lys Met Trp Pro Leu Thr
                165                 170                 175
Met Met Val Thr Met Asp Ala Lys Gln Gly Val Glu Leu Val Arg Leu
            180                 185                 190
Ile Lys Pro Asp Leu Thr Ile Pro Ile His Phe Asp Asp Tyr Asp Val
        195                 200                 205
Phe Ala Ser Ser Leu Glu Asp Phe Lys Ile Glu Met Gln Lys Ala Gly
    210                 215                 220
Leu Gly Gly Gln Val Val Tyr Leu Asp Arg Lys Asp Ala Tyr Arg Phe
225                 230                 235                 240
Gln Val Arg Ser Asp Leu Thr Cys Thr Ser Arg
                245                 250
```

<210> 34725
<211> 94
<212> PRT
<213> A.fumigatus

<400> 34725

```
Pro Ser Gly Val Pro Ala Asp Cys Pro Leu Ser Arg Pro Ala Cys Phe
1               5                   10                  15
Gln Thr Gly Asp Glu Gln Phe Asp Glu Phe Ala Leu Ala His Lys Met
            20                  25                  30
Arg Glu Arg Gly Trp Ile Leu Pro Ala Tyr Thr Met Ala Pro His Ser
        35                  40                  45
Asn Glu Leu Lys Leu Met Arg Val Val Val Arg Glu Asp Phe Ser Lys
    50                  55                  60
Asn Arg Cys Asp Ala Leu Leu Thr Asp Ile Lys Leu Ala Leu Lys Thr
65                  70                  75                  80
Leu Ser Asp Met Asp Lys Ala Met Leu Glu Lys Tyr Thr Leu
                85                  90
```

<210> 34726
<211> 153
<212> PRT
<213> A.fumigatus

<400> 34726

```
Arg Arg Val Ile Ser Ser Arg Pro Asn Gly Asp Gly His Val Leu Tyr
1               5                   10                  15
Pro Pro Phe Pro Ser Thr Ser His Gln Pro Ser Lys Pro Glu Leu Phe
            20                  25                  30
Leu Lys Met Thr Ser Gln Ser Pro Ser Asp Pro Leu Ile Ala Ala Leu
        35                  40                  45
Cys Gly Leu Leu Thr Leu Asn Ile Tyr Thr Leu Leu Ala Leu Leu Leu
    50                  55                  60
Ser Ile Pro Pro Phe Leu Asp Leu Arg Leu Ser Thr Leu Tyr Val Leu
65                  70                  75                  80
Ala Leu Gln Gly Leu Ile Ser Leu Val Val Val Arg Leu Phe Tyr Ile
                85                  90                  95
Ala Thr Cys Arg Pro Phe Gln Leu Arg Cys Arg Thr Thr Leu Ala Leu
            100                 105                 110
Met Leu Leu Tyr Ala Val Phe Pro Val Pro Arg Val Ala Leu Trp Val
        115                 120                 125
Phe Asp Thr Val Val Pro Gly Leu Cys Val Arg Lys Gly Phe Phe Gln
    130                 135                 140
```

```
Val Cys Arg Gly Asp Ala Cys Ser Val
145                 150

<210> 34727
<211> 101
<212> PRT
<213> A.fumigatus

<400> 34727
Gly Phe Cys Lys Tyr Leu Ile Asp Thr Pro Thr Leu Leu Ala Val Trp
1               5                  10                  15
Pro Leu Phe Ser Arg Pro Gly Asp Cys Gln Met Leu Glu Arg Glu Leu
            20                  25                  30
Ile Glu Pro Ser Ser Lys Ile Glu Thr Gly Leu Ser Leu Leu Trp Leu
        35                  40                  45
Pro Ala Ser Thr Ala Ile Thr Ser Ser Thr Ser Leu Lys Arg Ile Arg
    50                  55                  60
Ile Ile Arg Thr Arg His Leu Leu Ile Leu Ser Ser Tyr Leu Ser Phe
65                  70                  75                  80
Phe Lys Phe Glu Val Phe Gly Glu Met Pro Ile Phe Met Leu Val Leu
                85                  90                  95
Phe Ile Asp Trp Asp
            100

<210> 34728
<211> 194
<212> PRT
<213> A.fumigatus

<400> 34728
Leu Ser Ala Thr Gln Leu Thr Thr Val His Pro Gln Pro Glu Met Ile
1               5                  10                  15
Glu Asp Ile Gly Val Pro Lys Asn Glu Val Ala Lys Trp Val Gly Ile
            20                  25                  30
Ser Ser Ala Ala Ser Ser Ser Cys Gln Ala Val Met Ala Val Thr Trp
        35                  40                  45
Gly Thr Ile Ser Asp Thr Val Gly Arg Lys Pro Ile Ile Leu Cys Gly
    50                  55                  60
Leu Thr Phe Thr Met Ile Phe Ser Leu Met Phe Gly Leu Ser Lys Ser
65                  70                  75                  80
Leu Ala Met Leu Ile Ala Ser Arg Ala Leu Leu Gly Leu Met Asn Gly
                85                  90                  95
Asn Val Gly Ile Ile Arg Thr Met Val Ala Glu Met Val Pro Glu Lys
            100                 105                 110
Glu Leu Gln Pro Arg Ala Phe Ser Ile Met Pro Leu Val Trp Thr Ile
        115                 120                 125
Gly Ser Ile Phe Gly Pro Ala Phe Gly Gly Ser Leu Ala Arg Pro Ala
    130                 135                 140
Val Lys His Pro Glu Thr Phe Gly Asn Trp Lys Leu Phe Lys Ala Tyr
145                 150                 155                 160
Pro Phe Leu Leu Pro Asn Leu Ala Ser Ala Phe Leu Phe Val Ile Gly
                165                 170                 175
Ile Thr Thr Gly Trp Leu Phe Leu His Val Ser Val Ile Gln Ala Thr
            180                 185                 190
Gly Ser
```

<210> 34729
<211> 287
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (6),(19)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34729
Cys Gly Ser Pro Arg Xaa Trp Asp Pro Leu Trp Pro Pro Gly Ile Val
1 5 10 15
Gly Phe Xaa Thr Ser His Leu Arg Ser Asp Trp Ile Val Gln Ser Pro
20 25 30
Asn Gln Thr Leu Glu Gly Gln Thr Val Arg Asp Thr Trp Asp Gly Gln
35 40 45
Ile Asp Thr Met Gly Ser Gly Ser Asp Phe Asn Ala Phe Gln Asp Phe
50 55 60
Ala Gly Ile Pro Ser Tyr Asp Leu Gly Phe Ser His Gly Pro Lys Asp
65 70 75 80
Pro Val Tyr His Tyr His Ser Asn Tyr Asp Ser Phe Asp Trp Met Asp
85 90 95
Arg Phe Gly Asp Pro Gly Trp Leu Tyr His Glu Ala Cys Thr Lys Ile
100 105 110
Trp Ala Leu Ala Ala Ala Lys Leu Val Glu Thr Pro Val Leu Ala Phe
115 120 125
Asn Ala Thr Asp Tyr Ala Val Gly Leu Ser Thr Tyr Leu Asp Gln Ile
130 135 140
Arg Pro Ala Ala Glu Gln Leu Pro Gly His Ser Ser Phe Asn Leu Glu
145 150 155 160
Pro Leu Asp Lys Ala Ile Ala Arg Leu Gln Lys Val Ala Ala Lys Phe
165 170 175
Asp Ala Glu Ala Ala Glu Leu Thr Ser Gln Leu Asp Glu Asn Leu Pro
180 185 190
Trp Trp Leu Trp Trp Lys Lys Val Arg Leu Tyr Phe Leu Ile Arg Gly
195 200 205
Val Asn Asp Lys Tyr Lys Ala Phe Glu Arg Lys Phe Leu Tyr Gln Pro
210 215 220
Gly Leu Asp Gly Arg Asn Trp Tyr Lys His Val Val Phe Ala Pro Gly
225 230 235 240
Ile Trp Thr Gly Tyr Ala Gly Ala Thr Tyr Pro Gly Leu Val Glu Ser
245 250 255
Leu Asp Ala Gly Asp Leu Lys Asn Ala Lys Val Ser His Phe His Phe
260 265 270
Ser Tyr Phe Leu His His Leu Ala Cys Ser Ser Leu Leu Thr Leu
275 280 285

<210> 34730
<211> 99
<212> PRT
<213> A.fumigatus

<400> 34730
Val Ser Leu Thr His Ser Leu Phe Phe Ser Ser Leu Cys Leu Asp Asn

```
1               5                   10                  15
Phe Cys Thr Asp Ser Gln Thr Ile Gly Ile Tyr Tyr Thr Leu Ile Gly
            20                  25                  30
Ile Ile Gly Met Phe Val Gln Phe Phe Ile Phe Pro Val Ala Ala Lys
        35                  40                  45
Arg Phe Gly Val Leu Asn Cys Thr Lys Ala Thr Ala Ile Ala Ser Pro
    50                  55                  60
Val Leu Tyr Leu Met Thr Pro Phe Thr Ala Leu Val Pro Ala Ser Ile
65                  70                  75                  80
Arg Ser Phe Val Val Phe Met Leu Met Leu Ser Lys Leu Ile Cys Ser
                85                  90                  95
Ile Phe Ser
```

<210> 34731
<211> 738
<212> PRT
<213> A.fumigatus

<400> 34731

```
His Leu Arg Ser Tyr Leu Ser Met Asp Asp Gly Pro Leu Arg Ile Ser
1               5                   10                  15
Arg Met Gly Lys Thr Ala Val Met Ser Leu Met Pro Ile Val Leu Leu
            20                  25                  30
Val Ser Leu Leu Ile Cys Thr Val His Ala Ala Ile Pro Tyr Ser Pro
        35                  40                  45
Ser His Ile Phe Tyr Thr Ser Gln Tyr Asn Asp Ser Phe Ala Tyr Leu
    50                  55                  60
Leu Arg Ser Ser Asp Ser Gln Pro His Ala Thr Gln Phe Leu Ser Leu
65                  70                  75                  80
Asp Val Ser Gly Lys Val Asp Ala Ala Asn Pro Glu Tyr Thr Val Leu
                85                  90                  95
Leu Asp Glu Leu Pro Phe His Thr Asn Asn Gln Ser Ser Ala Phe Val
            100                 105                 110
Pro Ala Ile Asp Gln His Gly His Ile Lys Val Tyr Val Gly Asp Cys
        115                 120                 125
Gly Gln Ser Asn Glu His Asp Arg Leu Trp Val Phe Thr Pro Asn Val
    130                 135                 140
Asn Ser Ser Ser Gly Asn Gly Thr Trp Glu Val Arg Asp Leu Asp Leu
145                 150                 155                 160
Gly Gln Gly Ser Leu Gly Val Asn Ser Tyr Gly Pro Asn Tyr Leu Ser
                165                 170                 175
Ala Ala Phe Ala Trp Ser Ser Ser Asn Met Thr Glu Ser Ser Leu Tyr
            180                 185                 190
Thr Phe Gly Gly Met Cys Pro Phe Asn Ile Thr Pro Lys Ala Thr Trp
        195                 200                 205
Ile Tyr Ala Ala Asn Tyr Ser Gln Ser Met Ile Val Leu Ser Pro Pro
    210                 215                 220
Ser Ser Asp Arg Val Ser Pro Tyr Gln Ile Ser Ala Ala Gly Leu Arg
225                 230                 235                 240
Ala Pro Pro Ile Pro Glu Ala Gly Phe Ala Val Thr Pro Leu Asn Pro
                245                 250                 255
Thr Tyr Ala Leu Ser Pro Leu Gly Arg Thr Leu Gln Gln Gln Ser Phe
            260                 265                 270
Leu Phe Ile Gly Gly His Thr Gln Lys Ala Phe Ile Asn Met Ser Glu
        275                 280                 285
```

```
Leu Ala Ile Tyr Ser Leu Pro Gln Asp Ser Trp Ser Phe Val Thr Val
    290                 295                 300
Glu Ser Gly Ser Asp Ile Gly Lys Thr Glu Leu Ala Val Arg Asp Ser
305                 310                 315                 320
Ala Phe Val Glu Pro Arg Ser Gly His Thr Ala Val Leu Ser Pro Asp
                325                 330                 335
Gly Ser Lys Val Ile Leu Phe Gly Gly Trp Val Gly Ser Thr Ser Arg
            340                 345                 350
Pro Ala Gln Pro Gln Leu Ala Ile Leu Glu Met Gly Glu Glu Phe Gly
        355                 360                 365
Gly Thr Gly Ser Trp Arg Trp Val Ile Pro Ser Thr Pro Lys Ser Val
    370                 375                 380
Phe Ala Asp Gly Thr Gly Ile Tyr Gly His Gly Ala Ala Met Leu Pro
385                 390                 395                 400
Gly Gly Val Met Met Ile Ala Gly Gly Tyr Ser Thr Ser Thr Thr Thr
                405                 410                 415
Lys Arg Ser Ala Val Gly Pro Gln Pro Asn Ser Gln Ile Phe Leu Tyr
            420                 425                 430
Asn Val Thr Ser Gly Ser Trp Met Thr Ser Tyr Arg Asn Pro Ser Leu
        435                 440                 445
Pro Glu Pro Glu Pro Glu Pro Val Gly Ser Pro Ser Gly Ser Asp Ser
    450                 455                 460
Ser Leu Ser Lys Lys Ala Gly Leu Gly Ala Gly Leu Gly Leu Gly Ile
465                 470                 475                 480
Pro Ser Ala Ala Gly Leu Ala Val Phe Ala Trp Phe Tyr Trp Arg Arg
                485                 490                 495
Arg Arg Ala Arg Arg Ser Arg Asp Arg Glu Leu Arg Lys Leu Ala Leu
            500                 505                 510
Ser Ala Gln Arg Ala His Phe Trp Gly Arg Asp Glu Pro Glu Met Ala
        515                 520                 525
Ser Ser Ile Arg Met Ser Lys Thr Arg Asp Gln Asn Lys Thr Ile Ser
    530                 535                 540
Trp Thr Thr Ala Pro Ser Arg Asn Gly Gln Asp Asn Gly Glu Gly Ala
545                 550                 555                 560
Ala Glu Ser Thr Ser Leu Leu Arg Asp Ile Pro Ala Pro Asp Arg Asn
                565                 570                 575
Ser Gln Gln Ser Leu Gly Thr Arg Pro Tyr Arg Tyr Ser Ala Pro Tyr
            580                 585                 590
Ser Glu Tyr Arg Arg Ser Glu Thr Ala Gly Glu Ile His Pro Ile Asp
        595                 600                 605
Glu Arg Asp Glu Glu Glu Ala Ser Ser Pro Ala Phe Gly Gly Pro Asp
    610                 615                 620
Thr Ala Ala Ala Ser Glu Pro Phe Leu Gly Ala Glu Phe Val Thr Pro
625                 630                 635                 640
Arg Ser Thr Ile Ser Asn Pro Val Gly Ile Pro Phe Arg Thr Val Arg
                645                 650                 655
Ala Val Pro Ala Glu Asp Pro Ala Arg Asp Gly Val Leu Ser Pro Asp
            660                 665                 670
Gln Asp Glu Arg Thr Ser Ser Asn Leu Ser Asp Ser Ser Ala Arg Ser
        675                 680                 685
Gly Asn Ser Ala Pro Arg Arg Pro Ala Ser Leu Arg Thr Pro Thr Thr
    690                 695                 700
Leu Pro Asp Asn Gly Cys Asn Ser Pro Gly Leu Ala Thr Pro Arg Ser
705                 710                 715                 720
Ser Thr Val Ala Thr Gly Thr Val His Arg Arg Ser Ala Thr Pro Pro
                725                 730                 735
```

Asp Ser

<210> 34732
<211> 176
<212> PRT
<213> A.fumigatus

<400> 34732
Asp Pro Leu Val Ala Pro Ile Leu His Cys Arg Lys Lys Gln Gly Trp
1 5 10 15
Val Gln Asp Ser Asp Trp Gly Phe His Gln Leu Gln Ala Trp Leu Cys
20 25 30
Leu Leu Gly Ser Thr Gly Gly Asp Ala Val Arg Gly Gly Leu Gly Ile
35 40 45
Gly Asn Cys Ala Ser Ser Arg Ser Val His Lys Gly His Thr Ser Gly
50 55 60
Ala Gly Thr Ser Arg Lys Trp Arg Ala Ala Ser Ala Cys Pro Arg Pro
65 70 75 80
Gly Thr Arg Ile Arg Arg Ser Pro Gly Leu Pro Leu Gln Val Gly Thr
85 90 95
Asp Arg Thr Thr Ala Lys Val Leu Arg Arg Ala Pro Ala Cys Phe Val
100 105 110
Thr Ser Arg Pro Leu Thr Glu Ile Ala Ser Lys Val Trp Glu Arg Ala
115 120 125
Leu Thr Asp Ile Gln His His Ile Ala Ser Thr Glu Glu Ala Arg Leu
130 135 140
Gln Val Lys Tyr Ile Gln Ser Thr Asn Gly Met Arg Lys Lys Gln Val
145 150 155 160
His Gln Arg Ser Ala Ala Pro Ile Leu Pro Arg Pro Leu Ser Leu Ser
165 170 175

<210> 34733
<211> 254
<212> PRT
<213> A.fumigatus

<400> 34733
Asp Leu Asn Ile Arg Arg Pro Pro Asp Ile Pro Pro Ile Glu Leu Thr
1 5 10 15
Thr Arg Leu Asp Ile Glu Met Gly Arg Leu Ile Thr Gly Ser Thr Asn
20 25 30
Pro Val Val Leu Tyr Val Ser Gly Gly Asn Thr Gln Val Ile Ala Tyr
35 40 45
Ser Ser Gln Arg Tyr Arg Ile Phe Gly Glu Thr Leu Asp Ile Ala Val
50 55 60
Gly Asn Cys Leu Asp Arg Phe Ala Arg Thr Leu His Ile Ser Asn Asp
65 70 75 80
Pro Ala Pro Gly Tyr Asn Ile Glu Gln Leu Ala Lys Lys Gly Lys Gln
85 90 95
Leu Val Asp Leu Pro Tyr Thr Val Lys Gly Met Asp Cys Ser Phe Ser
100 105 110
Gly Ile Leu Ala Ala Ile Asp Gly Leu Ala Ala Ser Tyr Gly Leu Asn
115 120 125
Gly Glu Glu Lys Glu Glu Glu Gly Ala Gly Asp Asp Ser Lys Pro Thr
130 135 140

```
Arg Ala Asp Leu Cys Phe Ser Leu Gln Glu Thr Val Phe Ser Met Leu
145                 150                 155                 160
Val Glu Ile Thr Glu Arg Ala Met Ala His Val Gly Ser Lys Glu Val
                165                 170                 175
Leu Ile Val Gly Gly Val Gly Cys Asn Glu Arg Leu Gln Glu Met Met
            180                 185                 190
Gly Ile Met Ala Arg Asp Arg Gly Gly Ser Val His Ala Thr Asp Glu
        195                 200                 205
Arg Phe Cys Ile Asp Asn Gly Ile Met Ile Ala Gln Ala Gly Leu Leu
    210                 215                 220
Ala Tyr Lys Thr Gly Phe Arg Thr Pro Leu Lys Glu Ser Thr Cys Thr
225                 230                 235                 240
Gln Arg Phe Arg Thr Asp Asp Val Phe Val Lys Trp Arg Asp
                245                 250
```

<210> 34734
<211> 166
<212> PRT
<213> A.fumigatus

```
<400> 34734
Ile Leu Gly Ser Phe Asn Asn Lys Phe Phe Pro Val Met Ile Ala Ile
1                   5                   10                  15
Gly Leu Glu Gly Ser Ala Asn Lys Leu Gly Val Gly Ile Met Leu His
            20                  25                  30
Pro Glu Asp Gly Ser Thr Pro Arg Val Leu Ala Asn Ile Arg His Thr
        35                  40                  45
Tyr Val Ser Pro Pro Gly Glu Gly Phe Leu Pro Lys Asp Thr Ala Arg
    50                  55                  60
His His Arg Ser Trp Val Val Lys Leu Val Lys Arg Ala Leu Arg Glu
65                  70                  75                  80
Ala Arg Ile Ser Val Arg Asp Val Asp Cys Ile Cys Phe Thr Lys Gly
                85                  90                  95
Pro Gly Met Gly Ala Pro Leu Gln Ser Val Ala Val Ala Ala Arg Met
            100                 105                 110
Leu Ser Leu Leu Trp Gly Lys Glu Leu Val Gly Val Asn His Cys Val
        115                 120                 125
Gly Arg Met Cys Asp His Arg Arg Cys Pro Leu Ser Ala Ala Ser Cys
    130                 135                 140
Leu Arg Pro Glu His Ser Thr Ala Ser Arg His Ser Ser Tyr Arg Ala
145                 150                 155                 160
Asn Asn Ser Leu Arg Tyr
                165
```

<210> 34735
<211> 87
<212> PRT
<213> A.fumigatus

```
<400> 34735
Ile Pro Leu Ile Asp Ala Tyr Met Gln Glu Pro Tyr Gln Phe Thr Cys
1                   5                   10                  15
Leu Thr Thr His Gly Cys Ser Gln Val Thr His His Met Met Asn Asp
            20                  25                  30
Phe Ile Tyr Asp Arg Ala Ala His Ile Ser Phe Leu Gly Tyr Tyr Asn
        35                  40                  45
```

```
Met Asn Val Asp Met Gln His His Gln Met Pro Pro Leu Leu Pro Thr
    50                  55                  60
Phe Leu Tyr Leu Ile Cys Ser Ser Trp Ala Gly Ala Arg Leu Arg Cys
65                  70                  75                  80
Gly His Arg Gln Val Ile Gly
                85
```

<210> 34736
<211> 226
<212> PRT
<213> A.fumigatus

<400> 34736

```
Pro Leu Ile Phe Thr Leu Ser Val Ala Arg Ser Asp Ile Phe Asp Gly
1               5                   10                  15
Glu Glu Leu Phe Ser Ile Pro Arg Gly Leu Val Leu Ser Ala Gln Asn
            20                  25                  30
Ser Lys Leu Lys Asp Leu Leu Ser Gln Asp Leu Glu Glu Leu Gly Pro
        35                  40                  45
Trp Leu Ser Leu Ile Leu Val Met Met Tyr Glu Tyr Leu Leu Gly Glu
    50                  55                  60
Gln Ser Ala Trp Ala Pro Tyr Phe Lys Ile Leu Pro Lys Ser Phe Asp
65                  70                  75                  80
Thr Leu Met Phe Trp Ser Pro Ser Glu Leu Arg Glu Leu Gln Gly Ser
                85                  90                  95
Ala Ile Val Ser Lys Ile Gly Lys Glu Gly Ala Glu Asp Ser Ile Met
            100                 105                 110
Gln Met Ile Ala Pro Val Val Arg Ala Asn Pro Ser Leu Phe Pro Ser
        115                 120                 125
Val Asp Gly Leu Ala Ser Trp Asp Gly Glu Ala Gly Ser His Ala Leu
    130                 135                 140
Leu Arg Leu Ala His Ile Met Gly Ser Leu Ile Met Ala Tyr Ala Phe
145                 150                 155                 160
Asp Ile Glu Lys Val Glu Asp Glu Asp Asp Glu Asn Asn Asp Glu Glu
                165                 170                 175
Asp Gly Tyr Val Thr Asp Asp Glu Gln Asp Gln Ser Ser Lys Gly Met
            180                 185                 190
Val Pro Leu Ala Asp Ile Leu Asn Ala Asp Ala Asp Arg Asn His Val
        195                 200                 205
Arg Ser Leu Ser Pro His Thr Arg Ile Arg Pro Pro Ala Trp Lys Val
    210                 215                 220
Asn Ser
225
```

<210> 34737
<211> 175
<212> PRT
<213> A.fumigatus

<400> 34737

```
Thr Ser Arg Ser Asp Ile Gly Val Gly Gly Pro Asp Cys Lys Asn Gly
1               5                   10                  15
Lys Ser Leu Thr Glu Met Leu Ser Ala Gly Gly Thr Lys Ser Glu Ala
            20                  25                  30
Ser Phe Gly Asp Val Ser Gly Val Ser Asn Ser Ala Ser Cys Leu Thr
        35                  40                  45
```

```
Ala Thr Gly Ala Gly Ser Ser Ala Ser Ser Ala Ala Leu Gly Pro Ser
    50                  55                  60
Ile Ala Gly Thr Gly Gly Arg Ala Ala Ser Pro Ala Gly Cys Ser Leu
65                  70                  75                  80
Ala Arg Ile Pro Arg Ser Trp Ile Cys Ile Lys Arg Glu Thr Ile Cys
                85                  90                  95
Gly Ser Ser Arg Gly Gly Gly Gly Ile Ser Ala Arg Ser Ala Phe Met
            100                 105                 110
Ser Phe Ser Lys Ile Cys Phe Arg Ser Ser Arg Tyr Ser Cys Val Asn
        115                 120                 125
Thr Ser Phe Ser Ser Ser Ser Ser Ser Leu Asp Arg Pro Lys Ser Gly
    130                 135                 140
Ile Ser Val Ser Ser Cys Lys Ala Gly Leu Ser Ser Gly Ala Thr Phe
145                 150                 155                 160
Phe Ser Gly Pro Thr Thr Gly Ser Gly Ala Arg Gly Gly Val Thr
                165                 170                 175
```

<210> 34738
<211> 731
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34738

```
Xaa Met Asp Pro Thr Pro Val Ala Ser Met Gly Pro Val Pro Ala Ala
1               5                   10                  15
Ser Asp Arg Leu Pro Asp His Ala Ile Val Glu Leu Pro Arg Lys Pro
            20                  25                  30
Ala Met Ala Glu Ala Arg Arg Asp Ser Ile Arg Pro Asp Leu Ala Ala
        35                  40                  45
Ser Arg Pro Asp Pro Val Lys Asp Leu Pro Ser Pro Leu Pro Ile Lys
    50                  55                  60
Arg Ser Pro Pro Pro Ala Ala Pro Gln Val Pro Ala Phe Gly Ser Val
65                  70                  75                  80
Thr Ala Pro Ile Pro Asp Leu Ser Ala Asp Lys Gly Pro Ile Asp Thr
                85                  90                  95
Ile Pro Ala Glu Val Ala Pro Ser Val Ala Glu Lys Glu Arg Asn Glu
            100                 105                 110
Thr Ser Ser Arg Ala Pro Val Gln Pro Pro Thr Gly Pro Lys Ala Glu
        115                 120                 125
Arg Ala Ser Ala Gln Pro Pro Pro Glu Pro Arg Tyr Arg Arg Glu Glu
    130                 135                 140
Val Arg Arg Asp Asp Gly Pro Glu Thr Ser Glu Lys Asp His Ser Ile
145                 150                 155                 160
Ser Arg Ala Pro Arg Ala His Val Ser Pro Ser Leu His Ala Arg Lys
                165                 170                 175
Gln Thr Pro Glu Leu Ser Pro Pro Thr Ala Pro Ala Ala Met Ile Gly
            180                 185                 190
Lys Glu Ser Ser Ile Pro His Ala Glu Ala Ser Leu Thr Gly Arg Thr
        195                 200                 205
Gly Ser Ile Val Gly Ser Pro Glu Leu Ser Lys Ala Arg Thr Pro Ser
    210                 215                 220
```

```
Ile Gly Ala Thr Ser Pro Gly Leu His Ile Pro Thr Gly Pro Arg Ala
225                 230                 235                 240
Leu Gln Gln Arg Ser Thr Pro Thr Arg Gly Pro Ser Lys Val Lys Ala
                245                 250                 255
Gln Trp Ala Arg Pro Gly Tyr Asn Arg His Pro Ala Gly Ala Gly Thr
            260                 265                 270
Val Pro Val Pro Lys Arg Asp Ser Ile Asp Gly Lys Glu Gly Thr Met
        275                 280                 285
Ser Ile Ser Glu Asp Ser Arg Arg Glu Pro Pro Ala Pro Ala Asp Asp
    290                 295                 300
His Gly Asn Glu Leu Glu Ala Gly Glu Ile Leu Pro Asp Lys Gly Met
305                 310                 315                 320
Glu Val Asp Ala His Met Ser Pro Glu Ser Ser Lys Ala Asp Ala Val
                325                 330                 335
Cys His Val Thr Pro Pro Arg Ala Pro Glu Pro Val Val Gly Pro Glu
            340                 345                 350
Lys Lys Val Ala Pro Glu Asp Lys Pro Ala Leu Gln Glu Asp Thr Leu
        355                 360                 365
Ile Pro Asp Phe Gly Arg Ser Ser Asp Glu Asp Glu Asp Glu Asn Asp
    370                 375                 380
Val Phe Thr Gln Glu Tyr Leu Glu Glu Arg Lys Gln Ile Phe Glu Lys
385                 390                 395                 400
Asp Met Lys Ala Leu Arg Ala Glu Met Pro Pro Pro Pro Leu Glu Asp
                405                 410                 415
Pro His Ile Val Ser Leu Leu Met Gln Ile Gln Leu Leu Gly Ile Leu
            420                 425                 430
Ala Asn Glu Gln Pro Ala Gly Glu Ala Ala Leu Pro Pro Val Pro Ala
        435                 440                 445
Ile Glu Gly Pro Lys Ala Ala Asp Glu Ala Glu Glu Pro Ala Pro Val
    450                 455                 460
Ala Val Lys Gln Asp Ala Glu Leu Glu Thr Pro Glu Thr Ser Pro Lys
465                 470                 475                 480
Leu Ala Ser Asp Leu Val Pro Pro Ala Asp Ser Ile Ser Val Lys Asp
                485                 490                 495
Leu Pro Phe Leu Gln Ser Gly Pro Pro Thr Pro Ile Ser Asp Leu Asp
            500                 505                 510
Val Tyr Gln Glu Asn Ala Ala Ile His Ala Arg Met Lys Asp Val Phe
        515                 520                 525
Ser Gln Glu Leu Met Lys Arg Arg Lys Glu Ile Ala Arg Lys Asn Ala
    530                 535                 540
Glu Leu Arg Glu Glu Tyr Leu Ser Tyr Tyr Lys Arg Trp Arg Met Gln
545                 550                 555                 560
Val Trp Glu Leu Asp Arg Ala Lys Ala Arg Ala Ser Ala Thr Pro Gly
                565                 570                 575
Ala Gly Thr Ser Pro Ala Pro Ser Ala Pro Thr Pro Pro Val Ala Glu
            580                 585                 590
Gly Arg Arg Tyr Lys Gly Asn Ser Glu Leu Asp Phe Gln Asn Ala Leu
        595                 600                 605
Arg Ala Ser Glu Ile Ser Ala Gln Glu Glu Leu Glu Arg Arg Arg Gly
    610                 615                 620
Asn Lys Ala Thr Ala Gln Pro Asp Leu Ala Arg Glu Ala Val Ile Pro
625                 630                 635                 640
Asp Met Leu Glu Pro Gly Glu Ala Lys Ala Gln Ile Tyr Lys Asp Thr
                645                 650                 655
Asn Asn Ser Val Asp Pro Ala Asn Ala Met Asp Val Phe Gly Phe Leu
            660                 665                 670
```

```
Pro Pro Pro Asn Asp Phe Thr Pro Glu Glu His Glu Ile Phe Thr Asp
        675                 680                 685
Ala Phe Met Ala His Pro Lys Lys Trp Gly Lys Ile Ala Glu Ser Leu
    690                 695                 700
Pro Gly Arg Asp Phe Gln Gln Cys Ile Ser Pro Tyr Tyr Leu Ser Phe
705                 710                 715                 720
His Thr Arg Gln Val Ala Arg Asn Gln Gly Glu
                725                 730
```

<210> 34739
<211> 404
<212> PRT
<213> A.fumigatus

<400> 34739

```
Glu Asp Glu Val Leu His Ala Gln Val Ala Leu Glu Lys Lys Gly Ser
1               5                  10                  15
Val Gln Pro Leu Val Leu Lys Ala His Leu Asn Leu Ser Thr Ser Ser
            20                  25                  30
Met Ser Leu Ala Trp Phe Asn Ala Ser Ala Glu Thr Gly Glu Cys Ala
        35                  40                  45
Ala Glu Ser Phe Ala Thr Cys Val Val Arg Phe Glu Asp Pro Ala Ala
    50                  55                  60
Trp Thr Arg Glu Trp Asp Arg Leu Ser His Leu Val Leu Gly Arg Ile
65                  70                  75                  80
Glu Ala Leu Glu Gln Arg Ala Val Glu Gly Lys Ala Ser Lys Leu Ser
                85                  90                  95
Lys Pro Leu Ala Tyr Thr Leu Phe Lys Asn Val Val Asp Tyr Ala Asp
            100                 105                 110
Arg Tyr Arg Gly Met Asp Gln Val Val Leu Tyr Glu His Glu Ala Val
        115                 120                 125
Ala Glu Val Thr Leu Val Ala Glu Arg His Gly Thr Trp His Thr Pro
    130                 135                 140
Pro His Trp Ile Asp Ser Val Ser His Leu Ala Gly Leu Val Met Asn
145                 150                 155                 160
Gly Ser Asn Ala Ser Asn Thr Arg Asp Tyr Phe Tyr Val Thr Pro Gly
                165                 170                 175
Cys Ser Ser Phe Arg Leu Leu Asn Pro Leu Lys Ala Gly Gly Lys Tyr
            180                 185                 190
Arg Ser Tyr Val Arg Met Phe Pro Leu Pro Glu Glu Ala Asn Met Tyr
        195                 200                 205
Ala Gly Asp Val Tyr Ile Leu Glu Gly Glu Gln Ile Val Gly Met Val
    210                 215                 220
Gly His Ile Arg Phe Arg Arg Val Pro Arg Leu Leu Met Asp Arg Phe
225                 230                 235                 240
Phe Ser Pro Ala Ala Ala Ser His Thr Glu Lys Gln Leu Gln Glu Thr
                245                 250                 255
Ala Pro Ser Ala Thr Asn Val Lys Lys Ser Thr Pro Pro Pro Ala Glu
            260                 265                 270
Ala Pro Ile Ser Val Pro Val Ala Pro Gly Asn Pro Val Ala Ile Pro
        275                 280                 285
Leu Pro Thr Ala Ser Lys Ser Gln Val Ala Thr Pro Pro Leu Thr Pro
    290                 295                 300
Pro Ser Gln Glu Glu Ser Pro Gly Glu Ser Ala Val Ile Thr Pro Ala
305                 310                 315                 320
Thr Ser Asp Arg Gly Asp Ser Thr Asp Ala Gly Val Val Gly Gln Cys
```

```
                325                 330                 335
Leu Lys Val Met Ala Arg Glu Thr Gly Leu Glu Val Asp Ala Leu Thr
            340                 345                 350
Pro Asp Ala Ser Phe Val Gln Leu Gly Ile Asp Ser Leu Met Ser Leu
        355                 360                 365
Val Leu Ser Glu Lys Phe Arg Ala Glu Leu Gly Ile Glu Ile Lys Ser
    370                 375                 380
Ser Leu Phe Leu Glu Cys Pro Thr Ile Gly Glu Met Thr Ala Trp Leu
385                 390                 395                 400
Glu Glu Tyr Cys
```

<210> 34740
<211> 76
<212> PRT
<213> A.fumigatus

<400> 34740

```
Thr Thr Met Ala Ser Arg Leu Pro Ile Leu Ile Ile Gly Ala Gly Ile
1               5                   10                  15
Ser Gly Leu Thr Thr Ala Arg Leu Leu Thr Asn Ser Gly Ile Pro Asn
            20                  25                  30
Ile Val Phe Glu Ala Ser Ser Pro Asp Arg Arg Gln Gly Phe Ala Ile
        35                  40                  45
Ser Leu Arg Glu Trp Gly Tyr Thr Ile Leu Leu Ser Ala Leu Gly Asp
    50                  55                  60
Pro Pro Val Phe Thr Thr Glu Val Pro His Pro Arg
65                  70                  75
```

<210> 34741
<211> 161
<212> PRT
<213> A.fumigatus

<400> 34741

```
Ser Pro Ala Ala Met Asn Phe Asn Gly Gly Gln Met Pro Pro Asp Met
1               5                   10                  15
Ala Gly Gly Gln Phe Phe Met Lys Gly Met Pro Asp Ala Met Gly Gly
            20                  25                  30
Pro Asn Gly Met Arg Pro Pro Ser Ser Asn Pro Ala Phe Ser Gly Pro
        35                  40                  45
Gln Met Gly Gln Pro Ile Pro Ala Gly Ala Val Asn Arg Val Pro Ser
    50                  55                  60
Gly Asn Trp Gln Gln Gln Gln Gly Gln Pro Met Gly Pro Gln Gln Ser
65                  70                  75                  80
Pro Ala Gln Gln Pro Gln Ser Thr Gly Thr Pro Gln Thr Gln Asn Ser
                85                  90                  95
Met Pro Pro Pro Gln Ala Pro Pro Ala Gly Ala Asn Ala Ala Arg Thr
            100                 105                 110
Ser Pro Gln Ser Gln Asn Ala Ala Pro Pro Thr Pro Gln Gln Ala Asn
        115                 120                 125
Lys Pro Ala Pro Lys Lys Lys Glu Pro Lys Asp Thr Ala Arg Lys Val
    130                 135                 140
Cys Phe Tyr Ile Pro Ile Phe Arg Lys Pro Thr Val Phe Val Leu Pro
145                 150                 155                 160
Tyr
```

<210> 34742
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34742
Ser Ala Pro Tyr Asn Pro Asp Ser Leu Ser Phe Val Gln Phe Asn Ser
1 5 10 15
Gly Met Asn Tyr Ala Cys Glu Asp Met Met Glu Val Asp Ala Ser Phe
20 25 30
Leu Pro Phe Asn Leu Tyr Arg Trp Pro Lys Asn Leu Asn Phe Val Leu
35 40 45
Asp Ala Arg Ser Ser Thr His Thr Phe Glu Asn Thr Pro Arg Trp Arg
50 55 60

<210> 34743
<211> 464
<212> PRT
<213> A.fumigatus

<400> 34743
Gly Gly Arg Phe Asp Leu Gly Ala Gln Ser Ile Phe Ser Thr Leu Ser
1 5 10 15
Leu Pro Leu Val Cys Tyr Leu Thr Leu Thr Phe Asn Met Gly Ser Ser
20 25 30
Ala Asp Ile Ser Asp Tyr Ser Asp Thr Gly Lys Ala Val Gly Ala Gly
35 40 45
Asn Asp Lys Gly Glu Lys Phe Phe Ala Pro Pro Gln Tyr Asp Gly Asp
50 55 60
Met Ile Gly Glu Met Ser Glu Ala Glu Arg His Ile Tyr Glu His Gly
65 70 75 80
Ile Lys Lys Phe Ser Arg Leu Gly Trp Lys Arg Leu Thr Val Val Leu
85 90 95
Ile Val Glu Ala Ile Ala Leu Gly Ser Leu Ser Ile Pro Ser Ser Phe
100 105 110
Ala Thr Leu Gly Met Val Ala Gly Val Ile Cys Cys Val Gly Leu Gly
115 120 125
Phe Val Ala Ile Tyr Thr Ser Tyr Val Val Gly Gln Val Lys Leu Lys
130 135 140
Phe Pro Gln Val Ser His Tyr Pro Asp Ala Gly Arg Leu Met Phe Gly
145 150 155 160
Arg Phe Gly Tyr Glu Leu Ile Asn Val Met Leu Ile Leu Gln Leu Thr
165 170 175
Phe Leu Thr Gly Ser His Cys Leu Thr Gly Thr Ile Ala Phe Thr Asn
180 185 190
Ile Thr Glu Ser Ser Ile Cys Ser Val Val Phe Gly Val Val Ser Ala
195 200 205
Ile Ile Leu Leu Leu Val Ala Val Pro Pro Ser Phe Ala Glu Met Ala
210 215 220
Ile Leu Gly Tyr Val Asp Phe Ala Ser Ile Ile Ala Ala Ile Gly Ile
225 230 235 240
Thr Ile Ile Gly Thr Gly Ile Lys Ser Gly Asn Ala Pro Gly Gly Leu
245 250 255
Ser Gly Val Glu Trp Ser Ala Trp Pro Lys Glu Gly Ile Thr Phe Thr

```
            260                 265                 270
Asp Ala Phe Ile Ala Ile Thr Asn Ile Val Phe Ala Tyr Ser Phe Ala
        275                 280                 285
Met Cys Gln Phe Ser Phe Met Asp Glu Met His Thr Pro Lys Asp Phe
    290                 295                 300
Val Lys Ser Ile Trp Ala Leu Gly Leu Val Glu Ile Phe Ile Tyr Thr
305                 310                 315                 320
Leu Thr Gly Ala Leu Ile Tyr Ala Phe Val Gly Met Asp Val Gln Ser
                325                 330                 335
Pro Ala Leu Leu Ser Ala Gly His Thr Leu Ser Arg Val Ala Phe Gly
            340                 345                 350
Ile Ala Leu Pro Val Ile Phe Ile Ser Gly Ser Ile Asn Thr Val Val
        355                 360                 365
Cys Gly Arg Leu Ile His Gly Arg Ile Phe Arg Asn Ser His Ile Arg
    370                 375                 380
Phe Ile Asn Thr Pro Ala Gly Trp Ala Thr Trp Leu Gly Leu Ile Thr
385                 390                 395                 400
Thr Ile Thr Val Val Ala Phe Ile Ile Ala Glu Val Ile Pro Val Leu
                405                 410                 415
Leu Arg Pro Ala Leu His Leu Leu Gly Pro Ser Phe Ile Phe Arg Leu
            420                 425                 430
Pro Pro Ser Asn Phe Pro Leu Arg Pro Lys Val Val Ser Phe Leu His
        435                 440                 445
Pro Ala Lys Gly Val Ser Trp Glu Leu Lys Pro Lys Lys Thr Trp Ala
    450                 455                 460
```

<210> 34744
<211> 432
<212> PRT
<213> A.fumigatus

<400> 34744

```
Gly Pro Ser Phe Phe Gly Leu Gln Phe Pro Thr Asn Pro Phe Gly Gly
1               5                   10                  15
Met Lys Glu Gly Asn His Leu Arg Ala Gln Gly Lys Val Gly Arg Gly
            20                  25                  30
Lys Pro Glu Asp Glu Arg Gly Pro Glu Glu Met Glu Ser Arg Ser Glu
        35                  40                  45
Lys Asn Arg Asn His Leu Ser Asp Asp Glu Cys Asp Asp Gly Asp Gly
    50                  55                  60
Gly Asp Gln Thr Glu Pro Gly Gly Pro Ala Ser Gly Gly Val Asp Glu
65                  70                  75                  80
Ala Asp Val Gly Val Pro Glu Asp Ala Ser Val Asp Gln Thr Ala Ala
                85                  90                  95
Asp Asp Gly Val Asp Gly Ala Ala Asp Glu Asp Asp Arg Gln Gly Asp
            100                 105                 110
Thr Glu Ser His Pro Ala Glu Ser Val Pro Gly Arg Gln Gln Arg Arg
        115                 120                 125
Ala Leu His Val His Ala Asn Lys Ser Ile Asp Gln Arg Thr Ser Glu
    130                 135                 140
Arg Val Asp Glu Asp Phe His Gln Thr Gln Arg Pro Asp Arg Leu Asp
145                 150                 155                 160
Lys Val Leu Gly Gly Val His Leu Val His Glu Arg Glu Leu Ala His
                165                 170                 175
Gly Glu Thr Val Gly Glu Asp Asp Val Gly Asp Gly Asp Glu Ser Ile
            180                 185                 190
```

```
Gly Glu Gly Asp Ala Phe Leu Gly Pro Gly Gly Pro Leu His Ser Gly
        195                 200                 205
Gln Thr Pro Arg Cys Ile Ala Ala Phe Asp Ala Ser Ala Asn Asp Gly
    210                 215                 220
Asp Thr Asp Gly Gly Asn Asn Arg Arg Glu Val Asp Val Ala Gln Asn
225                 230                 235                 240
Arg His Phe Gly Glu Thr Arg Arg Asp Gly Asp Gln Gln Gln Asp Asp
                245                 250                 255
Gly Arg His Asn Ala Lys His Asp Gly Ala Asp Gly Thr Leu Gly Asp
            260                 265                 270
Val Gly Glu Arg Asn Arg Ala Gly Gln Thr Val Arg Ala Gly Gln Glu
        275                 280                 285
Gly Glu Leu Glu Asn Glu His Asp Ile Asp Gln Phe Ile Ala Glu Ala
    290                 295                 300
Ala Glu His Glu Pro Ser Cys Ile Gly Ile Val Gly Asp Leu Arg Glu
305                 310                 315                 320
Leu Glu Leu Asp Leu Thr Asp Asp Val Thr Gly Ile Asp Gly Asp Lys
                325                 330                 335
Ser Gln Thr Asn Thr Ala Asp Asp Thr Ser His His Thr Gln Gly Arg
            340                 345                 350
Glu Gly Gly Gly Asp Arg Gln Thr Thr Lys Arg Asn Gly Leu His Asp
        355                 360                 365
Glu His Asn Gly Gln Thr Leu Pro Ser Glu Thr Ala Glu Phe Leu Tyr
    370                 375                 380
Thr Val Leu Ile Asp Val Ser Leu Gly Leu Ala His Leu Pro Asn His
385                 390                 395                 400
Val Ser Ile Val Leu Gly Arg Ser Lys Glu Phe Leu Ala Leu Val Ile
                405                 410                 415
Ala Ser Ser His Gly Phe Ala Gly Ile Arg Val Val Gly Asn Val Gly
            420                 425                 430
```

<210> 34745
<211> 599
<212> PRT
<213> A.fumigatus

<400> 34745

```
Asp Ile Pro Arg Pro Ala Trp Thr Ser Ala Thr Ser Gln Thr Thr Val
1               5                   10                  15
Arg Ala Leu Ser Ile Pro Ser Ser Asp Val Ser Asn Tyr Ser Ser Tyr
            20                  25                  30
Tyr Leu Met Gly Ser Ser Asp Thr Tyr Ser Leu Arg Ile Val Ile Ala
        35                  40                  45
Thr Ser Gly Pro Ser Ser Asn Tyr Pro Gln Arg Ala Tyr Arg Asn Pro
    50                  55                  60
Leu Asp Ala Leu Val Asn Phe Leu Asp Thr Lys His Gly Lys Asn Trp
65                  70                  75                  80
Trp Ile Trp Glu Phe Arg Ala Glu Gly Thr Gly Tyr Pro Asp Ser Glu
                85                  90                  95
Val Tyr Gly Arg Ile His His Tyr Pro Trp Pro Asp His His Pro Pro
            100                 105                 110
Pro Phe Ala Leu Ile Pro Ala Ile Met Gly Ser Met Arg Asn Trp Leu
        115                 120                 125
His Arg Leu Asp Gly Pro Asp Gly Glu Gly Ala Ser His Pro Val Glu
    130                 135                 140
Glu Asn Lys Val Ala Val Val His Cys Lys Ala Gly Lys Gly Arg Ser
```

```
145                 150                 155                 160
Gly Thr Ile Ser Cys Ser Tyr Leu Ile Ser His Asp Gly Trp Asn Met
                165                 170                 175
Glu Asp Ala Leu Glu Arg Phe Thr Ala Arg Arg Met Arg Val Gly Phe
            180                 185                 190
Gly Pro Gly Val Ser Ile Pro Ser Gln Leu Arg Trp Val Gly Tyr Val
        195                 200                 205
Asp Arg Trp Ala Lys Gln Met Gly Lys Lys Tyr Ile Glu Arg Pro Val
    210                 215                 220
Glu Val Leu Glu Leu His Val Trp Gly Leu Arg Asp Gly Val Lys Val
225                 230                 235                 240
Ala Ile Gln Gly Tyr Val Asp Glu Gly Lys Lys Ile Lys Cys Phe His
                245                 250                 255
Leu Phe His Arg Gly Glu Arg Thr Val Val Asp Asp Gly Lys Thr Ile
            260                 265                 270
Phe Pro Ala Lys Asn Thr Gln Asp Gly Glu Glu Ser Ser Gly Ser Ser
        275                 280                 285
Lys Thr Asp Thr Thr Thr Asp Ala Ala Leu Pro Ala Phe Gln Ser Ser
    290                 295                 300
Ser Arg Pro Ser Asn Ile Ala Ser Thr Ser Ser Pro Lys Pro Thr Val
305                 310                 315                 320
Thr Ala Pro Leu Ala Ser Gly Ala Asp Gly Leu Ser Ala Ala Pro Gln
                325                 330                 335
Arg Arg Ile Ser Ala Val Ile Leu Arg Pro Ser Thr Pro Val Ile Val
            340                 345                 350
Pro Ser Ser Asp Val Asn Ile Asp Phe Glu Arg Arg Ser Lys Ala Ala
        355                 360                 365
Tyr Thr Gly Trp Ala Met Val Thr Ser Ile Ala His Val Trp Phe Asn
    370                 375                 380
Ala Tyr Phe Glu Gly Gly Asp Arg His Asp Ser Gly Val Phe Glu Ala
385                 390                 395                 400
Asp Trp Glu Ser Met Asp Gly Ile Lys Gly Thr Ser Lys Arg Gly Val
                405                 410                 415
Lys Ala Leu Asp Arg Leu Lys Val Val Trp Arg Tyr Ala Pro Pro Ser
            420                 425                 430
His Phe Gly Ile Arg Glu Pro Gly Lys Glu Asp Thr Ala Val Val Ala
        435                 440                 445
His Ala Ile Thr Glu Pro Lys Pro Gly Glu Pro Ile Arg Glu Ser His
    450                 455                 460
Pro Ala Asp Trp Arg Gly Gln Glu Thr Gly Ala Ala Asn Glu His Glu
465                 470                 475                 480
Arg Glu Gln Glu Ser Ile Ser Ser Arg Ile Ala Glu Val Asp Thr Gly
                485                 490                 495
Thr Lys Gly Leu Thr Ser Ala Thr Glu His Pro Leu Leu Thr Ser Val
            500                 505                 510
Ser Thr Thr Ala Ala Lys Ala Val Ser Ala Thr Ala His Ser Ile His
        515                 520                 525
Gly Leu Ser Lys Glu Leu Gly Leu Arg Lys Gln Thr Asp Glu Ser Lys
    530                 535                 540
Asp Val Ser Leu Ala Glu Ser Glu Ala Glu Ser Val Gln Thr Lys Thr
545                 550                 555                 560
Gly Thr Asp Lys Glu His Glu Asn Gly Asp Phe Glu Gly Val Arg Pro
                565                 570                 575
Tyr Phe Gly Asp Ser Gly Asn Asp Ser Glu His His Ser Gly Asp Ala
            580                 585                 590
Glu Ser Thr Arg Ser Leu Pro
```

595

<210> 34746
<211> 225
<212> PRT
<213> A.fumigatus

<400> 34746
Pro Pro Ser His Thr Ser Gly Ser Thr Pro Thr Ser Lys Ala Ala Thr
1 5 10 15
Gly Thr Thr Arg Ala Ser Leu Arg Gln Thr Gly Ser Pro Trp Thr Gly
20 25 30
Ser Arg Gly Pro Pro Asn Gly Ala Ser Lys Leu Ser Thr Ala Ser Arg
35 40 45
Ser Ser Gly Gly Thr Arg His Leu Pro Thr Ser Ala Ser Ala Ser Pro
50 55 60
Gly Arg Arg Thr Pro Pro Ser Trp Arg Met Pro Ser Arg Ser Pro Asn
65 70 75 80
Gln Ala Ser Arg Ser Ala Lys Ala Thr Gln Pro Thr Gly Ala Ala Arg
85 90 95
Lys Gln Glu Pro Pro Met Ser Thr Ser Ala Ser Arg Arg Ala Phe Pro
100 105 110
Arg Ala Leu Arg Arg Ser Thr Gln Ala Pro Arg Val Leu Arg Ala Arg
115 120 125
Arg Ser Ile Arg Tyr Ser Arg Ala Ser Val Arg Arg Leu Leu Arg Leu
130 135 140
Tyr Arg Arg Leu Arg Thr Arg Ser Thr Gly Leu Ala Arg Ser Trp Gly
145 150 155 160
Cys Gly Ser Arg Gln Met Arg Val Arg Thr Ser Val Ser Arg Arg Ala
165 170 175
Arg Arg Ser Gln Tyr Lys Arg Arg Arg Val Arg Thr Arg Asn Met Arg
180 185 190
Thr Gly Ile Ser Lys Ala Ser Gly His Ile Leu Gly Thr Val Val Thr
195 200 205
Ile Pro Ser Ile Ile Arg Ala Met Leu Asn Leu Arg Gly Val Tyr Arg
210 215 220
Arg
225

<210> 34747
<211> 106
<212> PRT
<213> A.fumigatus

<400> 34747
Ile Lys Ala Thr Ser Val Gly Ala Leu Val Val Met Asp Ala Thr Lys
1 5 10 15
Ala Arg Ala Ser Ser Tyr Val Leu Arg Gly Arg Glu Asn Asn Glu Glu
20 25 30
Ala Pro Val Tyr Tyr Ala Phe Ser Glu Lys Glu Lys Ile Arg Ser Val
35 40 45
Ala Val Ala Ser Met Val Thr Phe Leu Ser Pro Val Ser Gly Ser Ile
50 55 60
Tyr Tyr Pro Ala Leu Gln Ser Leu Ser Gln Asp Leu Gly Val Ser Ile
65 70 75 80
Asn Thr Ile Tyr Leu Thr Ile Thr Val Tyr Met Val Arg Phe Pro Tyr

```
                85                  90                  95
Asp Tyr Arg Glu Asn Ala Thr Glu Lys Val
            100                 105
```

<210> 34748
<211> 389
<212> PRT
<213> A.fumigatus

<400> 34748

```
Pro Leu Leu Phe Val Phe Asp Gly Arg Gln Ile Phe Gln Gly Phe Thr
1               5                  10                  15
Pro Leu Leu Thr Gly Thr Leu Ser Asp Gln Asn Gly Arg Arg Pro Val
            20                  25                  30
Phe Val Ala Cys Leu Ile Val Tyr Ile Gly Val Asn Ile Gly Leu Cys
        35                  40                  45
Val Gln Asp Ser Val Leu Ile Leu Phe Val Leu Arg Cys Leu Gln Ser
    50                  55                  60
Val Gly Ser Asn Gly Val Ser Val Val Ala Thr Ala Thr Ile Ala Asp
65                  70                  75                  80
Leu Ile Thr Arg Ala Glu Arg Arg Lys Tyr Met Ala Tyr Gly Ser Leu
                85                  90                  95
Gly Phe Thr Phe Gly Pro Ala Val Gly Pro Val Leu Gly Ser Val Leu
            100                 105                 110
Thr Gln Phe Leu Gly Trp Arg Ser Ile Phe Ala Phe Leu Ala Ile Val
        115                 120                 125
Ala Ala Thr Leu Leu Thr Leu Ile Leu Ala Phe Leu Pro Glu Thr Cys
    130                 135                 140
Arg Ala Met Val Gly Asn Gly Ser Val Pro Ala Pro Trp Trp Asn Arg
145                 150                 155                 160
Ser Cys Leu Gln Trp Leu Arg Leu Ser Phe Gln Ser Gly Thr Ile Ala
                165                 170                 175
Glu Asp Arg Gly Thr Leu Val Ser Pro Cys His Arg Pro Ser Leu Trp
            180                 185                 190
Asp Ser Ile Arg Ile Thr Arg Gln Arg Ser Thr Gly Leu Leu Ile Leu
        195                 200                 205
Ala Ser Thr Thr Leu Ser Ser Gly Ser Thr Ala Ile Leu Ala Asn Ile
    210                 215                 220
Pro Ala Leu Phe Glu Asp His Tyr Arg Phe Asn Ala Leu Gln Val Gly
225                 230                 235                 240
Leu Cys Tyr Leu Pro Asp Ala Ile Gly Ala Leu Ser Ala Pro Trp Thr
                245                 250                 255
Val Gly Thr Leu Ala Asp Arg Asn Phe Arg Arg Cys Cys Arg Leu Ala
            260                 265                 270
Gly Ile Thr Val Ala Arg Asn Gln Gln Thr Pro Gln Gln Leu Leu Ser
        275                 280                 285
Met Pro Leu Glu Lys Ala Arg Leu Gln Leu Met Leu Pro Leu Val Tyr
    290                 295                 300
Val Ser Ala Gly Val Leu Thr Ile Tyr Ser Trp Val Met Gln Met Arg
305                 310                 315                 320
Val His Val Ala Gly Pro Leu Ile Pro Leu Phe Phe Leu Gly Asn Val
                325                 330                 335
Ile Ser Gly Ala Arg Asn Ser Leu Ala Met Leu Ile Ile Asp Ile His
            340                 345                 350
Ala Gln Arg Pro Ala Thr Ala Ser Ala Ser Leu Ala Phe Phe Arg Phe
        355                 360                 365
```

```
Ala Gly Gly Cys Trp Arg Gly Gly Gly Asp Gly Ala Leu His Gln Gly
    370                 375                 380
His Arg His His Gly
385

<210> 34749
<211> 101
<212> PRT
<213> A.fumigatus

<400> 34749
Ile Gly His Ser Phe Arg Gly Phe Gln Leu Phe Cys Leu Arg Pro Ala
1               5                   10                  15
Val Val Val Leu Tyr Gln Arg Leu Ser Thr Val Ile Phe Asn Met Ser
            20                  25                  30
Gly Cys Asn Leu Pro Ser Ser Ser Arg Ala Ile Ser Ser Thr Lys Thr
        35                  40                  45
Ala Lys Leu Thr Glu Ser Gln Ile Lys Arg Leu Ser Ala Trp Ile Glu
    50                  55                  60
Asn Asp Ile Trp Ile Leu Phe Leu Gln Arg Val Val Glu Asn Trp Ile
65                  70                  75                  80
Gly Ser Met Ile Val His Thr Arg Thr Ala Ser Val Ala Thr Arg Ala
                85                  90                  95
Val Leu Ser Leu Gly
            100

<210> 34750
<211> 95
<212> PRT
<213> A.fumigatus

<400> 34750
Lys Asp Cys Met Ser Leu Pro Ser Asp Ile Arg Asn Gly Leu Glu Pro
1               5                   10                  15
Ser Lys Pro Asn Lys Leu His Cys Ala Asp Thr Asp Tyr Arg Ser Leu
            20                  25                  30
Gln Phe Ser Val Phe Tyr Phe Ser Gly Thr Tyr Gln Ile Ile Glu Thr
        35                  40                  45
Val Thr Met Lys Leu Ile Cys Ser Ser Ile Leu Tyr Asp Gln Ser His
    50                  55                  60
Ala Ala Ser Ser Asp Leu Val Ile Arg Arg Val Arg Arg Asp Gln Lys
65                  70                  75                  80
Ala Leu Ser Arg Gln Gln Gly Ser Thr Arg Ile Ala Leu Ser His
                85                  90                  95

<210> 34751
<211> 68
<212> PRT
<213> A.fumigatus

<400> 34751
Asn Gly Lys Tyr Ser Cys Tyr Phe Ser Asn Gln Tyr Phe Leu Phe Glu
1               5                   10                  15
Gly Lys Tyr Ala Ile Ala Lys Asp Val Ile Phe Phe Asp Ile Ala Ser
            20                  25                  30
Val Thr Ser Pro Pro Ile Ser Val Arg Ser Glu Asn Gly Pro Lys Leu
```

```
        35                  40                  45
Met Pro Lys Thr Met Tyr Leu Trp Thr Arg Ile Gln Ser Asn Pro Ile
    50                  55                  60
Leu Cys Arg Tyr
65

<210> 34752
<211> 751
<212> PRT
<213> A.fumigatus

<400> 34752
Tyr Lys Ser Thr Asp Ala Ile Ser Ser Asp Ala Glu Thr Val Glu Leu
1               5                  10                  15
Phe Gln Gln Leu Arg Gln Leu Ser Arg Glu Leu Val Thr Leu Leu Arg
            20                  25                  30
Leu Ser Ser Leu Leu Pro Ser Thr Gly Thr Arg Leu Ser Pro Leu Val
        35                  40                  45
Ala Arg Lys Phe Glu Val Tyr Ile Ala Lys Thr Asp Leu Ser Gln Ala
    50                  55                  60
Gly Asn Leu Ala Asp Phe Met Ala Asp Val Thr Asp Pro Thr Phe Glu
65                  70                  75                  80
Glu Lys Leu Arg Val Leu Ala Ser Leu Ala Leu Arg Thr Met Leu Glu
                85                  90                  95
Arg Val Val Lys Leu Leu Ala Arg Gln Val Arg Gly Ile Lys Asn Asn
            100                 105                 110
Val Lys Val Thr Thr Ile Ser Thr Ser Ser Phe Pro Ser Asn Ser Pro
        115                 120                 125
Phe Asp Ile Ser Gln Ile Asp Pro Arg Asp Arg Glu Leu Leu Ala Lys
    130                 135                 140
Arg Ala Met Ala Gly Leu Thr Gly Leu Thr Pro Pro Gly Ala Ala Gly
145                 150                 155                 160
Gly Arg Asn Asn Glu Asp Glu Lys Glu Thr Ile Glu Val Asp Glu Leu
                165                 170                 175
Gln Lys Arg Leu Gln Glu Ala Glu Leu Ser Pro Glu Ala Arg Lys Val
            180                 185                 190
Ala Asp Lys Glu Leu Arg Arg Leu Arg Lys Met Asn Pro Ala Asn Ala
        195                 200                 205
Glu Tyr Gly Val Cys Arg Thr Tyr Leu Glu Asn Ile Ala Asp Ile Pro
    210                 215                 220
Trp Thr Lys Val Thr Glu Asp Lys Leu Gly Pro Glu Thr Leu Lys Arg
225                 230                 235                 240
Ala Arg Asn Gln Leu Asp Glu Asp His Tyr Gly Leu Glu Thr Ile Lys
                245                 250                 255
Lys Arg Leu Leu Glu Tyr Leu Ala Val Leu Arg Leu Lys Gln Ser Thr
            260                 265                 270
Asn Gln Asp Val Glu Arg Gln Ile Ala Ala Leu Thr Lys Glu Leu Asp
        275                 280                 285
Ala Ala Asn Glu Val Leu Ala Glu Lys Asp Val Pro Ala Leu Ser Glu
    290                 295                 300
Ser Asp Arg Val Ser Leu Glu Ala Lys Leu Asn Leu Leu Gln Ser Arg
305                 310                 315                 320
Arg Leu Ala Asp Lys Ser Pro Ile Leu Leu Leu Val Gly Pro Pro Gly
                325                 330                 335
Thr Gly Lys Thr Ser Leu Ala Arg Ser Val Ala Thr Ser Leu Gly Arg
            340                 345                 350
```

```
Lys Phe Asn Arg Ile Ser Leu Gly Gly Val Arg Asp Glu Ala Glu Ile
        355                 360                 365
Arg Gly His Arg Arg Thr Tyr Val Ala Ala Met Pro Gly Leu Ile Val
    370                 375                 380
Asn Gly Leu Lys Lys Val Gly Val Ala Asn Pro Val Phe Leu Leu Asp
385                 390                 395                 400
Glu Ile Asp Lys Val Gly Gly Ala Asn Phe Gln Gly Asp Pro Ser Ala
                405                 410                 415
Ala Met Leu Glu Val Leu Asp Pro Glu Gln Asn Ser Thr Phe Val Asp
            420                 425                 430
His Tyr Ile Asn Ile Pro Ile Asp Leu Ser Lys Val Leu Phe Ile Ala
        435                 440                 445
Thr Ala Asn Ser Leu Asp Thr Ile Pro Ala Pro Leu Leu Asp Arg Met
    450                 455                 460
Glu Thr Ile Thr Leu Ser Gly Tyr Thr Thr Val Glu Lys Arg His Ile
465                 470                 475                 480
Ala Lys Arg His Leu Ile Pro Lys Gln Ile Arg Ala Asn Gly Leu Ser
                485                 490                 495
Glu Gly Gln Val Val Leu Ser Asp Glu Val Val Asp Lys Val Ile Thr
            500                 505                 510
Ser Tyr Thr Arg Glu Ser Gly Val Arg Asn Leu Glu Arg Glu Leu Gly
        515                 520                 525
Ser Ile Cys Arg His Lys Ala Val Gln Tyr Ala Asp Ala Val Asp Asn
    530                 535                 540
Gly Arg Leu Asp Thr Tyr Asn Pro Val Val Ala Leu Gly Asp Leu Glu
545                 550                 555                 560
Asp Ile Leu Gly Ile Glu Arg Phe Asp Glu Glu Ile Ala Glu Lys His
                565                 570                 575
Gly Arg Pro Gly Val Val Thr Gly Leu Val Ala Tyr Ser Thr Gly Gly
            580                 585                 590
Gln Gly Ser Ile Leu Phe Ile Glu Val Ala Asp Met Pro Gly Asn Gly
        595                 600                 605
Arg Val Gln Leu Thr Gly Lys Leu Gly Asp Val Leu Lys Glu Ser Val
    610                 615                 620
Glu Val Ala Leu Thr Trp Val Lys Ala His Ser Phe Glu Leu Gly Leu
625                 630                 635                 640
Thr His Asp Pro Asn Glu Asp Ile Met Lys Asn Arg Ser Leu His Val
                645                 650                 655
His Cys Pro Ala Gly Ala Ile Pro Lys Asp Gly Pro Ser Ala Gly Leu
            660                 665                 670
Ala His Thr Ile Gly Leu Ile Ser Leu Phe Thr Gly Lys Ala Val Pro
        675                 680                 685
Pro Gln Ile Ala Met Thr Gly Glu Val Ser Leu Arg Gly Arg Val Met
    690                 695                 700
Pro Val Gly Gly Ile Lys Glu Lys Leu Ile Gly Ala His Arg Ala Gly
705                 710                 715                 720
Val Lys Thr Val Leu Leu Pro Glu Gln Asn Arg Lys Asp Val Lys Asp
                725                 730                 735
Val Pro Gln Glu Val His Asp Gly Leu Gln Ile Val Tyr Val Arg
            740                 745                 750
```

<210> 34753
<211> 127
<212> PRT
<213> A.fumigatus

<400> 34753
Leu Leu Ala Leu Gly Leu Leu Phe His Cys Ala Asp Asn Ile Pro Gln
1 5 10 15
Cys Arg Pro Asp Phe Thr Ile Ala Leu Ile Arg Thr Pro Phe Leu Pro
20 25 30
Pro Arg Tyr Ala Thr Phe Tyr Val Pro Leu Asn Phe Asn Lys Leu Asp
35 40 45
Met Arg Asp Tyr Leu Gln Arg Leu Tyr Gly Val Gly Val Leu Arg Ile
50 55 60
Arg Ser Tyr Val Glu Gln Gln Lys Val Thr Arg Leu Arg Pro Leu Gly
65 70 75 80
Lys Phe Gly Tyr Gly Arg Leu Arg Arg Pro Met Ser Lys Lys Lys Met
85 90 95
Thr Val Glu Met Lys Glu Pro Phe Val Trp Pro Glu Ala Pro Thr Asp
100 105 110
Met Ser Pro Tyr Val Tyr Cys Phe Trp His Phe Pro Pro Lys Ser
115 120 125

<210> 34754
<211> 101
<212> PRT
<213> A.fumigatus

<400> 34754
Pro Val Leu Thr Gln Arg Asn Lys Gly Phe Gly Phe Asp Lys Phe Ile
1 5 10 15
Ser Gly Leu Leu Phe Pro Phe Cys Phe Ile Arg Ser Gly Asp Gly Lys
20 25 30
Ala Gly Ser Cys Ser Phe Leu Cys Gly Ile Phe Leu Ser Leu Ile Pro
35 40 45
Phe Ser Phe Tyr Met Phe Ile Asn Phe Val Pro Tyr Val Glu Ile Ser
50 55 60
Ser Gly Tyr Lys His Asn Ile Gln Glu Pro Ser Phe Thr Gly Lys Thr
65 70 75 80
Pro Ile Trp Asp Met Lys Leu Lys Met Gly Gly Ile Arg Ser Lys Thr
85 90 95
Lys Ala Ala Ile Asn
100

<210> 34755
<211> 79
<212> PRT
<213> A.fumigatus

<400> 34755
Asn Arg Trp Glu Lys Asp Gln Tyr Phe Asn Ala Glu Lys Tyr Gln Glu
1 5 10 15
Glu Ile Gln Arg Ser Gln Arg Pro Asp Ala Ala Met Glu Pro Asn Lys
20 25 30
Ala Glu Arg Glu Glu Tyr Ala Lys Glu Ala Lys Gln Leu Leu Glu Gly
35 40 45
Thr Lys Thr Trp Arg Pro Thr Trp Gln Ala Leu Gly Leu Asn Tyr Asp
50 55 60
Arg Ser Leu Leu Lys Glu Thr Lys Gly Ser Ala Ser Thr Ser Ser
65 70 75

<210> 34756
<211> 230
<212> PRT
<213> A.fumigatus

<400> 34756
Leu Pro Lys Tyr Val Tyr Gly Val Ile Cys Val Asn Asn Gln Leu Ser
1 5 10 15
Cys Phe Asn Val Arg Ile Asn His Val Leu Pro Asp Ile Asp Asn Leu
20 25 30
Gln Ala Ile Val Asp Leu Leu Arg Tyr Ile Leu Asp Ile Leu Pro Val
35 40 45
Leu Leu Arg Lys Glu Asp Ser Leu Asp Thr Gly Ala Val Cys Ser Asn
50 55 60
Gln Phe Leu Phe Asp Thr Ser Asn Arg His Asn Pro Ser Pro Gln Gly
65 70 75 80
Asp Phe Thr Gly His Cys Asn Leu Gly Arg Asn Ser Phe Ala Cys Glu
85 90 95
Lys Gly Asp Gln Pro Asp Cys Val Ser Lys Ser Ser Arg Gly Thr Val
100 105 110
Leu Gly Asp Ser Ser Cys Trp Ala Val Asp Met Gln Thr Ser Val Leu
115 120 125
His Asp Val Leu Val Gly Val Met Cys Lys Thr Glu Leu Glu Arg Met
130 135 140
Ser Phe Asp Pro Gly Gln Gly Asp Phe His Ala Phe Leu Gln Asn Ile
145 150 155 160
Ala Lys Leu Ala Cys Lys Leu Asn Ala Ala Val Ala Trp His Val Arg
165 170 175
Asn Leu Asn Glu Gln Asp Thr Thr Leu Ala Pro Ser Arg Val Arg Asp
180 185 190
Lys Thr Gly Tyr Asp Ala Trp Pro Thr Met Leu Leu Gly Asn Leu Phe
195 200 205
Val Lys Thr Leu Asn Ser Glu Asn Val Phe Gln Val Ala Lys Gly Asn
210 215 220
Tyr Arg Val Val Arg Ile
225 230

<210> 34757
<211> 77
<212> PRT
<213> A.fumigatus

<400> 34757
Arg Arg Gly Tyr Gly Ile Lys Gly Ile Gly Ser Gly Tyr Glu Glu Asn
1 5 10 15
Leu Ala Gln Val Asp Trp Asp Val Asn Val Met Ile Asp Glu Cys Gly
20 25 30
Val Leu Phe Arg Ile Gln Asp Phe Gln His Cys Ser Gly Trp Ile Ser
35 40 45
Leu Glu Ile Gly Pro Ala His Phe Ile Asp Leu Ile Lys Lys Lys His
50 55 60
Arg Ile Gly Asn Pro Asn Leu Phe Glu Thr Val His Asn
65 70 75

<210> 34758
<211> 320

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (320)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34758
Asp Asn Ser Arg Ala Gly Ser Ala Asp Glu Lys Lys His Leu Thr Ile
1 5 10 15
Leu His Ile Pro Leu Phe Glu Tyr Trp Leu Tyr Ile Leu Arg Met Ala
20 25 30
His Pro Leu Val Phe Ile Thr Gly Ala Thr Gly Phe Leu Gly Ser Ala
35 40 45
Thr Ala Val Ala Ala Leu Lys Ala Gly Tyr Arg Leu Arg Ile Cys Val
50 55 60
Arg Lys Pro Ser Asp Glu Leu Gln Asn Leu Leu Ser Gly Tyr Ser Glu
65 70 75 80
Gln Val Glu Phe Val Thr Val Ala Asp Trp Thr Ala Glu Gly Ala Phe
85 90 95
Arg Gly Leu Leu Asp Gly Ala Asp Tyr Val Ile His Leu Ala His Pro
100 105 110
Ile Pro Ser Gly Pro Glu Lys Glu Tyr Tyr Phe Thr Pro Ala Val Lys
115 120 125
Ala Thr Thr Ala Leu Leu Arg Glu Ala Ala Arg Val Pro Ser Ile Lys
130 135 140
Lys Val Val Val Thr Ser Ser Ile Ala Ala Leu Met Pro Leu Asp Gly
145 150 155 160
Ile Pro Ser Gly Gly Val Ile Lys Gly Ala Phe Ser Gly Leu Leu Gly
165 170 175
Arg Ala Tyr Arg Thr Trp Thr Asp Ile Ile Pro Glu Asp Asn Asp Trp
180 185 190
Asp Phe Asp Val Asp Glu Thr Glu Asp Phe Ala Ala Ser Asn Asp Pro
195 200 205
Arg Gly Val Pro Met Arg Leu Tyr His Ala Ser Lys Leu Leu Ala Asn
210 215 220
Gln Thr Ala Trp Glu Phe Arg Lys Ala Ala Lys Pro Pro Tyr Ala Leu
225 230 235 240
Val Thr Leu His Pro Ala Phe Val Tyr Gly Arg Asn Pro Val Gln Thr
245 250 255
Thr Ala Glu Ala Ile Gln Glu Ser Ser Asn Gly Leu Leu Trp His Ala
260 265 270
Ile Met Thr Gly Val Pro His His Ser Tyr Ser Arg Val Pro Gly Val
275 280 285
His Ile Asp Asp Val Val Glu Ala His Leu Arg Ala Leu Asp Pro Ala
290 295 300
Ile Pro Asp Gly Ser Lys Tyr Leu Leu Ala Ala Lys Gly Gly Thr Xaa
305 310 315 320

<210> 34759
<211> 380
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (64)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34759

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Ser Gln Arg Leu Gly Tyr Arg Gln Phe Gln Gly Ser Lys Phe Gly His
1               5                  10                  15
Ser Gly Pro Arg Gly Thr Glu Met Thr Lys Trp Ile Arg Asn Asp Leu
            20                  25                  30
Gln Ser Arg Ile Ala Pro Asp Asp Tyr Thr Ile Gln Gly Gly Thr Trp
        35                  40                  45
Ala Gln Leu Phe Leu Ala Gly His His Trp Leu Gly Arg Gln Gly Xaa
    50                  55                  60
Gly Ile Ser Ala Pro Cys Arg Thr Arg Lys Thr Val Ser Ala Asp Pro
65                  70                  75                  80
Asn Glu Met Ile Ile Ala Thr Pro Gly Leu Gly Thr Lys Ile Leu Phe
                85                  90                  95
Ile Leu Gly Met Leu Leu Gly Asn Thr Thr Trp Leu Ala Lys Leu Pro
            100                 105                 110
Thr Lys Gln Asn Arg Leu Ile Asp Thr Gly Cys Arg Asn Ile Arg Asp
        115                 120                 125
Ala Thr Arg Arg Met Ile Arg Glu Gln Lys Ala Lys Met Glu Asp Pro
    130                 135                 140
Asn Ala Ala Ala Glu Val Asp Ile Ile Ser Val Ala Met Arg Ser Gly
145                 150                 155                 160
Asn Phe Asp Asp Asp Asn Leu Val Asp Gln Leu Met Thr Phe Leu Gly
                165                 170                 175
Ala Gly His Glu Thr Thr Ala Gly Ala Leu Gln Trp Ala Ile Tyr Ala
            180                 185                 190
Leu Cys Lys His Pro Asp Val Gln Ser Arg Leu Arg Glu Glu Val Arg
        195                 200                 205
Ala Asn Leu Pro Pro Ile His Gly Glu Asn Pro Gly Pro Ile Asp Ala
    210                 215                 220
Ala Thr Ile Asp Ser Leu Pro Tyr Leu Asn Ala Val Cys Asn Glu Val
225                 230                 235                 240
Ile Arg Phe His Pro Ser Val Pro Asn Thr Val Arg Val Ala Leu Asn
                245                 250                 255
Asp Thr Thr Leu Met Gly His Pro Ile Pro Lys Gly Thr Gln Val Val
            260                 265                 270
Ile Ser Pro Glu Leu Val Asn His Met Pro Ala Leu Trp Gly Pro Asp
        275                 280                 285
Ala Glu Arg Phe Asn Pro Asp Arg Trp Met Gly Pro Gly Lys Ala Asn
    290                 295                 300
Thr Gly Gly Ala Ala Ser Asn Tyr Ala Phe Leu Ser Phe Leu His Gly
305                 310                 315                 320
Pro Arg Ser Cys Ile Gly Gln Val Phe Ala Lys Ala Glu Leu Ala Cys
                325                 330                 335
Leu Leu Ala Ala Val Val Gly Ser Phe Ala Phe Glu Leu Lys Ser Pro
            340                 345                 350
Asp Ala Pro Leu Glu Val Arg Glu Gly Ala Thr Ile Ala Pro Lys Asp
        355                 360                 365
Gly Val Leu Ala Lys Phe Thr Pro Val Glu Gly Trp
    370                 375                 380
```

<210> 34760
<211> 78

<212> PRT
<213> A.fumigatus

<400> 34760
Arg Arg Arg Arg Lys Lys Val Pro Arg Phe Thr Met Gly Tyr Asp Asn
1 5 10 15
Met Phe Ile Thr Ile Thr Met Leu Thr Leu Phe His Pro Ile His Cys
20 25 30
Ile Pro Asn Gly Ser Phe Phe Tyr His Ser Ala Asp Thr Ile Thr Met
35 40 45
Thr Ser Ala Leu Ser Ala Pro His Gly Asp Gln Ile Leu Lys Phe Phe
50 55 60
Gly Leu Glu Ser Ala Ala Trp Val Asn Ser Cys Asn Gly Lys
65 70 75

<210> 34761
<211> 110
<212> PRT
<213> A.fumigatus

<400> 34761
Ser Arg Arg Gln Leu Val Asp Ala Phe Val Thr Leu Pro Asp Tyr Glu
1 5 10 15
Lys Ala Val Leu Glu Asp Lys Ala Ala Lys Asp Phe Lys Pro Pro Gly
20 25 30
Lys Leu Val His Gly Tyr Val Ser Arg Asn Arg Asn Phe Glu Ile Trp
35 40 45
Ala Gly Ser Leu Ala Asp Pro Glu Val Arg Arg Leu Leu Asp Arg Ala
50 55 60
Gln Ile Phe Val Ser Leu Phe Ile Glu Ala Gly Thr Pro Leu Ala Thr
65 70 75 80
Asn Asp Pro Glu Trp Thr Leu Gln Arg Trp Thr Val Tyr Phe Val Tyr
85 90 95
Val Asp Leu Leu Phe His Asp Val Met Thr His His Ser Arg
100 105 110

<210> 34762
<211> 325
<212> PRT
<213> A.fumigatus

<400> 34762
Val Pro Tyr Arg Tyr Glu Ile Val Lys Pro Pro Thr Pro Thr Ala Ser
1 5 10 15
Lys Tyr Ser Ile Val Gly Tyr Ala Thr Thr Tyr Arg Trp Trp His Tyr
20 25 30
Cys Arg Asp Arg Thr Gln Val Pro Val Val Lys Asn Asp Pro Phe Pro
35 40 45
Ser Gly Pro Glu Ile His Pro Ser Gln Leu Pro Ser Arg Leu Arg Ile
50 55 60
Ala Gln Phe Leu Ile Leu Pro Pro His Gln Asn Ser Gly His Gly Arg
65 70 75 80
His Leu Tyr Thr Ala Ile His Ser Ala Cys Val Gln Asp Pro Ser Val
85 90 95
Val Glu Leu Thr Val Glu Asp Pro Asn Glu Ala Phe Asp Val Leu Arg
100 105 110

```
Asp Ser Ala Asp Tyr His Ile Leu Arg Pro Glu Phe Ile Lys His Glu
        115                 120                 125
Val Asn Ile Asn Pro Asp Pro Tyr Glu Ala His Ser Arg Asn Gln Arg
    130                 135                 140
Pro Arg Arg Val Pro Thr Ala Ala Leu Ile Pro Val Lys Leu Leu His
145                 150                 155                 160
Asp Ile Arg Thr Ser Tyr Lys Ile Asp Ser Thr Gln Phe Ala His Ile
                165                 170                 175
Leu Glu Met Phe Leu Leu Ser Gln Ile Pro Leu Lys Asn Arg His Ala
            180                 185                 190
Gly Gly Ala Asn Met Ser Arg Leu Leu Ile Lys Lys His Arg Ala Glu
        195                 200                 205
Asp Pro Asn Glu Arg Arg Tyr Tyr Trp Trp Arg Met Leu Thr Lys Gln
    210                 215                 220
Arg Leu Tyr Lys Arg Ser Lys Asp Ile Leu Ile Gln Leu Asp Leu Asp
225                 230                 235                 240
Glu Arg Ile Gln Lys Leu Glu Glu Thr Val Ser Asn Val Glu Glu Gly
                245                 250                 255
Tyr Glu Val Leu Leu Lys Glu Phe Ser Glu Arg Glu Glu Lys Leu Lys
            260                 265                 270
Ala Arg Gly Val Val Glu Ser Pro Ala Ala Thr Val Ser Asp Asp Ala
        275                 280                 285
Ser Ala Gly Pro Ser Gly Thr Ser Arg Asp Gln Arg Val Lys Arg Lys
    290                 295                 300
Phe Thr Val Glu Asp Asp Glu Asp Lys Val Glu Glu Glu Asp Thr Ala
305                 310                 315                 320
Lys Arg Thr Lys Val
                325
```

<210> 34763
<211> 80
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (73)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 34763
Leu Pro Leu Gly Leu Leu Thr Ala Ala Gln Gly His Pro Met Leu Val
1               5                   10                  15
Glu Leu Lys Asn Gly Glu Thr Leu Asn Gly His Leu Ala Asn Cys Asp
            20                  25                  30
Asn Trp Met Asn Leu Ile Leu Lys Glu Val Val Gln Thr Ser Pro Glu
        35                  40                  45
Ser Asp Arg Phe Phe Arg Leu Thr Glu Val Tyr Val Arg Arg Asn Asn
    50                  55                  60
Val Arg Tyr Leu His Pro Thr Pro Xaa Arg Ala Leu Val Pro Ser Leu
65                  70                  75                  80
```

<210> 34764
<211> 79
<212> PRT
<213> A.fumigatus

<400> 34764
Asn Ala Phe Ile Pro Gly Thr Cys Asp Ala Asn Asp Ala Val Asn Ile
1 5 10 15
*Thr Leu Val Gln Pro Asp Glu Gln Lys Leu Lys Thr Val Ser Ser Phe
20 25 30
His Pro Gln Phe Thr Tyr Pro Ile Phe Gly Asp Asp Glu Arg Ile Phe
35 40 45
Gly Tyr Lys Gly Leu Ile Ile Arg Leu Arg Phe Ala Ala His Asp Leu
50 55 60
Pro Pro Ser Ala Ser His Leu Val Arg Arg Glu Ile Gln Ala Cys
65 70 75

<210> 34765
<211> 538
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (36)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34765
Gly Glu Ile Arg Met Arg Arg Ile Leu Arg Lys Ser Ala Gly Met Leu
1 5 10 15
Asp Asp Trp Asp Val Lys Arg Asn Thr Lys Asn Leu Ala Thr Ala Thr
20 25 30
Ala Lys Leu Xaa Glu Val Pro Pro Gln Glu Ile Gly Leu His Val Leu
35 40 45
Asp Arg Ala Ser Leu Leu Ser Ile Phe Glu Ser Leu Ser Cys Glu Ala
50 55 60
Met Leu Arg Asn Asp Thr Leu Leu Gln Glu His Phe Asp Glu Pro Phe
65 70 75 80
Arg Leu Ile Gln Thr Lys Arg Ser Leu Lys Val Ser Asp Tyr Val Pro
85 90 95
Ala Val Thr Arg Phe Leu Phe Asp Ser Asn Gln Ser Arg Ser Phe Trp
100 105 110
Ala Ile His Ser Trp Met Arg Tyr Ser Arg Pro Pro Thr Ala Leu Glu
115 120 125
Phe Asp Trp Ala Ile Lys Glu Gly Leu Leu Asp Met Leu Lys Thr Ala
130 135 140
Ser Gln Gln Pro Pro Gln Ile Ala Val Ile Gln Arg Leu Trp Arg Gly
145 150 155 160
Met Gln Leu Val Val Lys Arg Leu Asp Lys Asp Gln Ile Thr His His
165 170 175
Leu Arg Ala Leu Glu Ile Asp Pro Cys Arg Leu Ser Val Glu His Leu
180 185 190
Gly Ile Gln Ser Pro Gly Leu Arg Phe Leu Leu Asn Thr Ile Gln Ile
195 200 205
Phe Leu Glu Lys Ala Pro Gly Asp Phe Trp Asp Ala Met Gln Thr Ile
210 215 220
Ser Pro Gln Ala Ile Ile Glu Leu Val Phe Tyr Asn Pro Gln Leu Glu
225 230 235 240
Ala Phe Leu Met Gln Ile Ser Glu Gly Glu Pro Tyr Glu Lys Ser Ala
245 250 255
Leu Lys Asp Met Leu Ser Trp Val Glu Pro Phe Met Ser Ser Leu Lys

```
            260                 265                 270
Gly Ala His Gln Pro Ser Ala Cys Arg Ser Leu Val Tyr Gln Leu Leu
        275                 280                 285
Asp Arg Leu Gln Asn Pro Arg Phe Pro Asp Leu Ala Arg Tyr His Cys
    290                 295                 300
Phe Tyr Val Gly Leu Ala Ser Leu Leu Gln Thr Leu Arg Ser Phe Thr
305                 310                 315                 320
Asp Asn Glu Ser Ser Arg Gly Ser Val Ala Arg Ile Val Leu Ser Glu
                325                 330                 335
Thr Met Gly Val Val Ser Ala Asn Ile Glu Thr Ile Leu Asn Pro Pro
            340                 345                 350
Lys Phe Ala Val Glu Gln Arg Arg Gln Glu Glu Ile Ser Ser Leu Cys
        355                 360                 365
Met Asp Val Ile Arg Asn Thr Leu Ala Leu Glu Cys Gln Ser Leu Lys
    370                 375                 380
Ser Asp Tyr Glu Val Ile Leu Arg Gln Asn Leu Leu Gln His Gly Val
385                 390                 395                 400
Ser Thr Tyr Ser Ala Ser Ile Trp Glu Ala Val Val Arg Asn Leu His
                405                 410                 415
Glu Asp Asn Arg Ala Leu Ser Thr Ser Ala Leu Leu Gly Ile Leu Pro
            420                 425                 430
Leu Val Gly Leu Glu Thr Phe Pro Thr Lys Gly Glu Ser Ser Pro Glu
        435                 440                 445
Lys Thr His Phe Asn Leu Ile Tyr Gly His Leu Thr Arg Leu Ser Cys
    450                 455                 460
Gln Ile Ile Glu Arg Leu Ala Asp Phe Lys Pro Glu His Leu Asn Glu
465                 470                 475                 480
Leu Phe Lys Ser Gln Asp Thr Ser Ser Ala Leu Ile Ser Ala Leu Phe
                485                 490                 495
Ala Ala Asp Leu Asp Thr Tyr Gln Ala Ala Val Asp Leu Ile Lys Asn
            500                 505                 510
Met Ser Gly Gln Ser Ala Arg Lys Gly Cys Asp Leu Ser Ser Ser Thr
        515                 520                 525
Val Leu Phe His Asn Asp Asp Val Arg Thr
    530                 535
```

<210> 34766
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34766

```
Arg Ala Arg Thr Asn Leu Gln Pro Ala Asp Leu Leu Ser Ile Ser Ser
1               5                   10                  15
Leu Ile Asp Ser Lys Thr Arg Ala Ser Arg Thr Trp Leu Gly Ile Ile
            20                  25                  30
Val Phe Met Leu Asp Trp Leu Val Tyr Phe Lys His Phe Ala Ala Ser
        35                  40                  45
Leu Thr Met Asn Leu His Glu Ala Arg Trp Arg Ala Ser Cys Cys Leu
    50                  55                  60
Arg Pro Trp Glu Leu
65
```

<210> 34767
<211> 270
<212> PRT

<213> A.fumigatus

<400> 34767

```
Asn Gln Arg Met Pro Gly Trp Gln Leu Ala Ser Asn Thr Ser His Pro
1               5                  10                  15
Ile Arg Trp Lys Gln Lys Gly Gln Gln Asn Pro Gly Ser Lys Leu Leu
            20                  25                  30
Ala His Arg Pro Leu Leu Ile Pro Thr Ile Asn Arg Asn Asn Pro Gln
        35                  40                  45
Thr His Gly Pro Arg Val Leu Leu Arg Gln Gly Ser Gln Pro Thr Thr
    50                  55                  60
Arg Thr Asp Asn Arg His Arg Leu Pro Arg Pro Ser Ala Gly Leu Leu
65                  70                  75                  80
Gln Pro Leu Val His Gly Asn Pro Gly Ala Gln His Arg Arg His Arg
                85                  90                  95
Ile Gln Gly His Val Leu Gly Asn Leu Arg Arg Met Arg Arg Leu Ala
            100                 105                 110
Asn Arg Val Leu Leu Glu Gly Ala Ile Asp Gly Ile Pro Gly Gln Gln
        115                 120                 125
Gly Ile Leu Ala Lys Arg Phe Ile Gly Leu Leu Ala Glu Leu Ala Gly
    130                 135                 140
Glu Thr Gly Pro Val Gln Pro Leu Asp Ala Cys Val Val Ala Asp Leu
145                 150                 155                 160
Glu Phe Arg Asp Glu Val Ala Leu Gly Tyr Asp Asp Ala Gly Ala Leu
                165                 170                 175
Val Ala Thr Asp Glu Gly His Leu Asp Arg Glu Arg Pro Val Ala Phe
            180                 185                 190
His Gly Val Glu Val Gly Val Ala Asp Ala Arg Val Thr Asp Leu Asp
        195                 200                 205
Gln Asp Leu Ile Gly Ser Gly Leu Trp Asp Arg Asp Leu Leu Glu Asp
    210                 215                 220
Gln Arg Ala Ala Asp Leu Phe Gly His Leu Gly Pro Leu His Gly Gly
225                 230                 235                 240
Asp Val Glu Leu Ser His Gly Cys Tyr Arg Trp Gly Glu Leu Val Lys
                245                 250                 255
Glu Ile Cys Leu Met Val Tyr Lys Pro Ser Asp Val Ile Asp
            260                 265                 270
```

<210> 34768
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34768

```
Leu Pro Arg Ile Leu Ile Ala Thr Arg Pro Gly Ile Ala Trp Thr Leu
1               5                  10                  15
Ile Gly Trp Trp Cys Ile Val Leu Leu Leu Asp Ser Pro Pro Pro Pro
            20                  25                  30
Pro Pro His Ile His Thr Glu Asp Gln Pro Val Asp Lys Leu Tyr Ile
        35                  40                  45
Phe Leu Leu Asp Ser Leu Ala Cys Met Phe Ser Asp Thr Arg Lys
    50                  55                  60
```

<210> 34769
<211> 169
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (42)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34769
Glu Ala Gly Asp Val Arg Ala Ala Trp Ser Arg Gly Phe Ala Ala Leu
1 5 10 15
Phe Val Ser Thr Gly Ser Asp Gly Thr Cys Ser Met Leu Thr Ala Asn
20 25 30
Gln Ala Tyr Val Asp Phe Thr Lys Ser Xaa Asp Leu Val Ala Asp Val
35 40 45
Lys Ala Ala Thr Pro Asp Gly Leu Gly Ala His Ala Val Ile Leu Leu
50 55 60
Ala Phe Ser Glu Lys Pro Phe Gln Gln Ala Thr Glu Tyr Val Arg Ser
65 70 75 80
Arg Gly Thr Val Val Ala Ile Gly Leu Pro Ala Asn Ala Phe Leu Arg
85 90 95
Ala Pro Val Leu Asn Thr Val Val Arg Met Ile Asn Ile Arg Gly Ser
100 105 110
Tyr Val Gly Asn Arg Gln Asp Gly Val Glu Ala Ile Asp Phe Phe Ala
115 120 125
Arg Gly Leu Ile Lys Ala Pro Tyr Lys Val Ala Pro Leu Ala Asp Leu
130 135 140
Pro Lys Ile Tyr Glu Leu Met Gly Met Phe Leu Pro Ser Pro Ser Val
145 150 155 160
Leu Trp Trp Val Ser Leu Thr Gly Gln
165

<210> 34770
<211> 270
<212> PRT
<213> A.fumigatus

<400> 34770
Ile His Leu Ile Asn His Gln Ser Ser Val Asn His Ile Ala Trp Leu
1 5 10 15
Ile His His Gln Thr Asn Leu Phe His Gln Phe Ala Pro Pro Ile Thr
20 25 30
Thr Met Thr Lys Phe Asp Ile Pro Ser Met Gln Trp Ala Gln Val Ala
35 40 45
Glu Gln Val Gly Gly Pro Leu Val Leu Lys Gln Ile Pro Val Pro Lys
50 55 60
Pro Gly Pro Asp Glu Ile Leu Val Lys Ile Arg Tyr Ser Gly Val Cys
65 70 75 80
His Thr Asp Leu His Ala Met Lys Gly Asp Trp Pro Leu Pro Val Lys
85 90 95
Met Pro Leu Val Gly Gly His Glu Gly Ala Gly Val Val Val Ala Lys
100 105 110
Gly Asp Leu Val Thr Glu Phe Glu Ile Gly Asp His Ala Gly Ile Lys
115 120 125
Trp Leu Asn Gly Ser Cys Leu Ala Cys Glu Phe Cys Lys Gln Ala Asp
130 135 140
Glu Pro Leu Cys Gln Asn Ala Leu Leu Ser Gly Tyr Thr Val Asp Gly

```
145                 150                 155                 160
Thr Phe Gln Gln Tyr Thr Ile Gly Lys Ala Thr His Ala Ser Lys Ile
                165                 170                 175
Pro Lys His Val Pro Leu Asp Ala Val Ala Pro Val Leu Cys Ala Gly
            180                 185                 190
Ile Thr Val Tyr Lys Gly Leu Lys Glu Ser Gly Ala Arg Pro Gly Gln
        195                 200                 205
Thr Val Ala Ile Val Gly Ala Gly Gly Gly Leu Gly Ser Leu Ala Gln
    210                 215                 220
Gln Tyr Ala Arg Ala Met Gly Leu Arg Val Ile Ala Ile Asp Gly Gly
225                 230                 235                 240
Asp Glu Lys Arg Ala Met Cys Glu Gln Leu Gly Ala Gly Val Leu Leu
                245                 250                 255
Pro Phe Leu Phe Pro Pro Asp Arg Met Gly Arg Val Arg Cys
            260                 265                 270
```

<210> 34771
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34771

```
Thr Asn His Arg Gln Ile Thr Gly Arg Pro Leu Asn Cys Phe Leu Ile
1               5                   10                  15
Val Pro Phe Pro Ser Ile Ser Phe Ser Ser His Phe Glu Leu Ala Ile
            20                  25                  30
Leu Arg Gln Ile Trp Thr Ala Phe Pro Thr Thr Tyr Phe Ala Asp Leu
        35                  40                  45
Asp Ser Leu Asp Ser Arg Thr Leu Ala Ala Leu Leu Asp Leu Thr Val
    50                  55                  60
Ile Arg Gln Cys Pro
65
```

<210> 34772
<211> 165
<212> PRT
<213> A.fumigatus

<400> 34772

```
Lys Gly Arg Phe Ser Ser Thr Leu Cys Leu Arg Pro Ser Ser Lys Leu
1               5                   10                  15
Phe Lys Pro Thr Ser Pro Ser Pro Asn Pro Pro Leu Ser Leu Ser Ser
            20                  25                  30
Leu Ser Pro Ser Pro Phe Lys Pro Pro Ser Pro Thr Tyr Lys Ala Arg
        35                  40                  45
Phe Pro Leu Ser Ile Leu Ser Ile Gln Leu Cys Ser Pro Thr Pro Pro
    50                  55                  60
Phe Ser Ser Asn Pro Ser Thr Val Pro Thr Ala Ser Ser Gln Pro Arg
65                  70                  75                  80
Arg His Glu Ser Pro Arg Pro Leu Leu Lys Pro Met Pro Gln Thr Leu
                85                  90                  95
Ala Gln Thr Arg His His Arg Leu Cys His Pro Ser Met Arg Ser Ser
            100                 105                 110
Ser Pro Leu Pro Ser Leu Val Ser Ser Phe Met Thr Ser Cys Pro Lys
        115                 120                 125
Ser Glu Glu Ser Ser Arg Leu Phe Thr Pro Cys Lys Leu Pro Trp Ser
```

```
    130                 135                 140
Lys Glu Ser Leu Ala Leu Thr His Gly Arg Asp Ile Arg Ala Val Trp
145                 150                 155                 160
Arg Val Lys Arg Ser
                165
```

<210> 34773
<211> 297
<212> PRT
<213> A.fumigatus

<400> 34773

```
Val Ser Trp Gln Asn Asn Ser Ser Ile Arg Met Thr Arg Asp Trp Thr
1               5                  10                  15
Gly His Phe Val Ser Leu Val Thr Gly Lys Tyr Leu Ala Val Arg Tyr
            20                  25                  30
Asn Asp Asn Ser Phe Thr Leu His Arg Asp Tyr His Gly Asn Gly Ser
        35                  40                  45
Leu Phe Tyr Leu Ser Asp Asp Glu Ile His Ile Ile Arg Asp Arg Thr
    50                  55                  60
Tyr Val Gly Gln Leu His Ser His Pro Ile Tyr Lys Asp Asn Val Phe
65                  70                  75                  80
His Ile Cys Arg Gly Ser Gln Tyr Ile Ser Arg Glu Gly Arg Trp Thr
                85                  90                  95
Asp Asn Ile Asn Glu Ala Leu Asp Val Gln Ile Asp Pro Glu Asp Pro
            100                 105                 110
His Ser Thr Asp Ser Ala Asp Arg Ala Pro Ile Leu Ser Leu Cys Glu
        115                 120                 125
Pro Ile Leu Asn Pro Ala His Pro Val Ser Ala Asp Gly Ile Asp Leu
    130                 135                 140
Tyr His Pro Gly Lys Gln Phe Ala Leu Tyr Pro Val Thr Ser Asp Arg
145                 150                 155                 160
Leu Trp Asn Gly Asp Ala Ser Asn Phe Asn Gly Lys Leu Val Phe Gly
                165                 170                 175
Gly Asn Pro Tyr Ser Ala Gly Leu Pro Phe Gln Leu Ser Val His Glu
            180                 185                 190
Gly Arg Thr Arg Ile Arg Ala Asn Asp Gly Met Tyr Leu Thr Val Val
        195                 200                 205
Met Glu Asp Asp Leu Val Pro Tyr Leu Lys Gly Glu Cys Gln Arg His
    210                 215                 220
Ser Arg Val Ser Pro Cys Ala His Cys Ser Thr Trp Tyr Ser Leu Gly
225                 230                 235                 240
Phe Arg Pro Glu Pro Ala Asp Cys Leu Ala Leu Ile Pro His Gly Leu
                245                 250                 255
Pro Ser Met Phe Val Leu His Asp Gly Ala Phe Tyr Tyr Ser Met Asn
            260                 265                 270
Val Leu Lys Ala Ser Tyr Ala Glu Thr Lys Arg Val Lys His Ile Glu
        275                 280                 285
Glu Ala Ser Leu Phe Gln Phe Val Gly
    290                 295
```

<210> 34774
<211> 201
<212> PRT
<213> A.fumigatus

<400> 34774
Ile Pro Ser Leu Thr Pro His Arg Ser Arg Pro Pro Gly Ser Gly Gln
1 5 10 15
Thr Leu Lys Arg Lys Val Leu Phe His Val Val Ser Lys Thr Phe Ile
20 25 30
Glu Thr Val Gln Ala Asn Val Ser Gln Ser Glu Ser Ala Ala Gln Ser
35 40 45
Leu Leu Ser Gln Ser Gln Ser Leu Gln Ala Ala Ile Ala Asn Leu Gln
50 55 60
Gly Glu Ile Ser Ser Leu Asn Ser Phe Asn Ser Thr Leu Gln Ser Asn
65 70 75 80
Thr Ser Ile Leu Gln Gln Ser Leu His Arg Ala Asp Gly Val Ile Ala
85 90 95
Ala Ala Gln Ala Arg Ile Ser Ser Ser Thr Ala Gln Ala His Ala Ser
100 105 110
Asn Ser Gly Ser Asp Ala Ala Pro Ser Ala Leu Pro Pro Ile Asp Glu
115 120 125
Val Leu Val Ala Pro Thr Val Val Gly Lys Gln Leu Tyr Asp Leu Val
130 135 140
Ser Glu Glu Arg Gly Ile Gln Gln Ala Ile Tyr Ala Leu Gln Ala Ala
145 150 155 160
Leu Val Lys Gly Val Ile Gly Val Asp Thr Trp Ser Arg His Thr Arg
165 170 175
Ser Leu Ala Arg Glu Ala Phe Leu Lys Arg Ala Leu Ile Arg Lys Ile
180 185 190
Gly Lys Gly Met Gly Leu Glu Glu Ala
195 200

<210> 34775
<211> 370
<212> PRT
<213> A.fumigatus

<400> 34775
Pro Ile Gln Gln Asn Arg His Leu Cys Ser Glu Ile Leu Leu Gly Cys
1 5 10 15
Phe Arg Arg Thr Ser Glu Phe Ser Gly Phe Arg Asp Trp Asn Pro Ile
20 25 30
Thr Thr Tyr Val Ser Leu Gly Glu Glu Thr Gly Ser Ile Cys Thr Val
35 40 45
Cys Thr Pro Pro Lys Pro Arg Ile Leu Trp Gly Arg Asp Met Lys Gly
50 55 60
Leu Ile Lys Ala Tyr Glu Asp Pro Arg Asp Ala Ala Leu Tyr Glu Arg
65 70 75 80
Gln Val Lys Ala Gln Pro Ser Pro Phe Leu Ile Phe Arg Arg Val Asp
85 90 95
Asp Asp Asn Ile Gly His Phe Leu Val Thr Leu Asn Val Gln Thr Leu
100 105 110
Leu His Lys Ala Tyr Ala Arg Leu Gly Ser Ser Gly Ser Ser Asn Pro
115 120 125
Ser Phe Tyr Trp Arg Leu Val Pro Asn Ala Tyr Asp Glu Arg Arg Val
130 135 140
Arg Phe Pro Lys Phe Asn Phe Leu Ser Asn Arg Asn Asp Ser Pro His
145 150 155 160
Ser Gln Pro Pro Asn Phe Arg Lys Ala Leu Arg Leu Glu Gln Leu Arg
165 170 175

```
Ser Leu Thr Trp Met Leu Glu Gln Glu Lys Asp Asp Ile Ala Pro Phe
            180                 185                 190
Val Glu Glu Glu Val Glu Glu Ala Ile Leu Pro Ser Met Met Trp Arg
        195                 200                 205
Ala Glu Gly Lys Val Met Val Gln Arg Thr Val Arg Gly Gly Val Leu
    210                 215                 220
Ala Asp Asp Val Gly Tyr Gly Lys Thr Ala Ile Thr Leu Gly Leu Ile
225                 230                 235                 240
Asp Val Gln His Ser Arg Gly His Asp Thr Val Pro Lys Pro Met Ala
                245                 250                 255
Gly Phe Ile Pro Ser Lys Ala Thr Leu Val Leu Val Pro Gln Ile Val
            260                 265                 270
Leu Gln Gln Trp Gln Leu Glu Ile Thr Lys Phe Val Gly Glu Lys Tyr
        275                 280                 285
Glu Val Leu Val Leu Ser Ser Gly Lys Asp Phe Ser Glu Thr Met Ile
    290                 295                 300
Ser Asn Ile Leu Arg Ala Asp Ile Ile Leu Val Pro Trp Ser Val Leu
305                 310                 315                 320
Asn Arg Gln Ser Tyr Tyr Glu Arg Met Gln Lys Phe Thr Gly Met Pro
                325                 330                 335
Arg Val Pro Glu Ser Ala Gly Arg Asn Phe Asp Ala Trp Phe Ala Glu
            340                 345                 350
Ala Gln Asn Ser Leu Arg Lys Thr Ser Pro Asn Ser Asp Gly Ser Arg
        355                 360                 365
Asn Leu
    370
```

<210> 34776
<211> 251
<212> PRT
<213> A.fumigatus

<400> 34776

```
Ser Pro Phe Ser Gln Thr Ala Tyr Gly Ser Leu Glu Lys Ile Pro Lys
1               5                   10                  15
Asn Pro Asp Leu Val Ile Ala Gly Phe Ser Cys Val Asp Phe Ser Gly
            20                  25                  30
Leu Asn Asn Asn Arg Lys Thr Leu Asp Glu Leu Gly Glu Ser Gly Gly
        35                  40                  45
Thr Leu Trp Gly Ile Ile Arg Tyr Ala Ile Ala Tyr Arg Pro Arg Ile
    50                  55                  60
Val Ile Leu Glu Asn Val Lys Thr Ala Pro Trp Glu Lys Ile Ala Glu
65                  70                  75                  80
His Trp Asn Glu Ile Asn Tyr Leu Ala Val His Lys Ser Val Asp Thr
                85                  90                  95
Lys Ala Tyr Tyr Leu Pro Gln Thr Arg Glu Arg Gly Tyr Met Phe Cys
            100                 105                 110
Ile Asp Arg Asn Leu Leu Gly Lys Cys Gly Leu Ser Glu Gln Ser Val
        115                 120                 125
Met Asp Trp Ala Lys Ile Phe Asp Asp Phe Lys Arg Pro Ala Ser Ser
    130                 135                 140
Pro Ala Gly Met Phe Leu Leu Asp Ala Asp Asp Pro Arg Leu Glu Gln
145                 150                 155                 160
Ile Glu Lys Asp Met Ser Ile Arg Val Lys Ser Thr Thr Val Arg Pro
                165                 170                 175
Ile Ile Asp Trp Thr Lys Tyr Gln Ala Arg His Gln Asn Tyr Arg Ser
```

```
            180                 185                 190
Ala Gln Glu Leu Gly Phe Glu Arg Pro Ile Ser Lys Ser Gln Asp Thr
        195                 200                 205
Gly Gly Cys Gln Met Leu Asp Phe Ala Trp Gln Thr Trp Phe Arg Tyr
    210                 215                 220
Leu Pro Glu Arg Ile Trp Asp Thr Ile Asp Val Asn Phe Leu Arg Lys
225                 230                 235                 240
Leu Val Glu Gly Tyr Asp Met Asn Phe Lys Glu
                245                 250
```

<210> 34777
<211> 620
<212> PRT
<213> A.fumigatus

<400> 34777

```
Thr Ser Lys Ser Lys Ala Val Pro Pro Phe Glu Lys Thr Ser Asn Pro
1               5                   10                  15
Ala Asn Gly Cys His Arg Arg Cys Ile Glu Leu Ser Gln Gly Val Glu
            20                  25                  30
Arg Glu Val Asp Ser Arg Ala Phe Gly Ile Val Gly Cys Ile Thr Pro
        35                  40                  45
Ala Gly Ile Pro Tyr Ile Thr Thr Arg Gly Gly Pro Leu Cys Gly Leu
    50                  55                  60
Glu Ala Leu Ala Leu Gln Gly Leu Pro Val Asn Arg Leu Leu Leu Thr
65                  70                  75                  80
Arg Glu Ser Pro Arg Asp Leu Gln Asp Leu Ala Gly Asn Ala Met Ser
                85                  90                  95
Ser Thr Val Val Gly Ala Ala Val Leu Ser Ala Leu Ile Val Gly His
            100                 105                 110
Lys Val Leu Pro Pro Gly Glu His Ser Pro Thr Pro Ser Asn Cys Ile
        115                 120                 125
Pro Lys Asn Lys Arg Ile Ser Leu His Gln Asn Leu Leu Pro Met Pro
    130                 135                 140
Arg Val Ser Gln Leu Ser Gln Leu His Thr Ala Asn Ile Leu Asp Leu
145                 150                 155                 160
Gln Arg Gln Ala Thr Ser Ser Ala Arg Tyr Cys Leu Cys Glu Arg Gln
                165                 170                 175
Ser Gly Val Lys Gln Asp Ile Leu Lys Cys Thr Leu Cys Ala His Thr
            180                 185                 190
Ala Cys Thr Asp Cys Ala Gly Asn Pro Ser His Ala Tyr Glu Arg Trp
        195                 200                 205
Pro Gly Leu Ile Arg Ser Gln Pro Ser Ala Phe Ile Arg Arg Phe Lys
    210                 215                 220
Ser Ile Leu Pro Ala Arg Leu Ile Met Ser Gly Leu Asn Arg Glu Ser
225                 230                 235                 240
Tyr Arg Ser Phe Asp Arg Ser Leu Pro Gly Asn Thr Asp His Val Trp
                245                 250                 255
Glu Lys Tyr Leu Asp Ala Val Thr Arg Thr Val Gly Asp Glu Leu Arg
            260                 265                 270
Phe Leu Asp Val Arg Arg Ser Lys Asp Trp Thr Ala Val Tyr Glu Gly
        275                 280                 285
Lys Cys Ser Ile Leu Lys Leu Val Ile Ser Gly Ser Thr Phe Glu Trp
    290                 295                 300
Leu Leu Phe Ala Lys Pro Leu Asp Ser Glu Pro Ala Leu Ser Leu His
305                 310                 315                 320
```

```
Arg Glu Ile Leu Ser Lys Pro Ile Ala Arg Met Ile Gln Asp Arg Gly
                325                 330                 335
Ile Trp Glu Val Cys Ala Pro Leu Ser Ser Lys Phe Thr Leu Thr Ile
            340                 345                 350
Ser Gly Thr Gly Ser Gln Val Pro Thr Tyr Glu Ala Arg Cys Gly Leu
        355                 360                 365
Gln Lys Arg Glu Phe Val Asn Ala Ser Arg Trp Asn Arg Leu Glu Val
    370                 375                 380
Gln Gly Ser Ser Tyr Asp Cys Glu His Leu Glu Val Asp Ile Arg Gly
385                 390                 395                 400
Thr Tyr Gln Leu Leu Pro Asp Cys Gly Thr Ala Asn Gly Tyr Leu His
                405                 410                 415
Lys Lys Glu Ala Thr Asp Arg Asp Pro Glu Val Tyr Leu Phe Leu Asp
            420                 425                 430
Pro Thr Lys Leu Gly Glu Pro Lys Asn Asp Ser Phe Val Phe Ala Leu
        435                 440                 445
Glu His Gln Arg Ser Pro Gly Tyr Glu Ser Arg Ile Thr Ile Ala Glu
    450                 455                 460
Leu Ser His Lys Trp Arg Ser Ser Lys Ala Asn Asp Ala Arg Arg Asn
465                 470                 475                 480
Val Asn Ala Tyr Tyr Arg Lys Trp Val Gln Val Gln Thr Met Gly Leu
                485                 490                 495
Asp Val His Pro Ser Asp Ser Thr Ile Thr Cys Trp Gly Leu Arg Pro
            500                 505                 510
Gly Thr Thr Val Phe Met Ala Asn Thr Gly Cys His Asp Ala Asn Phe
        515                 520                 525
Pro Leu Leu Ser Leu Ser Ala Pro Ala Asp Ala Ile Asp Ser Leu Trp
    530                 535                 540
Arg Lys Gly Pro Trp Gln Ile Thr Asn Pro Thr Glu Ser Thr Ser Leu
545                 550                 555                 560
Leu Arg Asp Phe Ala Trp Leu Leu Gln Lys Asn Phe Arg Val Leu Trp
                565                 570                 575
Leu Pro Arg Leu Glu Pro Tyr Tyr His Ile Cys Phe Thr Gly Arg Arg
            580                 585                 590
Asn Arg Leu His Leu His Cys Val His Pro Ser Lys Thr Gln Asn Thr
        595                 600                 605
Val Gly Ser Gly Tyr Glu Arg Phe Asp Gln Ser Ile
    610                 615                 620
```

<210> 34778
<211> 82
<212> PRT
<213> A.fumigatus

```
<400> 34778
Ser Gly Ile Gln Lys Cys His Leu Leu Trp Gln Cys Thr Cys Leu Ser
1               5                   10                  15
Gln Phe Ser Ala Ser Asn Leu Lys Gln Thr Ser Glu Ala Ser Ser Tyr
            20                  25                  30
Ser Val Leu Pro Ser Ala Pro Lys Pro Ser Pro Ala Val Leu Pro Asp
        35                  40                  45
Ser Trp Ser Leu Ala Pro Gly Pro Arg Leu Leu Ser Gly Ser Ser Phe
    50                  55                  60
Lys Thr Leu Leu Ile His Leu Gly Glu Arg Val Cys Ser Lys Pro Lys
65                  70                  75                  80
Ser Cys
```

<210> 34779
<211> 60
<212> PRT
<213> A.fumigatus

<400> 34779
Cys Ile Ala Thr Cys Gly Pro Ile Ser Asp Pro Tyr Lys Gly Ala Leu
1 5 10 15
Ser Ile Ile Gly Ala Pro Asp Thr Tyr Pro Thr Ile Pro Arg Gly Glu
20 25 30
Thr Phe Trp Phe Lys Arg Tyr Asp Gly Tyr Ser Leu Ser Leu Leu Arg
35 40 45
Arg Asn Val Asn Arg Ile Tyr His Ser Val Ser Asp
50 55 60

<210> 34780
<211> 543
<212> PRT
<213> A.fumigatus

<400> 34780
Met Cys Gly Ser Asn Asn Asp Lys Thr Val Thr Ile Tyr Ser Leu Thr
1 5 10 15
Arg Ser Lys Val Leu Lys Val Leu Pro His Gln Ala Cys Met Asn Tyr
20 25 30
Ala Ile Met Ser Pro Asp Ser Thr Leu Leu Ala Ala Val Gly Asp Glu
35 40 45
Thr Arg Ala Tyr Phe Tyr Asp Val Thr Cys Asp Tyr Glu Thr Thr Ile
50 55 60
Gln Thr Asp Asn Gly Glu Lys Leu Pro Ala Trp Asp Trp Asp Leu Ile
65 70 75 80
Arg Cys Ile Glu Met Asp Ile Gly Thr Arg Phe Asp Asp Gly Cys Cys
85 90 95
Phe Thr Val Ala Phe Ser Pro Phe Ser Arg Leu Cys Ala Ile Gly Ser
100 105 110
Gln Ser Gly Val Ile Thr Val Phe Asp Val Ala Thr Val Arg Asp Thr
115 120 125
Glu Gly Glu Ala Asp Gly Lys Asn Ala Ile Ile Cys Asn Phe Asn Ser
130 135 140
Ser Arg Pro Cys Cys Asn Gly Gly Ala Val Arg Cys Met Ala Phe Ala
145 150 155 160
Pro Glu Pro Trp Asp Leu Leu Val Trp Leu Glu Asp Lys Gly Arg Ala
165 170 175
Gly Val Ala Asp Val Arg Gln Ala Phe Ile Arg Arg Gln Ile Leu Asn
180 185 190
Leu Asp Met Asn Asp Pro Asn Leu Glu Glu Val Tyr Thr Glu Pro Ile
195 200 205
Leu Asn Asp Pro Glu Glu Leu Glu Ser Asp Leu Asp Gly Arg Val Leu
210 215 220
Ala Glu Ser Arg His Gly Thr Asp Ala Thr His Arg Ala Ile Leu Asp
225 230 235 240
Ser Ile Glu Arg Thr Ser Asn Glu Arg Gly Asn Gly Ala Asp His Ser
245 250 255
Pro Leu Arg Glu Ser Leu Ile Gln Asp Leu Thr Gln Arg Glu Arg Leu

```
            260                 265                 270
Ile Val Glu Phe Leu Asn Thr Ala Arg Trp Thr Ser Arg Leu Glu Glu
        275                 280                 285
Gly Leu Thr Glu Arg Arg Ala Arg Val Asn Ala Ser Ser His Pro Thr
    290                 295                 300
Pro Arg Ser Gln Phe Gln Ala Ser Thr Glu Gly Thr Arg Arg Pro Ser
305                 310                 315                 320
Arg Pro Thr Ser Pro Pro His Arg Ser Asp Ala Leu Ile Asp Thr Phe
                325                 330                 335
Arg Glu Asn Tyr Leu Gly His Ala Gly Ile Ser Ser Arg Asn Leu Asn
            340                 345                 350
Ala Gly Arg Asp Asn His Val Thr Pro Pro Arg Gly Tyr Pro Glu Gly
        355                 360                 365
Ser Arg Ser Val Ile Gly Ala Asn Val Arg Pro Gln Pro Ser Leu Thr
    370                 375                 380
Leu Ser Trp Thr Ala Ser Pro Ser Glu Leu Gln Ser Ala Thr Phe Leu
385                 390                 395                 400
Asp His Leu His Pro Val Asp Arg Asp Ala Asp Gly Pro Ser Ser Ser
                405                 410                 415
Ser Ser Glu Glu Gly Ser Asp Thr Arg Thr His Asp Pro Ile Thr Arg
            420                 425                 430
Pro Ser Ala Thr Val Asp His Ser Ser Ser Arg Leu Thr Ala Ser Asp
        435                 440                 445
Ser Arg His Asp Leu Gly Arg Leu Ser Thr Ser Glu Leu Arg Thr Asn
    450                 455                 460
Val Ala Ala Glu Arg Leu Arg Arg Gln Arg Gln Ile Ile Asn Glu Ala
465                 470                 475                 480
Gln Asn Arg Asn Ser Gln Arg Glu Gln Arg Tyr Arg Gln Gln Leu Leu
                485                 490                 495
Gly Phe Glu Gln Thr Arg Ser Pro Arg Trp Ile Arg Ser Val Leu Asn
            500                 505                 510
Glu Leu Pro Asp Arg Ser Leu Gly Pro Gly Ala Arg Asp Gln Glu Ser
        515                 520                 525
Gly Ser Thr Ala Gly Leu Gly Phe Gly Ala Asp Gly Arg Thr Leu
    530                 535                 540
```

<210> 34781
<211> 656
<212> PRT
<213> A.fumigatus

<400> 34781

```
Thr Thr Val Val Ser Asn Lys Lys Ile Gln Ala Phe Gln Leu His His
1               5                   10                  15
Val Ala Thr Pro Arg Asp Pro Thr Ile Asp Ala Ile Pro Gly Gly Ala
            20                  25                  30
Met Gln Asp Thr Ala Gly Glu Lys Thr Ile Glu Pro Gly Thr Arg Ser
        35                  40                  45
Pro Cys Gly Thr Glu Thr Arg Arg Arg Thr Leu Arg Pro Met Ser Ser
    50                  55                  60
Ser Pro Thr Leu Thr Asp Leu Arg Ser Leu Leu Pro Leu Tyr Glu Ala
65                  70                  75                  80
Ser Glu Leu Leu Val Asp Thr Tyr Phe Asp Arg Val His Trp Phe Met
                85                  90                  95
Leu Ile Phe Gln Gln Asp Asp Phe Arg Gln Asn Trp Pro His Leu Tyr
            100                 105                 110
```

```
Glu Thr Gln Ser Asp Gly Pro Asn Glu Val Cys Asn Asp Leu Gly Phe
        115                 120                 125
Leu Ser Thr Phe Leu Met Val Ile Ala Ile Gly Ala His Tyr Thr Gly
    130                 135                 140
Pro Tyr Arg Gln Arg Leu Leu Ala Arg Tyr Lys Val Glu Pro Glu Ala
145                 150                 155                 160
Leu Lys Gln Arg Ile Leu Lys Ala Ile Lys Ser Ser Leu Leu Asp Ile
                165                 170                 175
Ile Ser Val Gly Ser Leu Glu Val Val Gln Thr Cys Val Leu Leu Gly
            180                 185                 190
Thr Tyr Tyr Leu Phe His Gly Ala Pro Arg Leu Ala Trp Pro Val Cys
        195                 200                 205
Gly Cys Gly Leu Arg Val Ala Gln Ser Leu Asn Leu His Arg Lys Lys
    210                 215                 220
Glu His Ala Thr Leu Pro Leu Thr Pro Ala Glu Arg Asn Gln Asn Glu
225                 230                 235                 240
Thr Arg Lys Arg Cys Trp Trp Ala Ile Tyr Glu Ile Glu Thr Phe Cys
                245                 250                 255
Ser Met Ser Tyr Gly His Pro His Ser Ile Gly Asp Ala Asp Cys Asp
            260                 265                 270
Val Glu Pro Leu Asn Pro Ser Ala Lys Leu Arg Asn Ala Pro Ser Pro
        275                 280                 285
Val Ser Phe Asp Glu Pro Leu Arg Cys Glu Thr Thr Leu Leu Ala Tyr
    290                 295                 300
Lys Tyr Tyr Met Ser Lys Leu Ser Val Leu Thr Lys Ser Val Leu Ser
305                 310                 315                 320
Glu Leu Tyr Gly Phe Gly Pro Gly Leu Val Asn Asn Asn Lys Ala Pro
                325                 330                 335
Gly Glu Ser Gly Ser Arg Leu Arg Ala Val Val Ile Arg Val Ala Lys
            340                 345                 350
Leu Asp Ala Arg Leu Arg Asp Trp Arg Ala Glu Ile Pro Pro Lys Leu
        355                 360                 365
Arg Trp Glu Thr Val Ala Ser Thr Ser Val Ser Tyr Ser Ser Leu Glu
    370                 375                 380
Glu Phe Asp Arg Asp Ile Gly Ala Ser Gly Val Arg Phe Asp Asn His
385                 390                 395                 400
Ile Tyr His Leu Gln Ala Leu Ala Leu Glu Leu Ala Tyr Glu Asn Thr
                405                 410                 415
Met Ile Leu Val His Arg Pro Leu Leu Ser Phe Lys Leu Val Thr Lys
            420                 425                 430
Ser Thr Asp Lys Arg Asp Asp Met Ser Tyr Phe Asp Ile Gln Glu Asn
        435                 440                 445
Pro Phe Leu Lys Ser Met Lys Ala Cys His Asp Ala Gly Met Ser Leu
    450                 455                 460
Ser Glu Leu Ala Asn Ser Pro Ile Leu Glu Leu Val Ser Glu Thr Tyr
465                 470                 475                 480
Ala Ala Ala Phe Val Ser Ile His Thr Phe Thr Ala Gly Val Ala Leu
                485                 490                 495
Gly Ile Leu Gly Ser Ile Glu Pro Leu Thr Pro Gln Ala Gln Glu Ala
            500                 505                 510
Lys Val Gly Leu His Arg Leu Met Ser Ile Gln Ala Lys Leu Gln Thr
        515                 520                 525
Arg Ser Val Leu Ala Thr Gln Gly Leu Asp Ile Leu Gln Arg Leu Thr
    530                 535                 540
Lys Leu Val Leu Asp Lys Glu Leu Ser Met Met Leu Asp Val Ser Lys
545                 550                 555                 560
```

```
Pro Ile Arg Trp Pro Glu Gln His Ser Gly Val Gln Gly Asp Val Gly
                565                 570                 575
Ala Leu Gln Thr Ser Thr Leu Ser Pro Lys Pro Ser Ser Ser Asp Gln
            580                 585                 590
Arg Thr Arg Thr Leu Pro His Asp Ala Ala Gly Ala Ile Met Pro Thr
        595                 600                 605
Asp Ala Pro Leu Asn Met Ser Asp Thr Thr Asp Thr Arg Glu Thr Glu
    610                 615                 620
Ser Gln Lys Ala Ala Pro Asp Arg Asn Ser Leu Gly Asn Tyr Thr His
625                 630                 635                 640
Leu Gln Tyr Ile Glu Asp Thr Ser Val Ser Glu Ala Leu His Asp Phe
                645                 650                 655
```

<210> 34782
<211> 95
<212> PRT
<213> A.fumigatus

<400> 34782

```
Glu Leu Thr Thr Leu Arg Gly Cys Met Thr Pro Arg Gly Thr Asp Ser
1               5                   10                  15
Ser Ile Pro Phe His Ser Val Gly Val Ala Cys Asn Ser Ala Lys Tyr
            20                  25                  30
Leu Ala Ala Glu Ala Ala Phe Thr Ala Cys Glu Arg Ala Val Leu Thr
        35                  40                  45
His Gly Gly Met Gly Tyr Ala Met Glu Tyr Asp Val Glu Arg Tyr Leu
    50                  55                  60
Arg Glu Cys Leu Val Pro Arg Ile Ala Pro Val Ser Arg Glu Met Ile
65                  70                  75                  80
Leu Asn Tyr Val Ser Glu Lys Val Leu Gln Leu Pro Arg Ser Tyr
                85                  90                  95
```

<210> 34783
<211> 181
<212> PRT
<213> A.fumigatus

<400> 34783

```
Ala Ala Arg Phe Leu Pro Ala Pro Trp Gly Arg Pro Leu Ala Pro Leu
1               5                   10                  15
Leu Pro Val Leu Met Gly Ile Pro His Ser Gly Leu Gly Asn Arg Ala
            20                  25                  30
Arg His Thr Thr His Gly Thr Arg Lys Arg Ser Pro Arg Arg Pro Pro
        35                  40                  45
Arg Arg Arg Ala Arg Lys Tyr Gln Arg Arg Arg Asp Arg His His Arg
    50                  55                  60
Arg Arg Leu Asn Gly Arg Ala Gly Pro Ala Gln Ala His His Arg Ala
65                  70                  75                  80
Phe Ala Arg Arg His Tyr Pro Leu Arg Pro Arg Leu Asn Glu Ala Gly
                85                  90                  95
Glu Ala Asp Asp Val Arg His Asp Pro Val Gln Ala Leu Val Asp Thr
            100                 105                 110
Asp Trp Leu His Ala Thr Gly Ala Arg Val Glu Ala His Leu Leu Ala
        115                 120                 125
Ala Gly Glu Pro Arg Phe Ser Ala Gly Asp Ala Lys Ser Val Arg Ala
    130                 135                 140
```

```
Ser Val Pro Ala Gln Asp Asp Gly Asn Gly Ala Glu Thr Asp Cys Ala
145                 150                 155                 160
Gly Ser Asn Ser Cys Ser Gly Ala Ala Ser Cys Val Arg His Ala Ser
                165                 170                 175
Ala Ser Val Ser Ala
            180
```

<210> 34784
<211> 256
<212> PRT
<213> A.fumigatus

<400> 34784

```
Gln Arg Val Ser Phe Gln Pro Arg Gly Glu Asp Pro Ser Leu Leu Ser
1               5                   10                  15
Cys Leu Ser Ser Trp Gly Phe Pro Thr Val Asp Leu Gly Ile Ala Arg
            20                  25                  30
Asp Thr Pro Pro Thr Glu Leu Glu Asn Ala Leu Arg Asp Ala Leu Arg
        35                  40                  45
Gly Val Gly Arg Ala Asn Thr Ser Val Asp Val Ile Val Thr Thr Gly
    50                  55                  60
Gly Val Ser Met Gly Glu Leu Asp Leu Leu Lys Pro Thr Ile Glu Arg
65                  70                  75                  80
Ser Leu Gly Gly Thr Ile His Phe Gly Arg Val Ser Met Lys Pro Gly
                85                  90                  95
Lys Pro Thr Thr Phe Ala Thr Ile Pro Phe Lys Pro Ser Ser Thr Pro
            100                 105                 110
Thr Gly Ser Thr Gln Gln Glu Arg Glu Ser Lys Leu Ile Phe Ser Leu
        115                 120                 125
Pro Gly Asn Pro Ala Ser Ala Leu Val Thr Leu Asn Leu Phe Val Leu
    130                 135                 140
Pro Ser Leu His Lys Met Met Gly Met Gly Gln Arg Gln Thr Ala Pro
145                 150                 155                 160
Gly Val Thr Pro Ala Leu Gly Leu Pro Leu Val Ser Val Thr Leu Ala
                165                 170                 175
His Pro Phe Pro Leu Asp Pro Lys Arg Thr Glu Tyr His Arg Ala Ile
            180                 185                 190
Val Thr Ala Ser Arg Ser Asp Gly Arg Leu Tyr Ala Thr Ser Thr Gly
        195                 200                 205
Leu Glu Gly Val Gly Gln Arg Ser Ser Arg Val Gly Ser Leu Ala Ser
    210                 215                 220
Ala Asn Ala Leu Leu Val Leu Gln Pro Gly Ser Gly Lys Val Asp Lys
225                 230                 235                 240
Gly Thr Leu Val Glu Ala Leu Leu Leu Gly Asn Val Val Ser Glu Ala
                245                 250                 255
```

<210> 34785
<211> 79
<212> PRT
<213> A.fumigatus

<400> 34785

```
Arg Tyr Val Gly Ser Ile His Tyr Pro Gly Cys Ser Thr Glu His Leu
1               5                   10                  15
Leu Ile Asn Ser Thr Ala Asn Leu Leu Pro Arg Arg Gly Arg Asp Lys
            20                  25                  30
```

```
Pro Gly Tyr Glu Gly Glu Asp Arg Leu Arg Gly Val Ala Gly Glu Ala
        35                  40                  45
Asp Thr Tyr Gly Cys Leu Ala Val Asp Asn Leu Tyr Asn Ile Met His
    50                  55                  60
Thr Thr Asp Arg Arg Ser Leu Leu Ile Cys His Leu Asn Arg Ile
65                  70                  75
```

<210> 34786
<211> 156
<212> PRT
<213> A.fumigatus

<400> 34786

```
Leu Thr Pro Ser Ala Ile Ala Tyr Arg Leu Asn Ala Ala Val Asp Val
1               5                   10                  15
Asp Leu Ala Asn Ser Leu Lys Val Ala Ser Ile Pro Gly Thr Ser Ser
            20                  25                  30
Ser Phe Trp Glu Ser Phe Gly Ser Val Phe Arg Trp Ser Thr Ser Thr
        35                  40                  45
Val Pro Ala Pro Ile Arg Pro Ala Thr Leu Thr Lys Leu Pro Ser Asn
    50                  55                  60
Val Glu Met Glu Thr His Asp Phe Thr Arg Glu Glu Ile Ala Glu Lys
65                  70                  75                  80
Arg Met Leu Leu Leu Asn Asp Asn Gly Gln Ile Asp Tyr Phe Ile Ser
                85                  90                  95
Gly Gly Gly Gly Pro Leu Asn Ile Gln Tyr Leu Asn Met Leu Ser Ala
            100                 105                 110
His Ser Ser Tyr Trp Ile Leu Ser Asp Phe Val Arg Phe Ile Val Ile
        115                 120                 125
Glu Ile Ala Arg Lys Gln Gly Arg Glu Ser Thr Leu Pro Ala Phe Arg
    130                 135                 140
Ala Glu Lys Lys Lys Gly Trp Lys Ile His Lys Gly
145                 150                 155
```

<210> 34787
<211> 72
<212> PRT
<213> A.fumigatus

<400> 34787

```
Asp Ala Asp Phe Pro Pro Val Gly Lys Ile Ile Ile Ser His Gln Pro
1               5                   10                  15
Ser Lys Leu Pro Asp Ile Asp Phe Ala Thr Thr Ser Val Arg Ser Asp
            20                  25                  30
Ile Phe Glu Phe Asp Thr Lys Asn Leu Phe Leu Cys Gly Ser Pro Val
        35                  40                  45
Gly Phe Phe Leu Leu Leu Asn Lys Gly Met Leu Asp Leu Tyr Ile Thr
    50                  55                  60
Gln Val Val Leu Pro Asn Thr Cys
65                  70
```

<210> 34788
<211> 83
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (62)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34788
Phe Leu Ser Leu Leu Cys Leu Phe Ala Pro Pro Pro Leu Asn Ile Phe
1 5 10 15
Leu Cys Thr Val Ser Met Ile Ser Tyr His Cys Pro Lys Ser Phe Ser
20 25 30
Val Pro Leu Ser Gly Val Asn His Pro Ser Pro Leu Ser Leu Cys Ser
35 40 45
Gly Gly His Leu Ala Asp Thr Ser Gln Gly Ser Lys Ala Xaa Val Ala
50 55 60
Ala Trp Glu Asn Pro Trp Leu Ser Leu Gly Phe Val Trp Leu Lys Ile
65 70 75 80
Ala Leu Gln

<210> 34789
<211> 476
<212> PRT
<213> A.fumigatus

<400> 34789
Leu Met Leu Ala Thr Ala Val Asn Leu Ile Gly Gly Leu Val Ile Ser
1 5 10 15
Phe Ser Ile Ala Trp Lys Ile Thr Ile Val Leu Cys Pro Thr Ile Pro
20 25 30
Val Leu Leu Val Ser Gly Met Met Lys Leu Arg Val Gln Lys Gln Leu
35 40 45
Ala Glu Arg His Gln Lys Ala Phe Ala Lys Ala Thr Ala Val Thr Ile
50 55 60
Glu Ala Val Asp Asp Ile Arg Ala Val Ser Ala Phe Ser Leu Glu Lys
65 70 75 80
Gln Ser Tyr Gln Val Tyr Gly Arg Ala Leu Arg Gly Pro Tyr Arg Ala
85 90 95
Thr Ile Lys Ala Thr Phe His Gly Asn Ala Trp Leu Ala Leu Ala Phe
100 105 110
Ser Ile Ser Asn Leu Val Tyr Ala Leu Ala Tyr Trp Trp Gly Ser Lys
115 120 125
Gln Ile Ala Glu Gly Arg Tyr Ser Gln Thr Gln Phe Phe Ile Val Met
130 135 140
Pro Ala Leu Leu Phe Ser Thr Gln Ser Cys Gly Gln Met Phe Ala Leu
145 150 155 160
Ala Pro Asp Ile Ser Lys Ala Gly Val Ala Ser Ser Asn Ile Val Glu
165 170 175
Leu Leu Thr Thr Arg Ser Ala Glu Asp Glu Val Thr Pro Gly Ser Ser
180 185 190
His Ser Phe Gln Arg Ser Ser Ser Leu Leu Glu Glu Lys Thr Ala Val
195 200 205
Gln Asp Ile Glu Ala Gln Glu Tyr Ala Arg Ser Thr Arg Gln Arg Ala
210 215 220
Ala Glu Arg Gly Gly Met Gly Ala Gln Leu Arg Asp Val His Phe Thr
225 230 235 240
Tyr Pro His Arg Pro Glu Arg Pro Val Leu Lys Gly Leu Asn Ile Asp

```
                245                 250                 255
Ile Lys Pro Gly Gln Phe Cys Ala Leu Val Gly Pro Ser Gly Ser Gly
            260                 265                 270
Lys Ser Thr Thr Phe Ala Met Leu Glu Arg Phe Tyr Arg Pro Asn Ala
        275                 280                 285
Gly Ala Val Val Ile Asp Gly Val Asp Val Thr Arg Gln Val Gly Thr
    290                 295                 300
Glu Phe Arg Asp Asp Ile Ala Leu Val Pro Gln Gln Asn Ile Leu Phe
305                 310                 315                 320
Glu Gly Thr Val Ala Phe Asn Val Ala Leu Gly Ala Cys Pro Gly His
                325                 330                 335
Glu Pro Thr Gln Glu Glu Ile Glu Glu Ala Cys Arg Met Ala Asn Ile
            340                 345                 350
His Asp Val Ile Met Thr Leu Pro Gln Gly Tyr Gln Thr Met Cys Ser
        355                 360                 365
His Asp Gly Lys Gln Phe Ser Gly Gly Gln Arg Gln Arg Leu Ser Ile
    370                 375                 380
Ala Arg Ala Leu Val Arg Lys Pro Arg Leu Leu Leu Leu Asp Glu Ser
385                 390                 395                 400
Thr Ser Ala Leu Asp Val Glu Ser Glu Lys Arg Ile Gln Glu Ala Leu
                405                 410                 415
Ala Thr Leu Ala Gly Arg Thr Thr Val Val Ala Ile Ala His Arg Leu
            420                 425                 430
Asn Thr Ile His Arg Ala Asp Gln Ile Phe Leu Ile Glu Asp Gly Arg
        435                 440                 445
Cys Ile Glu Gln Gly Thr His Gln Gln Leu Ile Gln Arg Ser Glu Thr
    450                 455                 460
Tyr Arg Thr Ser Val Ile His Gln Ser Leu Glu Thr
465                 470                 475
```

<210> 34790
<211> 92
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (71)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34790

```
Phe Phe Ser Ser Gly Val Phe Val Leu Ile Pro Phe Leu Thr Leu Phe
1               5                   10                  15
Val Cys Ser Thr Pro Leu Lys His Leu Ser Leu His Cys Lys Tyr Asp
            20                  25                  30
Leu Val Ser Leu Pro Gln Ile Leu Phe Arg Pro Pro Leu Arg Gly Gln
        35                  40                  45
Pro Pro Leu Pro Pro Val Ser Leu Leu Trp Trp Ala Phe Gly Gly His
    50                  55                  60
Lys Pro Gly Ile Gln Gly Xaa Cys Cys Cys Met Gly Glu Pro Leu Ala
65                  70                  75                  80
Glu Ser Gly Val Cys Val Ala Lys Asn Cys Phe Thr
                85                  90
```

<210> 34791
<211> 242

<212> PRT
<213> A.fumigatus

<400> 34791
Ile Asp Asn Arg Cys Ile Val Arg Ser Gln Val Leu Ala His Val Gln
1 5 10 15
Pro Glu Thr Val Pro Ala Val Leu Tyr His Gly Glu Phe Gln Leu Pro
20 25 30
Arg Ala Asp Phe Asp Arg Leu Phe Arg Pro His Thr Gly Glu Ser Asn
35 40 45
Ile Leu Ala Gly Val Gly Asp Gly Phe Asn Thr Pro Phe Ala Val Cys
50 55 60
Asn Met Thr Lys Thr His Val His Met Asp Trp Ser Tyr Ser Arg Pro
65 70 75 80
Val Arg Gly Ser Gly Glu Asp Asp Pro Leu Tyr Arg Pro Asn Leu Ala
85 90 95
Ser Glu Glu Ala Lys Arg Ile Pro Thr Ala Leu Val Glu Glu Leu Ala
100 105 110
Ser Arg Asp Leu Ala Glu Pro Trp Ser Leu Phe Leu Asn Gly Glu Ala
115 120 125
Ile Gln His His Arg Val Phe His Trp Ala Val Arg Cys Val Ser Val
130 135 140
Thr Arg Glu Asp Met Gln Arg Ala Val Gly Arg Gly Val Ala Phe Val
145 150 155 160
Gly Asp Ser Trp His Ala Met Pro Ile Phe Gly Gly Glu Gly Gly Asn
165 170 175
His Ala Leu Ala Asp Gly Ile Glu Leu Ala Gly Ala Ile Ala Ala Gly
180 185 190
Ala Thr Gly Asp Leu Gly Thr Ala Ile Gly Asn Tyr Tyr Asp Gln Ala
195 200 205
Trp Lys Arg Ser Gln Asp Ala Val Arg Arg Ser Lys Gln Arg Phe Tyr
210 215 220
Thr Leu His Arg Pro Met Ala Glu Trp Arg Glu Leu Ser Lys Lys Lys
225 230 235 240
Pro Leu

<210> 34792
<211> 89
<212> PRT
<213> A.fumigatus

<400> 34792
Asp Asp Trp Arg Gly Arg Glu Glu Pro His Pro Leu Gln Arg Ala Leu
1 5 10 15
Thr Val Arg Ala Gly Lys Cys Gly Ala Asp Thr Glu Asn Glu Ser Thr
20 25 30
Gly Tyr Leu Asp Val Asp Tyr Ala Trp Met Ala Ile Glu Ser Asn Glu
35 40 45
Asp Gln Lys Thr Leu Tyr Leu Ser Arg Arg Glu Ile Asp Lys Lys Ile
50 55 60
Ala Ala Lys Val Asp Gln Asp Gly Thr Arg His Arg Ser Gly Trp Leu
65 70 75 80
Gly Arg Ala Thr Glu Glu Asn Arg Pro
85

<210> 34793
<211> 165
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (139)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34793
Leu Val Pro Lys Ile Arg Asn Pro Gly Ser Phe Phe Ser Leu Val Trp
1 5 10 15
Ser Val Lys Ala Tyr Ile Asp Ile Asn Ser Arg Pro Ala Thr Lys Gln
20 25 30
Pro Ser Ile Ile Lys Met Glu Lys Ser Asn Arg Arg Lys Arg Pro Ser
35 40 45
Thr Pro His Leu Ser Cys Glu Leu Cys Arg Glu Arg Lys Ile Lys Cys
50 55 60
Asp Lys Val Asp Pro Cys Asn Asn Cys Val Ser Ala Gly Val Val Cys
65 70 75 80
Ile Pro Val His Arg Pro Arg Leu Pro Arg Ser Val His Ala Arg Arg
85 90 95
Ala Arg Pro Met Ser Pro Thr Phe Val Pro Pro Arg Ala Pro Thr Pro
100 105 110
Val Ala Gly Pro Val Pro Ser Lys Lys Lys Gln Thr Asp His Ser Ser
115 120 125
Gly Ala Val Thr Gly Val Asp Asp Glu Leu Xaa Glu Thr Arg Ser Pro
130 135 140
Gly Leu Lys Gly Glu Ser Thr Ala Cys Val Ala Ala Met Gln Asp Ser
145 150 155 160
Ser Ser Ala Asn Gly
165

<210> 34794
<211> 775
<212> PRT
<213> A.fumigatus

<400> 34794
Ser Asp Ser His Leu Arg Gln Ile Asn Ser Val Pro Ala Leu Ser Pro
1 5 10 15
Ala Leu Ala Pro Leu Asp Val Ser Asp Leu Ala Phe Ser Ser Pro Ser
20 25 30
Pro Glu Pro Glu Leu Gln Met Leu Pro Ser Pro Ala Ser Thr Glu Ile
35 40 45
Leu Glu Thr Ser Lys Pro Gln Asn His Gln Ser Lys Asp Pro Asp Ala
50 55 60
Ser His Gly Pro Tyr Val Leu Glu Arg Val Gln Arg Thr Ser Lys Gly
65 70 75 80
Gly Ala Gly Gly Met Met Gln Ile Asp Arg Pro Leu Ser Ala Ala Glu
85 90 95
Arg Leu Gln Ile Trp Asp His Ala Ala Thr Val Gly Val Thr Glu Pro
100 105 110
Cys Glu Ser Thr Ala Phe Ala Ala Glu Glu Gly Arg Ser Gln Arg Asn
115 120 125

```
Ser Gln Asp Ile Gln Leu Gln Ala Asn Leu Ile Ile Gln Lys Leu Asp
    130                 135                 140
Asn His Asp Glu Gln Pro Ala Ser His Ser Ala Pro Leu Ala Glu Arg
145                 150                 155                 160
Lys Val Ser Glu Lys Glu His Glu Trp Leu Val Thr Glu Thr Pro Val
                165                 170                 175
Lys Glu Asn Thr Ala Val Val Leu Gln Ser Arg Pro Ala Ser Ile Ser
            180                 185                 190
Pro Ser Thr Thr Cys Tyr Ser Ser His Thr Asn Asp Ala Ala Phe Glu
        195                 200                 205
Ala Ser Ile Gln Cys Ser Asn Asn Asp Ser Gly Glu Ser Asp Thr His
    210                 215                 220
His Ser Ala Pro Asp Pro His Ala Ser Ser Thr Gln Glu Gln Ala Asn
225                 230                 235                 240
Arg Lys Ser Val Ser Asn Ile Thr Val Glu Gly Gly Ile Val Ser Thr
                245                 250                 255
Asn Gln Asn Val Pro Thr Leu Pro Val Leu Asp Ser Gln Ile Val Ser
            260                 265                 270
Lys Gln Gly Gln Pro Thr Ser Arg Ile Gln Gln Ser Asn Ile Ser Ala
        275                 280                 285
Phe Met Val Gly Asp Ser Asp Leu Thr Ala Ala Thr Gln Thr Arg Leu
    290                 295                 300
Gln Thr Asn Thr Pro Ala Thr Val Phe Asn Gln His Leu Gln Gln Arg
305                 310                 315                 320
Lys Arg Lys Arg Gln Leu Thr Asn Lys Ser Phe Val Gly Ser Ser Gln
                325                 330                 335
Ser Glu Gln Gln Glu Gln Gln Arg Gln Val Arg Lys Pro Ser Phe Thr
            340                 345                 350
Thr Val Gly Ser Leu Ala Ala Phe Met Glu Thr Arg Gly Arg Asn Glu
        355                 360                 365
Met Arg Asn Met Val Thr Gln Ser Pro Tyr Phe Pro Ala Gly Lys Ser
    370                 375                 380
Thr Asp Asp Val Ser Lys Arg Gln Ser Asp Glu Val Ser Ile Glu Lys
385                 390                 395                 400
Pro Glu Ser Cys Leu Asn Glu Pro Asn Lys Ser Glu Asn Val Ser Asp
                405                 410                 415
Ile Val Gln Thr Ala Thr Gln Leu Pro Arg Phe Gln Gln Gln Thr Gly
            420                 425                 430
Glu Gln Pro Ile Leu Phe Leu Ser Thr Thr Leu Leu Lys Ser His Leu
        435                 440                 445
Arg Leu Val Arg Cys Leu Glu Gly Met Ala Gly Leu Pro Val Ile Val
    450                 455                 460
Tyr Arg Asp Tyr Asn Gln Glu Thr Ser Gly Ser Glu Pro Arg Gly Lys
465                 470                 475                 480
His Thr Thr Ser Ser Met Asn Asn Asn Pro Thr His Gln Ile Glu Ala
                485                 490                 495
Asp Ile Ile Ile Ser Pro Ser Thr Gly Leu Val Leu Thr Thr Ser Gln
            500                 505                 510
Ala Ala Thr Gln Leu Tyr Leu Pro Gly His Lys Ser Thr His Pro Glu
        515                 520                 525
Thr Asn Thr Glu Cys Ile Asn Ser Pro Leu Arg Glu Arg Ile Phe Leu
    530                 535                 540
Leu Ala Pro Arg Tyr Glu Arg Ile Tyr Leu Phe Ile Cys His Ser Ala
545                 550                 555                 560
Pro Ser Pro Lys Glu Ser Gln Gly Lys Gln Ser Gly Pro Thr Ala Asp
                565                 570                 575
```

```
Lys Arg Leu Leu Ala Ser Ile Ala Ser Leu Thr Ala Phe Cys Asn Ser
            580                 585                 590
Met Ser Ala Tyr Ala Thr Ile Asn Pro Leu Leu Ala Pro Ser Ser Pro
        595                 600                 605
Glu Thr Ala Ala Gly Trp Ile Leu Ser Leu Ala Asn Lys His Ile Ala
    610                 615                 620
Arg Leu Pro Glu Asn Pro Thr Arg Ile Pro Pro Ser Thr Ser Phe Thr
625                 630                 635                 640
Pro Ile Asn Ser Pro Gln Lys Asn Arg Leu Arg Pro Glu Ile Met Met
                645                 650                 655
Arg Thr Ala Val Trp Glu Leu Phe Leu Arg Gln Ala Gly Leu Asn Pro
            660                 665                 670
Tyr Ala Ala Gln Leu Ile Leu Ala Phe Ile Lys Arg Glu Asp Glu Glu
        675                 680                 685
Glu Arg Thr Tyr Ile Arg Tyr Ala Ser Pro Lys Ala Ala Ser Ser Ser
    690                 695                 700
Ser Val Glu Asp Gly Gly Thr His Gly Leu Ala Arg Phe Ile Glu Met
705                 710                 715                 720
Glu Pro Asp Arg Arg Lys Glu Val Phe Gly Gln Leu Ile Gly Asp Arg
                725                 730                 735
Met Met Gly Arg Ile Asn His Ile Leu Asp Lys Asp Trp Gln Cys Asp
            740                 745                 750
Trp Val Leu Asn Phe Asp Val Asp Thr Glu Leu Leu His His Arg Gly
        755                 760                 765
Arg Arg Ile His Ala Lys Ser
    770                 775

<210> 34795
<211> 82
<212> PRT
<213> A.fumigatus

<400> 34795
Leu Pro Ile Ser Ile Val Tyr Pro Val Asp Phe Leu Pro Ile Pro Asn
1               5                   10                  15
Thr Glu Gln Met Gln Leu Ile Asp Ser Phe Ile Ala Asp Met Glu Ala
            20                  25                  30
Thr Phe Gly Ile Lys Thr Glu Lys Val Ser Ile Ala Asp Thr Trp Lys
        35                  40                  45
Ala Phe Pro Pro Asn Glu Ala Gly Asn His Thr Ile Gln Glu Tyr Leu
    50                  55                  60
Lys Asp Val Arg Ile Ser Gly Ser Leu Ser Ser Arg Phe Glu Glu Thr
65                  70                  75                  80
Leu Cys


<210> 34796
<211> 157
<212> PRT
<213> A.fumigatus

<400> 34796
Pro Cys Leu Arg Val Arg Asp Gln Ile Gln Ile Gln Leu Ile Gly Ser
1               5                   10                  15
Cys Ala Val Cys Cys Ser Pro Ser Leu Leu Leu Asn Ser Asp Leu Ile
            20                  25                  30
```

```
Ala Asp Lys Gln Ala Ile Ile Ile Pro Met Asp Asp Pro Gly Ser Thr
        35                  40                  45
Val Gln Ala Ser Met Phe Phe Leu Thr Pro Asp Glu Leu His Lys Gln
    50                  55                  60
Gln Arg Pro Tyr Thr Phe Lys Phe Pro Pro Tyr Asn Gly Cys Pro Gln
65                  70                  75                  80
Ser Asn Met Thr His Glu Lys Ile Asn Gly Ile Thr Val Glu Asn Met
                85                  90                  95
Arg Gly Arg Glu Asp Gln Phe Gln Leu Glu Arg Asn Gly Phe Thr Ile
            100                 105                 110
Leu Lys Val Asn Thr Gly Leu Glu Tyr Asp Asp Ser Phe Lys Gln Lys
        115                 120                 125
Gly Val Thr Gln Tyr Leu Arg Leu Met Glu Gly Val Leu Lys Ala Arg
    130                 135                 140
Leu Gly Ala Ser Arg Val Asp Val Phe Arg Tyr Gly Val
145                 150                 155

<210> 34797
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34797
Arg Ser Lys His Arg Thr Tyr Phe Asp Ser Gly Asp Tyr Ala Leu Ala
1               5                   10                  15
Ala Ala His Lys Val Thr Asp Glu Gly Asp Ile Gln Thr Gly Thr Ala
            20                  25                  30
His Pro Leu Arg Glu Ser Ile Pro His Pro Tyr Ala Pro Val Pro Ser
        35                  40                  45
Ser Gly Asn Val Ala Gly Asp Ala Asn Lys Asp Ser His Cys Arg Arg
    50                  55                  60
Ser Ser Ser Pro Glu
65

<210> 34798
<211> 258
<212> PRT
<213> A.fumigatus

<400> 34798
Phe Pro Thr Leu His Asp Ile Thr Ala Asn Thr Leu Ile Ser Ser Lys
1               5                   10                  15
Ile Pro Ser Ala Cys Pro Ser Lys Ile Thr Val Ser Gly Arg His Ile
            20                  25                  30
Leu Cys Thr Thr Ile Val Glu His His Glu Asp Asp Pro Arg Ser Pro
        35                  40                  45
His Leu Ser Leu Tyr His Asp Gly Ser Gly Gln Arg Arg Lys Glu Gly
    50                  55                  60
Ser Gln Arg Asn Leu Gly Arg Thr Gly Met Glu Ile Ser Trp Leu Phe
65                  70                  75                  80
Arg Ala Ala Ile Asn Ile Lys Ser Gly Asp Thr Asn Asp Ser Arg Leu
                85                  90                  95
Val Tyr Trp Ile Asp Arg Asp Phe Ser Gln His Ser Ile Ile Asp Arg
            100                 105                 110
Leu Ser Val Leu Lys Pro Gly Phe His Leu Leu Glu Asp Thr Lys Ser
        115                 120                 125
```

```
Ser Pro Asp Gly Pro Arg Val Gly Phe Ile Arg Ser Asn Leu Phe Asn
    130                 135                 140
Val Asn Ser Gly Arg Val Leu Pro Gln Asn Ile Glu Gly Pro Asp Asn
145                 150                 155                 160
Asn Ile Ile Asp Leu Leu Glu Pro Glu Val Arg Gln Ala Ile Glu Arg
                165                 170                 175
Gln Ala Glu Val Tyr Val Phe Gly Ala Arg Phe Asp Thr Lys Asp Gly
            180                 185                 190
Ile His Asp Val His Met Asn Gln Gly Asn Lys Gly Arg Trp Lys Gly
        195                 200                 205
Ile Thr Pro Ser Phe Lys Thr Glu His Ser Leu Phe Ile Ser Gln Ile
    210                 215                 220
Leu Thr Asp Gly Leu Ala Phe Ser Ser Ala Leu His Pro Arg Gln Pro
225                 230                 235                 240
Ile Pro Met Ile Gly Leu Gly Met Pro Tyr His Arg Arg Leu Gly Val
                245                 250                 255
Thr Thr
```

<210> 34799
<211> 761
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (49),(332)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34799

```
Pro Pro Ile Arg Ser Lys Thr Asp Ala Asp Arg Ala Lys Ser Lys Gln
1               5                   10                  15
Gln Leu Asn Leu Leu Arg Gln His Gln His Gly Ala Phe Lys Leu Asp
            20                  25                  30
Ala Ala Gln Glu Ala Pro Ala Ile Pro Leu Asp Leu Pro Thr Ile Leu
        35                  40                  45
Xaa Gly Arg Arg Lys Lys Phe Asn Pro Ser Lys Leu Ser Ser Glu Gln
    50                  55                  60
Phe Arg Lys Cys Val Glu Pro Trp Ala Leu Ser Ala Val Leu Ala Trp
65                  70                  75                  80
Ile Arg Asp Leu Cys Glu Glu Glu Thr Ala Leu Arg Lys Ser Ala Ile
                85                  90                  95
Val Asp Ala Ile Val Ala Leu Phe Thr Pro Lys Val Pro Thr Met Asn
            100                 105                 110
Ile Ala Asp Ala Glu Thr Leu Ala Ala Arg Val Val Asp Asn Met Leu
        115                 120                 125
Glu Gln Glu Ala Leu Val Lys Glu Glu Glu Trp Val Lys Phe Gly Arg
    130                 135                 140
Gly Thr Leu Ser Gly Val Leu Phe Gln Ile Thr Gly Thr Gly Cys Tyr
145                 150                 155                 160
Ser Pro Leu Leu His Glu Gln Glu Thr Glu Ile Leu Gly Arg Cys Tyr
                165                 170                 175
Ser His His Cys Met Arg Thr Leu Lys Lys Val Asn Leu Lys Ala His
            180                 185                 190
Lys Met Ala Pro Gln Lys Lys Val Glu Asp Trp Val Thr Phe Tyr Lys
        195                 200                 205
```

```
Val Pro Lys Glu Val Trp Glu Ala Tyr Pro Lys Lys Glu Val Asp Arg
    210                 215                 220
Gln Asn Asn Leu His Glu Ile Val Thr Thr Glu Asp Ala Phe Ile Gly
225                 230                 235                 240
Gln Leu Asp Val Leu Arg Glu Leu Tyr Arg Asp Gln Leu Ala Asn Met
                245                 250                 255
Gln Pro Ala Ile Ile Pro Pro Lys Arg Leu Pro Lys Phe Leu Asn Asp
            260                 265                 270
Val Phe Gly Lys Val Asp Ala Val Lys Lys Val Asn Glu Glu Tyr Leu
        275                 280                 285
Leu Ala Gln Leu Lys Tyr Arg Gln Lys Glu Gln Gly Pro Phe Ile Val
    290                 295                 300
Gly Phe Ser Asp Ile Phe Arg Glu Trp Ile Arg Lys Ala Lys Met Val
305                 310                 315                 320
Tyr Ile Asp Tyr Ala Ala Thr Phe Pro Tyr Ala Xaa Tyr Leu Val Arg
                325                 330                 335
Lys Glu Met Glu Arg Asn Ala His Phe Arg Gln Phe Leu Asn Gln Ala
            340                 345                 350
Arg Glu His Lys Met Ser Asn Arg Leu Ser Trp Asp Thr Tyr Leu Lys
        355                 360                 365
Ala Pro Ile Thr Arg Ile Gln Arg Tyr Thr Leu Leu Leu Ser Thr Val
    370                 375                 380
His Lys Asn Met Val Lys Glu Cys Glu Glu Lys Thr Asn Leu Ala Gln
385                 390                 395                 400
Ala Ile Asp Glu Ile Lys Val Val Ala Leu Glu Cys Asp Asn Lys Val
                405                 410                 415
Gly Glu Thr Ser Lys Lys Val Asp Leu Met Glu Leu Ser Ala Lys Leu
            420                 425                 430
Gln Leu Arg Pro Glu Met Lys Lys Glu Val Glu Leu Asn Leu Gln His
        435                 440                 445
Leu Gly Arg Glu Ile Ile Tyr Arg Gly Asp Leu Gln Arg Pro Gly Thr
    450                 455                 460
Arg Thr Arg Phe Leu Val Asp Thr His Ala Ile Leu Phe Asp His Tyr
465                 470                 475                 480
Leu Val Leu Ala Lys Leu Ser Thr Thr Arg Asp Pro Thr Arg Gly Ile
                485                 490                 495
Lys Tyr Glu Ser Tyr Asp Val Ser Lys Leu Pro Ile Pro Met Asp Leu
            500                 505                 510
Leu Val Leu Glu Ser Thr Asn Asp Asp Pro Val Val Lys Ser Ser Val
        515                 520                 525
Arg Gly Val Ser Thr Val Thr Pro Pro Gln Ala Thr Thr Arg Gly Ala
    530                 535                 540
Gly Ala Ala Pro Leu Ile His Ser Asn Ser Gly Asn Ser Gly Asn Ser
545                 550                 555                 560
Thr Ser Ser Gly Lys Thr Leu Val Ala Ala Thr Val Leu Glu Ser Ser
                565                 570                 575
Lys Asp Asp Lys Ile Leu Tyr Pro Phe Lys Val Lys His Leu Gly Lys
            580                 585                 590
Asn Gly Thr Phe Thr Leu Tyr Ala Phe Ser Ala Gln Asn Arg Gln Glu
        595                 600                 605
Trp Cys Asp Lys Ile Met Glu Ala Lys Thr Arg His Ala Ala Ala Leu
    610                 615                 620
Phe Ala Gln Asn Ala Glu Pro Phe Arg Leu Arg Val Leu Ala Asp Thr
625                 630                 635                 640
Ala Phe Ala Ser Ser Asp His Ser Gly Ile Ser Lys Arg Thr Val Thr
                645                 650                 655
```

```
Val Lys Gly Thr Pro Leu Asp Arg Ala Ile Arg Glu Val Glu Glu Arg
            660                 665                 670
Tyr Gly Gly Ser Lys Ser Arg Pro Val Pro Val Cys Arg Thr Ser Val
        675                 680                 685
His Cys Ala Thr Val Phe Gln Gln Pro Pro Gly Arg Met Met Cys Ala
    690                 695                 700
Val Gly Thr Asp Tyr Gly Val Tyr Ile Ser Glu Tyr Asn Asp Pro Arg
705                 710                 715                 720
Gly Trp Val Arg Val Ser Thr Phe His Cys Gly Leu Leu Ala Ser Ala
                725                 730                 735
Lys Ile Gly Pro Arg Pro Phe Arg Ser Ser Glu Cys Arg Arg Leu Arg
            740                 745                 750
Ser Leu Lys Ser Ser Ile Ser Ser Cys
        755                 760
```

<210> 34800
<211> 517
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (358)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34800

```
Thr Arg Leu Arg Val Ile Leu Arg Arg Pro Val Val Glu Val His Pro
1               5                   10                  15
His Ser Ser Gln Phe Pro Leu Tyr Thr Ala Gln Ser Pro His His Ser
            20                  25                  30
Asp Ala Ala Ile Ala Pro Pro Tyr Pro Asp Glu Leu Pro Pro Glu Pro
        35                  40                  45
Pro Ala His Ser Thr Pro Ala Glu Asp Leu Tyr Gly Lys Arg Gln Ser
    50                  55                  60
Phe Gly Arg Arg Gly Ser Gly Arg Ser Leu Pro Thr Pro Pro Ile Gln
65                  70                  75                  80
Gln Ala Gln Ser Gln Ile Ser Pro Arg Arg Thr Asp Ala Leu Thr Arg
                85                  90                  95
His Pro Gln Ser Arg Pro Leu Pro Gly Pro Pro Val Asp Ala Asp Ser
            100                 105                 110
Asp Ser Ser Pro Leu Asp Asp Leu Asn Gly Val Gly Gly Arg Asp Pro
        115                 120                 125
Arg Ser Asp Arg Pro Val Gly Tyr Gly Asp Leu Met Arg Glu Val Glu
    130                 135                 140
Ala Ala Val Ile Asp Asn Arg Met Ser Arg Glu Thr Arg Tyr Asn Thr
145                 150                 155                 160
Arg Pro Pro Arg Val Asp Ala Gln Ser Ser His His Glu Glu Tyr Asp
                165                 170                 175
Pro Ser Pro Ser Val Thr Ala Thr Ser Ser Met Arg Leu Ser Pro Asp
            180                 185                 190
Glu Arg His Thr His Thr Asn Gly Thr Leu Ala Thr Gly Thr Gly Gln
        195                 200                 205
Tyr Val Asn Tyr Asp Ala Tyr Ser Asp Asp Ser Asp Ala Glu Ala Ala
    210                 215                 220
Ala Gly Leu Ala Met Leu Gln Met Ala Asp Glu Glu Asp Arg Ile Gln
225                 230                 235                 240
```

```
Ala Glu Arg Glu Gln Ala Arg Thr Arg Arg Glu Thr Asn Ala Ser Ile
                245                 250                 255
Ile Ser Ala Tyr Gly Ser His Ser Ser Ala Arg Ala Pro Ser Pro Arg
            260                 265                 270
Arg Asp Ser Arg Gln Asp Glu Leu His Phe Ala Thr Asn Thr Thr Tyr
        275                 280                 285
Gly Ser Asn His Tyr Glu Arg Tyr His Tyr Asp Ala Asp Met Asp Glu
    290                 295                 300
His Ala Asp Glu Thr His Asn Glu Gly Val Asp Gln Ala Thr Arg Leu
305                 310                 315                 320
Ala Pro Ser Gly Ser Leu Ser Arg Ser Asn Leu Ser Ala Asp Asp Arg
                325                 330                 335
Gly Glu Tyr Ser Asp Asp Tyr Asp Tyr Tyr Pro Val Pro Asp Asp Gln
            340                 345                 350
Val His Gln Tyr Tyr Xaa Tyr Ile Ser Ala Ala Arg Val Asp Ala Ala
        355                 360                 365
Gly Thr Gly Gly Leu Ser Glu Pro Gly Ala Tyr Glu Arg Arg Met Ser
    370                 375                 380
Phe Asp Tyr Gly Asp Glu Ala Asp Ala Tyr Pro Asp Asp Val His His
385                 390                 395                 400
Ser Gly Ser Glu Gly Ser Asp Thr Gly Gly Ile Pro Gly Glu Leu Phe
                405                 410                 415
Phe His Pro Gly Met Arg Pro Leu Pro Pro Ala Pro Val Glu Pro Ala
            420                 425                 430
Asn Asn Ala Asp Leu Leu Pro His Leu Met Pro Ala Gly Thr Tyr Arg
        435                 440                 445
Pro Gln Glu Ser Gly Glu Tyr Pro Glu Glu Thr Gln Tyr Thr Ser Pro
    450                 455                 460
Gln Tyr Pro Val Ser Ala Asp Ser Phe Ala Ser Thr Val Ser Thr Pro
465                 470                 475                 480
Thr Ser Gln Val Pro Arg Ser Thr Ser Leu Ser Ser His Pro Ile Gly
                485                 490                 495
Pro Gly Leu Asp Pro Leu Ser Gly Pro Arg Pro Met Arg Ile Gly Arg
            500                 505                 510
Ser Pro Ser Ser Ser
        515
```

<210> 34801
<211> 333
<212> PRT
<213> A.fumigatus

<400> 34801

```
Ala Ile Pro Ile Ile Arg Val Ser Gln Ile Ala Val Phe Glu Glu Phe
1               5                   10                  15
Asn Leu Phe Leu Leu Ile Ala Asp Lys Ser Leu Ile Ala Tyr His Leu
            20                  25                  30
Asp Val Val Cys Pro Ala Ser Gly Val Ser Ser Gln Thr Thr Lys Asp
        35                  40                  45
Ser Ala Arg Arg Ala Pro Gln Lys Leu Ser Gly Asn Arg Glu Val Gly
    50                  55                  60
Phe Phe Ala Ala Gly His Met Lys Asp Arg Thr Leu Val Met Tyr Lys
65                  70                  75                  80
Lys Arg Asp Gly Leu Ser Ser Thr Phe Lys Val Leu Glu Pro Val Leu
                85                  90                  95
Gln Lys Ser Thr Thr Ser Lys Ser Arg Leu Phe His Thr Arg Arg Ser
```

```
            100                 105                 110
Gln Thr Glu Phe Phe Arg Glu Tyr Asp Glu Phe Tyr Ile Pro Ala Glu
        115                 120                 125
Ser Tyr Gly Ile Asn Met Phe His Ser Ser Leu Ala Ile Ser Thr Gln
    130                 135                 140
Arg Gly Ile Glu Ile Leu Thr Leu Asp Lys Lys Gln Thr Trp Ser Val
145                 150                 155                 160
Pro Asp Phe Arg Ser Glu Ala Pro Glu Ala Gln Ala Gln Leu Ser Ser
                165                 170                 175
Ile Ala Asn Arg Ile Ser Asn Leu Arg Pro Leu Gly Met Phe Arg Leu
            180                 185                 190
Ser Asp Ser Glu Phe Leu Val Ala Tyr Thr Asp Cys Ala Val Tyr Val
        195                 200                 205
Asn Lys His Gly Asp Val Ser Arg Ser Val Ile Met Glu Phe Val Gly
    210                 215                 220
Arg Ala His Ser Ala Cys Leu Tyr Gly Lys Phe Leu Ile Leu Phe Asn
225                 230                 235                 240
Asp Asp Phe Val Glu Val Arg Asn Ala Met Asn Gly Arg Leu Arg Gln
                245                 250                 255
Val Ile Pro Gly His Asn Val Val Cys Leu Asp Asp Gly Ser Ala Leu
            260                 265                 270
Pro Gly Ser Ser Ala Asn Thr Val Pro Thr Asn Ser Gly Thr Ser Ile
        275                 280                 285
Asn Leu Ala Ser Gly Leu Ser Asn Gly Val Ala Met Ala Ser Ser Gly
    290                 295                 300
Arg Thr Val Lys Ile Cys Met Gln His Pro Glu Tyr Glu Arg Ser Gln
305                 310                 315                 320
Leu Val Leu Glu Leu Ile Glu Asn Glu Gly Gln Lys Glu
                325                 330
```

<210> 34802
<211> 60
<212> PRT
<213> A.fumigatus

<400> 34802

```
Phe Gly Leu Trp Gly Ile Pro Val Met Thr Tyr Ser Val Gln Pro Gln
1               5                   10                  15
Tyr Leu Ala Tyr Val Ser Pro Trp Gly Leu Pro Pro Leu Ile Thr Ser
            20                  25                  30
Pro Tyr Leu Pro Asp Thr Ala Met Ile Phe Ser Ile Gln Phe Leu Gly
        35                  40                  45
Phe Leu Pro Thr Ser Trp Phe Leu His Val Ile Tyr
    50                  55                  60
```

<210> 34803
<211> 93
<212> PRT
<213> A.fumigatus

<400> 34803

```
Ser Gly Ser Leu Leu Thr Cys Leu Ser Gln Thr Phe Tyr Val Phe Gly
1               5                   10                  15
Ala Ala Met Phe Ala Tyr Ile Pro Ile Ile Tyr Cys Phe Phe Pro Glu
            20                  25                  30
Thr Ala Gly Arg Thr Leu Glu Gln Ile Asp Phe Leu Phe Ala Ser Lys
```

```
        35                  40                  45
Ser Pro Phe Val Trp Glu Glu Glu Lys Glu Phe Ala Lys Arg Met Thr
    50                  55                  60
Arg Phe His Ala Glu Ile Gln Lys Met Glu Ile Glu Asn Gly Gly Tyr
65                  70                  75                  80
Ala Gly Glu Lys Thr Gly Glu Glu Phe Val Glu Lys Val
                85                  90
```

<210> 34804
<211> 87
<212> PRT
<213> A.fumigatus

<400> 34804

```
Ser Ser Leu Ser Ser Phe Trp Gly Ser Phe Pro Arg Leu Gly Phe Ser
1               5                   10                  15
Met Leu Tyr Ile Asp Ser Lys Ser Thr Leu Phe Pro Pro Pro Pro Phe
            20                  25                  30
Ser Ser Ala Thr Arg Phe Thr Met Met His Arg His Phe Trp Lys Thr
        35                  40                  45
Val Pro Gly Pro Arg Leu Leu Arg Leu Ile Thr Val Val Ser Ala Val
    50                  55                  60
Ala Ile Ser Tyr Glu Gly Met Ser Gln Gly Val Met Gly Ala Val Asn
65                  70                  75                  80
Val Ala Pro Glu Tyr Gly Val
                85
```

<210> 34805
<211> 323
<212> PRT
<213> A.fumigatus

<400> 34805

```
Ser Asn Ile Thr Leu Gln His Arg Met Gly Phe Ala Asp Glu Gln Gly
1               5                   10                  15
Lys Val Ile Lys Pro Ser Leu Gln Gly Gly Ile Ala Ala Met Tyr Tyr
            20                  25                  30
Leu Gly Ala Leu Phe Gly Ala Phe Trp Ala Gly Ser Phe Ser Asp Ala
        35                  40                  45
Tyr Gly Arg Ile Lys Gly Ile Trp Leu Ala Cys Ala Trp Cys Leu Val
    50                  55                  60
Gly Ala Ile Leu Gln Ala Ser Ala Val Asn Leu Ala His Met Leu Cys
65                  70                  75                  80
Ala Arg Val Val Ala Gly Val Gly Val Ala Phe Ile Ile Val Ile Ala
                85                  90                  95
Pro Ser Trp Thr Ala Glu Leu Ala Pro Ala Ala His Arg Gly Gln Met
            100                 105                 110
Ile Ala Val Thr Phe Leu Ala Asn Phe Gly Gly Ile Ala Leu Ser Ser
        115                 120                 125
Trp Ile Gly Phe Ala Thr Ser Phe Thr Asp Tyr Ala Gly Gly Ala Phe
    130                 135                 140
Arg Trp Arg Phe Cys Phe Ala Cys Gln Val Ile Pro Ile Phe Phe Leu
145                 150                 155                 160
Val Ile Gly Thr Leu Leu Ile Pro Glu Ser Pro Arg Trp Leu Val Lys
                165                 170                 175
Val Gly Arg Asn Asp Glu Ala Phe Glu Ile Ile Thr Lys Leu Arg Gly
```

```
            180                 185                 190
Asp Gly Asp Arg Ala His Pro Asn Val Gln Lys Glu Ile Arg Glu Ile
        195                 200                 205
Val Ala Val Val Gln Met Glu His Glu Ser Gln Ser Ser Ser Tyr Leu
    210                 215                 220
Gln Met Phe Leu Gly Ile Gly Ser Gly Asp Ile His Ile Gly Arg Arg
225                 230                 235                 240
Ile Gln Leu Ala Phe Trp Leu Gln Val Leu Met Gln Tyr Gly Thr Gly
                245                 250                 255
Ile Ala Ala Val Val Ile Tyr Ser Gly Asn Ile Tyr Arg Thr Ala Gly
            260                 265                 270
Phe Asp Asp Phe Lys Ser Asn Trp Leu Ser Ala Val Cys Met Thr Cys
        275                 280                 285
Gly Ile Leu Gly Thr Gly Ile Ala Ala Leu Thr Leu Asp Arg Val Gly
    290                 295                 300
Arg Arg Trp Thr Leu Tyr Trp Gly Ala Val Val Leu Ser Val Ile Leu
305                 310                 315                 320
Phe Thr Leu
```

<210> 34806
<211> 114
<212> PRT
<213> A.fumigatus

<400> 34806

```
Val Phe Glu Ser Ser Ser Ser Trp Pro Trp Leu Leu Leu Thr Phe Ser
1               5                   10                  15
Arg Gly Gly Leu Asn Arg Gly Ala Val Asn Asn Pro Asp Lys Ala Glu
            20                  25                  30
Gln Tyr Gly Thr Gly Ala Ala Ala Met Val Phe Leu Tyr Val Val Val
        35                  40                  45
Phe Ser Ser Ser Trp Leu Met Ile Pro Phe Ile Tyr Pro Thr Glu Ile
    50                  55                  60
Phe Pro Thr Trp Leu Arg Ala Lys Gly Asn Ala Phe Gly Val Ala Gly
65                  70                  75                  80
Trp Ala Val Gly Tyr Gly Ala Gly Ser Leu Leu Val Pro Val Met Phe
                85                  90                  95
Ala Gly Ile Gln Glu Lys Val Ser Ala Val Leu His Leu Asp Arg Val
            100                 105                 110
His Cys
```

<210> 34807
<211> 68
<212> PRT
<213> A.fumigatus

<400> 34807

```
Ser Gly Ala Ala Ile Ile Ile Tyr Ser Gly Ile Gly Ile Ser Tyr Ala
1               5                   10                  15
Leu Tyr Trp Tyr Gly Tyr Leu Leu Leu Arg His Ile Ser Ala Thr His
            20                  25                  30
Ala Ile Ser Leu Gly Thr Ala Thr Thr Asp Cys Gly Gln Trp Ser Ala
        35                  40                  45
Pro Tyr Leu Ser Leu Arg Pro Leu Lys Pro Pro Arg Glu Ser Gly Trp
```

```
    50                  55                  60
Glu Gln Gly Ser
65

<210> 34808
<211> 81
<212> PRT
<213> A.fumigatus

<400> 34808
Asp Ala Thr Lys His Ser Pro Lys Glu Thr Ser Gly Ile Phe Ser Leu
1               5                  10                  15
Gly Val Phe Phe Trp Leu Asn Lys Leu Phe Leu Ala Gly Tyr Arg His
            20                  25                  30
Val Phe Thr Ile Lys Ser Leu Tyr Pro Leu Asp Ser Thr Phe Asp Ala
        35                  40                  45
Gln Ala Leu His Glu Glu Phe Ala Lys Lys Met Asp Tyr Thr Lys Leu
    50                  55                  60
Lys Gly Asp Lys Phe Gly Leu Leu Lys Val Leu Val Arg Thr Leu Trp
65                  70                  75                  80
Val


<210> 34809
<211> 271
<212> PRT
<213> A.fumigatus

<400> 34809
Leu Phe Pro Ser Ile Asp Leu Ile Asn Ala Gly Leu Thr Tyr Trp Ser
1               5                  10                  15
Asp Ala Thr Glu Ser Ile His Pro Ala His Pro Asn Ser Tyr Tyr Ala
            20                  25                  30
Gly Ile Tyr Ala Leu Leu Gln Ile Cys Ala Ile Ile Ala Leu Leu Leu
        35                  40                  45
Leu Leu Gly Ile Thr Leu Phe Ile Val Ser Val Lys Lys Ala Gly Ala
    50                  55                  60
Asn Leu His Gln Gln Ala Leu Ser Thr Leu Ile Cys Ala Pro Leu Pro
65                  70                  75                  80
Phe Phe Thr Asn Thr Asp Thr Gly Val Val Thr Asn Leu Phe Ser Gln
                85                  90                  95
Asp Leu Asn Leu Ile Asp Thr Glu Leu Pro Glu Ala Ile Leu Asn Thr
            100                 105                 110
Leu Phe Cys Leu Phe Gln Ser Ile Gly Gln Ala Ala Val Met Leu Thr
        115                 120                 125
Ser Ser Val Tyr Leu Ala Ile Ser Tyr Pro Ile Leu Gly Gly Leu Leu
    130                 135                 140
Tyr Phe Val Gln Lys Tyr Tyr Leu Arg Thr Ser Arg Gln Leu Arg Leu
145                 150                 155                 160
Leu Asp Leu Glu Ala Lys Ser Pro Leu Tyr Thr His Phe Leu His Thr
                165                 170                 175
Leu Lys Gly Ile Val Thr Leu Arg Ala Phe Gly Phe Ile Pro Asn Asp
            180                 185                 190
Ile His Lys Asn Ile Arg Leu Val Asp Ser Ser Gln Arg Ala Ala Tyr
        195                 200                 205
Leu Leu Leu Met Ile Gln Glu Trp Leu Asn Leu Val Leu Asn Leu Val
```

```
    210                 215                 220
Val Met Val Ile Ala Ala Val Leu Thr Thr Leu Ala Val Arg Leu His
225                 230                 235                 240
Ser Asn Trp Ala Phe Pro Gly Ala Ser Leu Tyr Ser Leu Met Lys Phe
                245                 250                 255
Gly Asp Ser Leu Ser Gly Ile Val Ile Ser Tyr Thr Arg Leu Glu
            260                 265                 270
```

<210> 34810
<211> 589
<212> PRT
<213> A.fumigatus

<400> 34810

```
Tyr Val His Cys Gly Cys Asn Tyr Ser Cys Leu Phe Pro Pro Arg Ala
1               5                   10                  15
Ala Leu Met Ala Phe Tyr Ser Cys His Leu Leu Phe Ile Glu Ser Leu
            20                  25                  30
Ile Thr Tyr Leu Ser His Ser Asp Pro Asp Pro Asn Val Gly Tyr Trp
        35                  40                  45
Leu Ile Gly Arg Cys Tyr Asn His Leu Leu Gly Asp Trp His Leu Val
    50                  55                  60
Cys Leu Val Leu Val Arg Ile Pro Ala Val Thr Ala Tyr Phe Ser Asp
65                  70                  75                  80
Ser Arg His Phe Ala Arg Tyr Cys His His Arg Leu Arg Thr Met Val
                85                  90                  95
Arg Ser Ile Leu Val Thr Glu Thr Phe Lys Ala Ala Thr Arg Val Arg
            100                 105                 110
Leu Gly Ala Gly Ile Leu Ile Asn Phe Thr Gly Asp Ser His Arg Ser
        115                 120                 125
Trp Met Ser Gly Val Gln Lys Arg Val Gly Leu Thr Ala Thr Val Ile
    130                 135                 140
Ala Ser Met Lys Trp His Lys Ile Ser Gly Leu Ala Gly Pro Val Ala
145                 150                 155                 160
Glu Tyr Val Gln Gln Leu Arg Val Asp Glu Leu Ala Ala Gly Ala Arg
                165                 170                 175
Tyr Arg Arg Ile Met Ile Phe Ala Ala Val Phe Ala Phe Met Arg Gln
            180                 185                 190
Leu Ile Ser Pro Pro Leu Thr Phe Ala Phe Ala Gln Asn Pro Leu Asn
        195                 200                 205
Ala Ser Thr Met Phe Thr Ser Leu Ser Phe Leu Thr Leu Leu Thr Gln
    210                 215                 220
Pro Leu Ser Gln Leu Phe Gln Ser Ile Pro Glu Leu Val Ser Gly Leu
225                 230                 235                 240
Ala Cys Leu Gly Arg Ile Gln Val Phe Leu Glu Leu Glu Pro Arg Arg
                245                 250                 255
Asp Tyr Arg Gln Pro Gln Val Glu Ala Gln Ser Cys Gly Met Glu Lys
            260                 265                 270
Ser Ser Lys Gln Leu Asn Leu Lys Ser Thr Asp Cys Ile Val Ile Arg
        275                 280                 285
Asp Ala Asn Phe Gly Trp Lys Ala Asp Lys Phe Val Leu Asn Asn Ile
    290                 295                 300
Asn Thr Gln Ile Pro Ala Ala Ser Leu Thr Met Val Ile Gly Pro Val
305                 310                 315                 320
Ser Ser Gly Lys Ser Thr Phe Cys Lys Ala Leu Leu Gly Glu Ile Pro
                325                 330                 335
```

```
Phe Ser Gln Gly Ser Phe Val Met Ser Thr Pro Pro Arg His Val Gly
            340                 345                 350
Phe Cys Glu Gln Thr Ala Phe Leu Trp Asn Gly Thr Ile Arg Glu Asn
        355                 360                 365
Ile Val Gly Phe Thr Pro Phe Asp Cys Glu Arg Tyr Asp Gln Val Ile
    370                 375                 380
Glu Ala Asn Ser Leu Arg Phe Asp Leu Ala Thr Leu Leu Gln Gly Asp
385                 390                 395                 400
Gln Thr Asn Ile Gly Ser Asp Gly Val Ala Leu Ser Gly Gly Gln Lys
                405                 410                 415
Gln Arg Leu Ser Leu Ala Arg Ala Leu Tyr Leu Pro Ser Asp Phe Leu
            420                 425                 430
Ile Pro Gly Asp Val Phe Ser Gly Leu Asp Ala Asp Thr Glu Glu Gln
        435                 440                 445
Val Phe Arg Gln Val Phe Gly Pro Asp Gly Leu Leu Pro Arg Arg Gly
    450                 455                 460
Ser Thr Val Val Leu Cys Thr His Ser Val Arg His Leu Pro Thr Ala
465                 470                 475                 480
Asp Tyr Ile Ile Ala Leu Glu Asn Gly Ser Ile Ala Glu Gln Gly Thr
                485                 490                 495
Phe Val His Leu Ser Thr Arg Ala Gly Tyr Val Gln Arg Leu Glu Val
            500                 505                 510
Gly Leu Lys Pro Glu Gly Glu Asp Thr Asn Ala Asp Asp Glu Pro Gly
        515                 520                 525
Pro Cys Pro Lys Leu Phe Glu Gly Gln Thr Arg Thr Gly Lys Lys Leu
    530                 535                 540
Asp Pro Ala Ile Thr Val Asn Ser Thr Gln Ser Ser Thr Leu Asn Ala
545                 550                 555                 560
Ser Ala Glu Ala Gly Ala Arg Gln Val Gly Asp Ala Thr Val Tyr Lys
                565                 570                 575
Val Tyr Ile Lys Ser Met Gly Trp Phe Val Ala Arg Leu
            580                 585
```

<210> 34811
<211> 825
<212> PRT
<213> A.fumigatus

<400> 34811

```
Ser Asp Arg Phe Phe Ser Gly Ser Thr Ser Arg Ser Arg Val Ile Ile
1               5                   10                  15
Ala Arg Leu Ala Leu Ser Gln Asn Pro Gly Thr Gly Ser Leu Ala Leu
            20                  25                  30
Arg Pro Thr Gln Leu Pro Ser Leu Val Arg Ala Ala Cys Gln Leu Leu
        35                  40                  45
Ser Arg Cys Ser Leu Gly Leu Val Ser Asp Ser Pro Lys Tyr Ile Lys
    50                  55                  60
Ser Glu Glu Ser Trp Pro Leu Gly Pro Ala Ile Leu Ser Phe Ser Leu
65                  70                  75                  80
Val Ser Met Ser Gly Arg Pro Gly Leu Thr Glu Lys Arg Leu Ser Ala
                85                  90                  95
His Arg Phe Gln Pro Leu Pro Asp Tyr Ser Asn Asp Thr Met Met Ala
            100                 105                 110
Ser Pro His Asp Val Thr Ile Asp Ile Pro Leu Thr Asn Val Pro Ser
        115                 120                 125
Arg Thr Pro Thr Gly Ala Arg Arg Gly Ser Ala His Thr Ala Thr Ser
```

130 135 140
Pro Ala Ala Tyr His Pro Pro Leu Asp Asp Val His Thr Asn Thr Ser
145 150 155 160
Glu Lys Ala Gly Leu Val Ala Gly Thr Gly Pro Gly Arg Arg Lys Arg
165 170 175
Thr Val Asp Asp Ser Thr Gly Arg Ser Leu Glu Asp Pro Glu Asp Gly
180 185 190
Thr Leu Thr Arg Met Gly Lys Ile Tyr Gln Ala Ile Leu Asn Phe Ser
195 200 205
Ile Val Thr Arg Tyr Ile Ile Tyr Val Thr Pro Ile Ala Leu Leu Ile
210 215 220
Ala Ile Pro Ile Ile Val Gly Ala Thr Val Ala Glu Asp Ala Arg Ile
225 230 235 240
Gly Gly Val Thr Leu Pro Trp Phe Phe Ala Trp Ile Glu Val Val Trp
245 250 255
Leu Ser Leu Trp Ile Cys Lys Ile Ile Ala His Phe Leu Pro Tyr Leu
260 265 270
Phe Gln Phe Leu Cys Gly Ile Val Ser Pro Gly Thr Arg Lys Tyr Ala
275 280 285
Leu Ile Leu Arg Ala Leu Glu Leu Pro Ile Ala Thr Val Phe Trp Thr
290 295 300
Ile Val Ser Leu Val Thr Phe Leu Pro Val Met Thr Tyr Asn Pro Glu
305 310 315 320
Lys Lys Arg Thr Gly Asp Thr Ser Thr Lys Pro Trp Glu Lys Ser Val
325 330 335
Lys Asn Ile Leu Phe Ala Leu Phe Val Cys Ser Leu Ile Leu Leu Ala
340 345 350
Glu Lys Phe Leu Val Gln Leu Ile Ser Ile Ser Tyr His Arg Lys Gln
355 360 365
Phe Asp Leu Lys Ile Lys Glu Ser Lys Arg Asn Ile Glu Leu Ile Gly
370 375 380
Gln Leu Tyr Asp Ala Ser Arg Asn Met Phe Pro Met Tyr Cys Lys Glu
385 390 395 400
Phe Arg Glu Glu Asp Leu Ile Ile Ser Asp Ser Leu Leu Thr Ala Ala
405 410 415
Thr Ala Lys Gly Pro Ile His Ser Arg Ser Ser Ser Ser Met Pro Leu
420 425 430
Arg Leu Ile Arg Asn Val Gly His Asn Val Gly Arg Phe Gly Asp Arg
435 440 445
Val Thr Ala Ala Phe Gly Gly Val Ala His Glu Ile Thr Gly Lys Glu
450 455 460
Val Phe Asn Pro Thr Ser Val Arg Gly Ile Val Thr Gln Ala Leu Glu
465 470 475 480
Arg Arg Lys Pro Ala Glu Ala Leu Ala Arg Arg Ile Trp Met Ser Leu
485 490 495
Val Ile Glu Gly Arg Asp Ala Leu Tyr Pro Asp Asp Ile Pro Glu Val
500 505 510
Leu Gly Ala Gly Lys Glu Met Ile Ala Glu Glu Cys Phe His Met Leu
515 520 525
Asp Arg Asp Gly Asn Gly Asp Ile Ser Leu Asp Glu Met Val Met Val
530 535 540
Val Gly Glu Ile Gly Arg Asn Arg Lys Ala Leu Asn Asn Ser Met Tyr
545 550 555 560
Asp Val Asp Gln Ala Ile His Val Leu Asp Asn Leu Leu Leu Thr Val
565 570 575
Ala Gly Ile Ile Ala Val Leu Val Phe Ile Ser Phe Val Thr Ser Gly

```
            580                 585                 590
Phe Gly Thr Val Ile Ala Ala Gly Ala Thr Ser Leu Leu Ser Leu Ser
        595                 600                 605
Phe Val Phe Ala Thr Thr Ala Gln Glu Val Leu Gly Ser Cys Ile Phe
    610                 615                 620
Leu Phe Val Lys His Pro Phe Asp Ile Gly Asp Arg Val Glu Ile Ser
625                 630                 635                 640
Asp Lys Asp Tyr Met Val Glu Arg Ile Ser Leu Leu Tyr Thr Val Phe
                645                 650                 655
Lys Ser Val Thr Asp Gln Arg Val Thr Gln Val Pro Asn Val Val Leu
            660                 665                 670
Asn Thr Leu Trp Val Asp Asn Phe Thr Arg Ser Asn Ala Met His Glu
        675                 680                 685
Thr Leu Lys Ile Pro Val Ser Phe Asp Thr Thr Phe Ala Asp Ile Gln
    690                 695                 700
Leu Leu Arg Asp Glu Met Glu Arg Phe Val Arg Asp Lys Glu Asn Tyr
705                 710                 715                 720
Arg Asp Phe Gln Pro Asp Val Asp Leu Asp Val Val Gly Val Gly Asp
                725                 730                 735
Met Asp Lys Leu Glu Leu Thr Val Ser Ile Arg His Lys Ser Asn Trp
            740                 745                 750
Ala Asn Glu Ser Ile Arg Ala Met Arg Arg Ser Lys Phe Met Cys Ala
        755                 760                 765
Leu Val Ser Ala Val Arg Lys Ile Pro Ile Arg Ala Pro Gly Ala Ala
    770                 775                 780
Ala Glu Asp Ala Ala Gly Asp Ser Glu Asn Lys Asp Asp Lys Asp Asp
785                 790                 795                 800
Thr Asn Asp Lys Pro His Lys Pro Asp Ala Asp Asn Ala Glu Gln Asn
                805                 810                 815
Tyr Phe Thr Arg Ile Val Ser Gly Arg
            820                 825
```

<210> 34812
<211> 84
<212> PRT
<213> A.fumigatus

<400> 34812

```
Pro Ser Ala Ser Ala Ile Asn Pro Thr Gly Leu Thr Ser Arg Ser Val
1               5                   10                  15
Pro Cys Val Gly Pro Asn Ser Cys Val Pro Trp Ser Ala Pro Cys Ala
            20                  25                  30
Arg Phe Pro Ser Ala Leu Leu Val Leu Leu Arg Lys Thr Pro Pro Ala
        35                  40                  45
Thr Ala Arg Thr Arg Thr Thr Arg Thr Thr Pro Met Thr Ser Leu Thr
    50                  55                  60
Ser Leu Thr Pro Ile Thr Gln Ser Arg Thr Thr Ser Arg Gly Ser Ser
65                  70                  75                  80
Pro Ala Gly Ser
```

<210> 34813
<211> 486
<212> PRT
<213> A.fumigatus

<400> 34813

```
Asp Phe Ser Cys Leu Pro Ile Thr Leu Tyr Val His Leu Lys Trp Ile
1               5                  10                  15
Lys Ile Asn Glu Thr Ser Arg Pro Arg Thr Pro Thr Asn Ser Gly Val
            20                  25                  30
Ser Pro Arg Glu Cys Ile Lys Arg Leu Ser Phe Ser Glu Arg Lys Ser
        35                  40                  45
Ser Glu Gln Ala Thr Asp Pro Gln Ser Ser Cys Ser Gly Leu Tyr Tyr
    50                  55                  60
Leu Leu Pro Cys Arg Asp Thr Leu Val Cys Ile Leu Ile His Gln Asp
65                  70                  75                  80
Asp Ile Gly Leu Thr Arg Ser Ala Leu Gly Leu Ala Val Thr Ala Ser
                85                  90                  95
Ser Ile Thr Ile Ser Pro Ser Pro Thr Ser Glu Pro Ser Thr Thr Ser
            100                 105                 110
Gly Gln Trp Leu Ile Ile Ser Gly Thr Ser Ile Phe Trp Pro Thr Tyr
        115                 120                 125
Thr Asp Tyr Phe Tyr Gly Pro Thr Thr Gly Pro Glu Ala Pro Val Val
    130                 135                 140
Thr Cys Asn Ala Lys Trp Val Glu Tyr Tyr Gly Arg Ser Asp Gly Leu
145                 150                 155                 160
Arg Ser Leu Gly Pro Thr Gly Thr Ser Ile Thr Phe Asp Pro Tyr Pro
                165                 170                 175
Thr Ser Gly Gly Ala Cys Arg Thr Ser Ser Ser Leu Glu Gly Tyr Ser
            180                 185                 190
Asp Thr His Thr Gly Pro Val Thr Thr Leu Cys Asp Gly Ile Pro Arg
        195                 200                 205
Ala Leu Gly Pro Arg Glu Met Val Thr Ser Tyr Tyr Pro Gly Thr Gly
    210                 215                 220
Pro Cys Ser Thr Tyr Thr Ile Thr Phe Thr Asp Thr Val Glu Leu Tyr
225                 230                 235                 240
Arg Glu Pro Pro Thr Pro Asp Cys Glu Leu Asn Thr Gln Glu Cys Ile
                245                 250                 255
Pro Ile Trp Ser Thr Tyr Ser Glu Leu Ser Ser Ser Phe Asp Ala Thr
            260                 265                 270
Ala Thr Thr Val Thr Pro Gly Asp Thr Lys Ser Pro Ile Pro Pro Asp
        275                 280                 285
Gly Cys Pro Ser Thr Thr Arg Thr Tyr Pro Glu Asp Pro Cys Thr Ala
    290                 295                 300
Cys His Phe Leu Pro Gly Thr Ala Thr Val Phe Tyr Trp Pro Val Thr
305                 310                 315                 320
Thr Ala Gly Gly Asp Leu Cys Leu Gln Asn Gly Thr Thr Ile Pro Ala
                325                 330                 335
Thr Pro Thr Gly Asn Gly Pro Asn Thr Ala Val Val Asn Gly Gln Thr
            340                 345                 350
Phe Val Ser Pro Ser Ile Tyr Val Ser Phe Thr Ser Ile Tyr Ala Trp
        355                 360                 365
Ser Asn Arg Arg Ala His Pro Gly Ser Gln Cys Gly Asp Thr His Asn
    370                 375                 380
Asp Ala Ile Ile Ala Val Asp Pro Ala Ser Val Ser Ser Val Arg Asn
385                 390                 395                 400
His Arg Asn Ala Lys Tyr Pro Thr Ile Gly Thr Ala Tyr Pro Phe Asn
                405                 410                 415
Phe Ala Glu Phe Met Pro Gln Asp Val Gly Asn Tyr Thr Met Pro Leu
            420                 425                 430
Ile Pro Trp Pro Gln Tyr Arg Gly Gly Ser Gln Cys Pro Leu Tyr Asp
```

```
        435                 440                 445
Pro Ser Cys Thr Met Ile Arg Asp Asp Tyr Met Pro Leu Pro Gly Cys
    450                 455                 460
Ser Gln Ala Phe Arg Gln Ile Asp Pro Leu Trp Asp His Gly Asp Ala
465                 470                 475                 480
Pro Trp Tyr Ser Pro Leu
                485
```

<210> 34814
<211> 521
<212> PRT
<213> A.fumigatus

<400> 34814

```
Leu Glu Thr Gln Trp Ser Thr Ser Gln Ser Ser Arg Tyr Ser Pro Arg
1               5                  10                  15
His Ser Val Leu Tyr Leu Asp Leu Cys Tyr Ser Pro Lys Thr Ala Ala
            20                  25                  30
Ala Met Ala Ser Asp Leu Thr Asn Ser Ile Leu Asp Ala Leu Ser Ala
        35                  40                  45
Ser Asp Gly Pro Ile Leu Ser Asp Lys Ala Phe Pro Ser Thr Pro Ser
    50                  55                  60
Leu Asp Leu Lys Ser Ala Leu Asp Arg Leu Ala Ser Arg Ser Met Ile
65                  70                  75                  80
Glu Tyr Glu Arg Met Glu Arg Glu Ala Ile Ala Leu Thr Gln Glu Gly
                85                  90                  95
Glu Glu Ile Ala Ala Asn Gly Ser His Glu Ala Lys Val Phe Gln Ala
            100                 105                 110
Val Leu Ala Ala Met Asp Gly Leu Lys Ile Gly Asp Leu Pro Gly Ile
        115                 120                 125
Val Gly Lys Glu Asn Ala Lys Val Gly Gln Gly Asn Ala Phe Lys Lys
    130                 135                 140
Gly Trp Ile Lys Lys Asp Lys Asp Val Leu Arg Pro Asn Thr Glu Ser
145                 150                 155                 160
Ile Val Asp Glu Thr Gln Glu Gln Leu Leu Thr Val Lys Asn Thr Gln
                165                 170                 175
Thr Leu Ser Asp Gln Lys Ala Val Ala Asp Leu Lys Arg Arg Lys Leu
            180                 185                 190
Ile Ala Leu Gln Lys Val Phe Thr Phe Arg Ile Ser Lys Gly Pro Lys
        195                 200                 205
Phe Ala Lys Glu Phe Val Lys Glu Glu Thr Asp Leu Thr Pro Glu Met
    210                 215                 220
Leu Ala Asn Gly Ser Trp Lys Thr Val Thr Leu Lys Pro Tyr Asn Phe
225                 230                 235                 240
Lys Ala Lys Gly Ala Pro Thr Pro Ala Gly Ala Phe His Pro Leu Asn
                245                 250                 255
Lys Val Arg Gln Glu Phe Arg Asn Ile Phe Phe Glu Met Gly Phe Glu
            260                 265                 270
Glu Met Pro Thr Asn Arg Phe Val Glu Thr Gly Phe Trp Asn Phe Asp
        275                 280                 285
Ala Leu Tyr Val Pro Gln Gln His Pro Ala Arg Asp Leu Gln Asp Thr
    290                 295                 300
Phe Tyr Ile Ser Asp Pro Ala Thr Ala Asp Pro Pro Arg Glu Asp Pro
305                 310                 315                 320
Leu Asn Asp Pro His Arg Leu Lys Ser Val His Pro Ala Ser Val Val
                325                 330                 335
```

```
Ser Ser Glu Lys Pro Leu Asp Tyr Lys Glu Tyr Trp Glu Asn Val Arg
            340                 345                 350
Gln Val His Glu Asn Gly Lys Tyr Gly Ser Ile Gly Tyr Arg Tyr Pro
        355                 360                 365
Trp Asn Ala Asp Glu Ala Leu Arg Leu Val Leu Arg Thr His Thr Thr
    370                 375                 380
Ser Val Ser Thr Tyr Val Leu His Lys Leu Ala Ala Asn Pro Arg Pro
385                 390                 395                 400
Ala Arg Tyr Phe Ser Ile Asp Arg Val Phe Arg Asn Glu Ala Val Asp
                405                 410                 415
Ala Thr His Leu Ala Glu Phe His Gln Ile Glu Gly Val Ile Ala Asp
            420                 425                 430
Phe Gly Leu Thr Leu Gly Gly Leu Ile Gly Phe Met Glu Val Phe Phe
        435                 440                 445
Ala Lys Met Gly Ile His Gln Leu Arg Phe Lys Pro Ala Tyr Asn Pro
    450                 455                 460
Tyr Thr Glu Pro Ser Met Glu Ile Phe Gly Tyr His Lys Gly Leu Gly
465                 470                 475                 480
Lys Trp Val Glu Ile Gly Asn Ser Gly Met Phe Arg Pro Glu Met Leu
                485                 490                 495
Glu Pro Met Gly Ile Pro Arg Asp Met Arg Val Tyr Gly Trp Gly Leu
            500                 505                 510
Ser Leu Glu Arg Pro Thr Met Ile Lys
        515                 520
```

<210> 34815
<211> 78
<212> PRT
<213> A.fumigatus

<400> 34815

```
Pro Tyr Val Pro Arg Lys Cys Ser Ala Thr Asn Arg Ile Ile Lys Ala
1               5                   10                  15
Asn Asp His Ala Ser Val Gln Ile Ser Ile Gly Lys Val Asp Glu Asn
            20                  25                  30
Gly Arg Tyr Thr Gly Glu Asn Gln Ser Tyr Ala Leu Cys Gly Phe Ile
        35                  40                  45
Arg Ala Arg Gly Glu Ser Asp Asp Ser Leu Asn Arg Leu Cys Gln Arg
    50                  55                  60
Asp Gly Tyr Ile Arg Asn Val Trp Ser Ala Ser Arg Gln Arg
65                  70                  75
```

<210> 34816
<211> 77
<212> PRT
<213> A.fumigatus

<400> 34816

```
Cys Tyr Ser Leu Pro Cys Asn Ile Ser Leu His Ile Leu His Leu Val
1               5                   10                  15
Leu Leu Gln Ser His Asp Arg Val Gly Leu Asp Glu Val Lys Val Asp
            20                  25                  30
Phe Val Thr Glu Lys Leu Ser Asn Ile Ala His Ser Val Ser Ala Lys
        35                  40                  45
Lys Glu Thr Ser Val His Gly Leu Lys Gly Lys Tyr Gly Arg Thr His
    50                  55                  60
```

```
Leu Ile Met Val Gly Leu Ser Arg Leu Asn Pro His Pro
65                  70                  75

<210> 34817
<211> 300
<212> PRT
<213> A.fumigatus

<400> 34817
Thr Thr Leu Ser Gly Phe Lys Ser Leu Thr Gln Ala Gln Leu Leu Ser
1               5                   10                  15
Asp Ala Leu Tyr Tyr Thr Pro Ser Thr Asp Ser Gln Pro Trp Leu Ile
            20                  25                  30
Tyr Tyr Ile Ser Arg Pro Leu Ile Gly Leu Phe Asp Pro Gly Lys Val
        35                  40                  45
Ile Ser Ala Val Val Pro Gly Ser Leu Pro Gln Arg Val Val Thr Asn
    50                  55                  60
Thr Gly Ala Lys Ser Gly Asp Ser Thr Thr Ser Leu Pro Lys Lys Glu
65                  70                  75                  80
Ile Lys Ser Phe Gly Glu Leu Leu Ala Asn Phe Pro Met Ile Ala Arg
                85                  90                  95
Gln Met Gln Pro Gly Leu Asp Arg Leu Phe Arg Glu Phe Gly Lys Glu
            100                 105                 110
Leu Gly Lys Pro Leu Pro Pro Pro Pro Ser Arg Ser Pro Ser Ile Pro
        115                 120                 125
Asp Gly Tyr Glu Arg Lys Glu Asp Arg Asp Glu Ser Ser Ala Asp Glu
    130                 135                 140
Val Ala Ser Ile Arg Ser Ala Ser Ser Arg Asn Arg Asp Gly Leu Pro
145                 150                 155                 160
Phe Asn Ser Glu Glu Tyr Phe Glu Asp Asp Glu Asp Leu Met Arg Arg
                165                 170                 175
Ser Leu Glu Thr Ala Val Thr Ala Ala Ile Asp Leu Phe Arg Leu Val
            180                 185                 190
Asp Lys Gln Gln Leu Ser Phe Leu Gly Ala Thr Thr Asp Leu Thr Gly
        195                 200                 205
Pro Leu Val Gln Arg Leu Ile Glu Arg Tyr Val Ala Glu Gln Val His
    210                 215                 220
Glu Ser Leu Leu Phe Pro Arg Leu Cys Ser Phe Arg Gln Pro Glu Asp
225                 230                 235                 240
Ala Glu Leu Asp Ser Arg Ile Arg His Met Glu Asn Leu Asp Val Ser
                245                 250                 255
Gln Val Gly Ile Ala Val Glu Gly Gly Arg Glu Gly Lys Arg Glu Leu
            260                 265                 270
Leu His Arg Leu Gly Arg Ala Val Glu Glu Phe Arg Lys Met Thr Asp
        275                 280                 285
Ala Lys Cys Pro His Asp Met Leu Asn Thr Leu Leu
    290                 295                 300

<210> 34818
<211> 139
<212> PRT
<213> A.fumigatus

<400> 34818
Gly Gly Asp Ala Cys Pro Ser Ser Pro Ala Val Lys Thr Ala Ser Gly
1               5                   10                  15
```

```
Val Pro Glu Glu Arg Val Leu Thr Phe Ala Arg Arg Ala Ala Ala Leu
            20                  25                  30
Ile Gly Leu Asp Ala Glu Lys Asp Ile Ser Met Asp Asp Val Arg Leu
        35                  40                  45
Asp Asp Arg Phe Ala Gly Thr Ala Tyr Gly Val Leu Asp Ala Gln Thr
    50                  55                  60
Ser Thr Ala Leu Asp Leu Met Ala Lys Lys Glu Ala Val Met Leu Asp
65                  70                  75                  80
Pro Val Tyr Thr Ser Lys Val Val Arg Gly Leu Leu His Trp Val Gln
                85                  90                  95
Gln Glu Glu Leu Ala Lys Asp Trp Ser Leu Arg Leu Gly Asp Arg Glu
            100                 105                 110
Arg Pro Asp Cys Met Asn Val Leu Phe Ile His Thr Gly Gly Gln Ala
        115                 120                 125
Ala Leu Gly Ala Tyr Ala Asp Met Val Glu Leu
    130                 135
```

<210> 34819
<211> 375
<212> PRT
<213> A.fumigatus

<400> 34819

```
Phe Arg Arg Tyr His Gly Lys Cys Leu Lys Ile Ala Arg Gly Lys Val
1               5                   10                  15
Lys Glu Phe Asp Lys Tyr Thr Cys Pro Ile Cys Asp Trp Arg Gln Lys
            20                  25                  30
Ile Pro Arg Asp Ala Ala Arg Pro Lys Leu Glu Asp Leu Gln Asp Trp
        35                  40                  45
Gln Ala Glu Ile Pro Ser Leu Pro Phe Gln Pro Asp Glu Glu Gln Val
    50                  55                  60
Leu Glu Asn Ile Ile Asn Gln Ala Thr Thr Phe Arg Asp Phe Ile Gln
65                  70                  75                  80
Ser Phe Thr Asn Ala Ala Cys Thr Thr Thr Glu Glu Val Pro Thr Leu
                85                  90                  95
Ile Phe Tyr Leu Arg Lys Ile Glu Gly Ala Glu Val Leu Leu Ala Tyr
            100                 105                 110
Glu Thr Asn Phe Phe Arg Gln Glu Ile His Lys Trp Ala Pro Val Ala
        115                 120                 125
Pro Glu Pro Pro Pro Ile Leu Glu Gln Ser Leu Ser Thr Arg Lys Pro
    130                 135                 140
Arg Pro Thr Lys Gln Gln Lys Ile Met Ala Gln Leu Gly Val Glu Arg
145                 150                 155                 160
Pro Glu Asp Leu Pro Pro His Leu Arg Thr Lys Gln Pro Asn His Ala
                165                 170                 175
Lys Arg Lys Ser Leu Glu Ser Gln Thr Pro Arg Pro Ala Thr Leu Gln
            180                 185                 190
Arg Thr Ser His Thr Pro Cys Glu Asp Ser Asn Arg Thr Gly Pro Ala
        195                 200                 205
Leu Thr Pro Met Thr Glu Ala Gln Asn Pro Pro Tyr Pro Phe Ser Ala
    210                 215                 220
Asn Tyr Ser Leu Pro Ala Ser Asp Ser Thr Pro Ala Phe Ala Pro Gly
225                 230                 235                 240
Ala Ser Ala Phe Leu Pro His Val Ser Ala His Ser Pro Ser Phe Pro
                245                 250                 255
Pro Arg Ser Pro Ser Pro His His Gly Leu Asp Ser Ala Leu Phe Ser
```

```
            260                 265                 270
Ser Pro Arg Phe Asn Arg Asp Pro Thr Glu Gly Pro Pro Val Val Asp
        275                 280                 285
Val Asp Asn Gln Asp Pro Phe Asn Ser Ser Pro Arg Gln Asn Leu Asp
    290                 295                 300
Asp Val Phe Ala Asp Leu Thr Asn Gln Asp Ala Glu Pro Glu Pro Glu
305                 310                 315                 320
Pro Glu Pro Met Glu Asn Thr His Ala Asn Glu Ala Leu Glu Ala Leu
                325                 330                 335
Asp Ala Ser Asn Gly Gly Asp His Ser Asp Ala Met Gln Asp Asp Asn
            340                 345                 350
Ser Pro Asp Thr Gly Val Asn Gly Asp Met Asn Gly Gln Ala Asp Ala
        355                 360                 365
Glu Asn Thr Thr Glu Ser Ser
    370                 375

<210> 34820
<211> 396
<212> PRT
<213> A.fumigatus

<400> 34820
Phe Gly Pro Leu Ile Leu Ala Pro Leu Ser Glu Ile Tyr Gly Arg Arg
1               5                   10                  15
Ile Val Leu Ser Phe Ala Asn Trp Phe Phe Val Val Trp Leu Val Gly
            20                  25                  30
Cys Ala Leu Ala Pro Asn Ile Glu Ser Leu Ile Val Phe Arg Phe Leu
        35                  40                  45
Cys Gly Ile Gly Gly Cys Gly Cys Ile Thr Leu Gly Ala Gly Leu Ile
    50                  55                  60
Ala Asp Leu Phe Pro Val Glu Gln Arg Gly Met Ala Thr Ser Ile Trp
65                  70                  75                  80
Ser Leu Gly Pro Leu Val Gly Pro Val Ala Gly Pro Ile Cys Ala Gly
                85                  90                  95
Phe Ile Gly Glu Ser Ile Gly Trp Arg Trp Ile Phe Trp Ile Leu Leu
            100                 105                 110
Ile Ala Ser Gly Ala Ile Ser Phe Gly Ile Glu Cys Leu Asn Arg Glu
        115                 120                 125
Thr Cys Ala Pro Val Leu Ile Arg Trp Lys Thr Ala Lys Leu Ala Lys
    130                 135                 140
Glu Leu Gly Arg Thr Asp Leu His Ser Ala Tyr Glu Pro Asp Gly Gln
145                 150                 155                 160
Gly Val Ser Val Ala Ser Thr Leu Lys Leu Gly Leu Met Arg Pro Leu
                165                 170                 175
Gln Leu Phe Phe Lys Ser Pro Ile Val Phe Leu Leu Ser Ile Tyr Met
            180                 185                 190
Ser Leu Thr Tyr Gly Leu Leu Tyr Leu Phe Phe Thr Thr Ile Pro Ser
        195                 200                 205
Val Phe Gln Lys Gln Tyr Gly Phe Ser Thr Gly Leu Ser Gly Leu Ala
    210                 215                 220
Tyr Leu Gly Ile Gly Ile Gly Phe Phe Val Gly Leu Ala Leu Ile Ala
225                 230                 235                 240
Phe Thr Asn Asp Arg Ile Leu Met Lys Leu Thr Ala Lys Asn Gly Gly
                245                 250                 255
Lys Ser Glu Pro Glu Met Arg Leu Pro Thr Met Ile Phe Phe Ser Cys
            260                 265                 270
```

```
Phe Leu Pro Val Ser Phe Phe Trp Tyr Gly Trp Ser Ala Ala Lys Lys
        275                 280                 285
Ala His Trp Ile Val Pro Ile Ile Gly Met Cys Pro Phe Gly Ile Ser
    290                 295                 300
Leu Met Gly Leu Phe Met Pro Ile Gln Thr Tyr Val Ile Asp Cys Tyr
305                 310                 315                 320
Pro Ala Tyr Ala Ala Ser Ala Asn Ala Ile Leu Thr Ala Thr Arg Ser
                325                 330                 335
Leu Val Gly Ala Leu Val Pro Leu Ala Gly Pro Ser Met Phe Asn Ser
            340                 345                 350
Leu Gly Leu Gly Trp Gly Asn Ser Leu Leu Gly Phe Leu Ala Leu Ala
        355                 360                 365
Phe Val Pro Ile Pro Ile Leu Phe Thr Arg Tyr Gly Lys Ala Ile Arg
    370                 375                 380
Glu Lys Phe Pro Val Asn Phe Asp Gly Lys Lys Ala
385                 390                 395
```

<210> 34821
<211> 102
<212> PRT
<213> A.fumigatus

<400> 34821

```
Arg Arg Phe Pro Glu Thr Asn Leu Ser Arg Gly Ile Val Gly Trp Asp
1               5                   10                  15
Gly Gln Asn Asp Pro Ala Asn Pro Gln Asn Phe Ser Ala Gly Gln Lys
            20                  25                  30
Trp Gly Leu Leu Ala Leu Met Ser Ser Ile Thr Phe Leu Ser Pro Leu
        35                  40                  45
Ala Ser Ser Met Phe Ala Pro Ala Ala Ser Tyr Val Ala Val Asp Leu
    50                  55                  60
Gly Val Thr Asn Glu Thr Leu Leu Ser Phe Ser Val Thr Ile Phe Leu
65                  70                  75                  80
Leu Gly Tyr Thr Val Arg Ile Arg Pro Ile Tyr Ile Trp Leu Arg Ser
                85                  90                  95
Thr Gln Asn Lys Glu Ala
            100
```

<210> 34822
<211> 87
<212> PRT
<213> A.fumigatus

<400> 34822

```
Ile Gly Met Asn Lys Pro Ile Asn Glu Met Pro Lys Gly His Met Pro
1               5                   10                  15
Ile Ile Gly Thr Ile Gln Cys Ala Phe Leu Ala Ala Asp His Pro Tyr
            20                  25                  30
Gln Lys Lys Leu Thr Gly Lys Lys Gln Glu Lys Lys Ile Met Val Gly
        35                  40                  45
Lys Arg Ile Ser Gly Ser Asp Leu Pro Pro Phe Phe Ala Val Asn Phe
    50                  55                  60
Ile Lys Ile Leu Ser Phe Val Lys Ala Met Ser Ala Arg Pro Thr Lys
65                  70                  75                  80
Lys Pro Met Pro Met Pro Arg
                85
```

<210> 34823
<211> 177
<212> PRT
<213> A.fumigatus

<400> 34823
Ile Glu Ser Arg Asn Thr Met Gly Asp Leu Lys Asn Ser Cys Lys Gly
1 5 10 15
Arg Ile Arg Pro Ser Phe Arg Val Asp Ala Thr Asp Thr Pro Trp Pro
20 25 30
Ser Gly Ser Tyr Ala Leu Cys Lys Ser Val Arg Pro Ser Ser Leu Ala
35 40 45
Ser Leu Ala Val Phe His Arg Ile Ser Thr Gly Ala His Val Ser Arg
50 55 60
Phe Arg His Ser Ile Pro Asn Glu Met Ala Pro Leu Ala Ile Ser Arg
65 70 75 80
Ile Gln Lys Ile Gln Arg Gln Pro Ile Asp Ser Pro Ile Lys Pro Ala
85 90 95
Gln Ile Gly Pro Ala Thr Gly Pro Thr Ser Gly Pro Lys Leu Gln Ile
100 105 110
Asp Val Ala Ile Pro Arg Cys Ser Thr Gly Asn Arg Ser Ala Met Arg
115 120 125
Pro Ala Pro Arg Val Met Gln Pro Gln Pro Pro Ile Pro His Lys Asn
130 135 140
Arg Asn Thr Met Arg Asp Ser Met Leu Gly Ala Arg Ala His Pro Thr
145 150 155 160
Ser Gln Thr Thr Lys Asn Gln Leu Ala Lys Leu Ser Thr Ile Leu Arg
165 170 175
Pro

<210> 34824
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34824
Met Leu Val Ser Ser Pro Leu Ile Thr Leu Phe Leu Gly Asn Lys Ser
1 5 10 15
Asp Ser Gly Pro Glu Val Thr Asp Gly Gly Thr Met Val Leu Tyr Pro
20 25 30
Val Val Gly Glu Leu Cys Ile Ile Ile Ala Ala Ser His Lys Val Lys
35 40 45
Asn Gln Ala Asn Leu Thr Val Phe Gly Ser Trp Ser Glu Ala Ser Gly
50 55 60
Thr
65

<210> 34825
<211> 482
<212> PRT
<213> A.fumigatus

<400> 34825
Gln Gln Leu His Arg Val Ile Ala Ala Ala Gln Val Trp Asn Pro Val

```
1               5                  10                  15
Asn Ser Leu Leu Asp Glu Phe Gln Asn Phe Met Ala Lys Lys Gly Ser
            20                  25                  30
Leu Ala Glu Ala Thr Gly Ile Arg Ser Val Ala Arg Arg Tyr Leu Asp
        35                  40                  45
Arg Leu Glu Ala Val Phe Ala Arg Asp Ile Ser Ser Glu Ser Gly His
    50                  55                  60
Cys Met Met Cys Asp His Asp Glu Met Glu Glu Arg Pro Ser Gly Val
65                  70                  75                  80
Ser Trp Gly Glu Val Leu Glu Leu Val Ser Gly Arg Arg Glu Leu Leu
                85                  90                  95
Ser Trp Pro Pro Phe Met Met Val Pro Ser Val Glu Ala Asp Ile Ser
            100                 105                 110
Gly Asp Glu His Ile Pro Met Gln Lys Met Asp Ile Asp Val Pro Glu
        115                 120                 125
Glu Tyr Arg Asp His Tyr Leu Arg Gln Ser Arg Lys Thr Lys Ala Ala
    130                 135                 140
Val Asp Lys Trp Leu Asn Glu Gln Val Ala Gln Pro Thr Ser Ala Pro
145                 150                 155                 160
Glu Glu Val Asp Asp Glu Thr Leu Thr Phe Ala Met Leu Thr His Leu
                165                 170                 175
Gly Pro Glu Leu Arg Pro Leu Phe Cys Ser Leu Leu Gly Ile Thr Ser
            180                 185                 190
Thr Ser Thr Pro Thr Pro Arg Thr Asp Asp Gln Leu Pro Arg Ala Lys
        195                 200                 205
Pro Gln Ala Leu Val Ser Ser Ser Ile Ala Ile Gln Arg Leu Tyr Arg
    210                 215                 220
Leu Ser Thr Leu Pro Arg Asp Pro Glu Thr Ala Ile Tyr Met Leu Asn
225                 230                 235                 240
Asn Pro Gly Ile His His Val Leu Ala Thr Leu Ala Ala Ile Ser Asp
                245                 250                 255
Asp Glu Trp Asp Ile Leu Ile Ser Gly Arg Phe Asp Gly Phe Leu Arg
            260                 265                 270
Ser Gly Ala Glu Asp Pro Ile Pro Gly Ile Pro Gly Ala Thr Pro Thr
        275                 280                 285
Arg Trp Ser Ser Ser Arg Ser Asn Thr Pro Phe Thr Thr Gly Gly Met
    290                 295                 300
Ser Arg Gly Pro Thr Pro Ser His Met Glu Gly Gly Val Arg Pro Ala
305                 310                 315                 320
Ser Gln Pro Tyr Gly Val Asn Ser Pro Ser Pro Ala Ser Phe Gly Gly
                325                 330                 335
Pro Ile Ala Leu Asp Glu Glu Thr Glu Ile Ala Ala Leu Ala Glu Ile
            340                 345                 350
Glu Arg Glu Ile Phe Leu Gly Met Glu Ala Leu Glu Asp Ala Phe Glu
        355                 360                 365
Ala Leu His Cys Lys Ala Glu Ala Val Arg Arg Thr Leu Arg Glu Arg
    370                 375                 380
Gly Ala Gly Leu Ser Ile Ala Asn Gln Asn Arg Arg Gly Ser Tyr Val
385                 390                 395                 400
Glu Ala Arg Leu Gly Thr Pro Ser Ser Ala Leu Gly Thr Trp Glu Ser
                405                 410                 415
Gly Thr Glu Asp Asp Gly Ile Asp Asp Asp Arg Ser Leu Ala Pro Asp
            420                 425                 430
Asp Ser Ala Ser Asn Ile Ser Ser Asn Arg Arg Arg Arg Pro Lys Arg
        435                 440                 445
Arg Thr Glu Arg Arg Thr Pro Ala Pro Val Glu Glu Glu Asp Glu Glu
```

```
    450                 455                 460
Glu Glu Glu Ser His Pro Ser Arg Arg Asp Arg Asp Arg Gly Ser Arg
465                 470                 475                 480
Arg Arg
```

<210> 34826
<211> 133
<212> PRT
<213> A.fumigatus

<400> 34826

```
Cys Lys Cys Asp Trp Gly Glu Ser Ser Ala Trp Gly Tyr Phe Leu Ser
1               5                  10                  15
Thr Gln Tyr Gln Gly Ser Gln Pro Gln Asn Trp Ala Ser Ala Arg Ile
            20                  25                  30
Tyr His Met Asn Asn Asn Asn Asn Lys Arg Val Ala Leu Pro Gln Asp
        35                  40                  45
Pro Asn Thr Pro Ile Glu Asp Glu Pro Pro Phe Gly Ser Thr Asp Pro
    50                  55                  60
Trp Leu Met Pro Gly Ala Pro Gly Ser Leu Val Ala Val Met Val Gln
65                  70                  75                  80
Ser Val Ile Leu Trp Asn Ala Ser Leu Thr Asp Gly Thr Asp Thr Pro
                85                  90                  95
Thr Thr Ser Gly Leu Pro Trp Leu Arg Ala Cys Ser Gln Ser Met Glu
            100                 105                 110
Arg Ser Ser Leu Val Ser Ser Leu Ala Ser Lys Glu Asn Gly Ile Arg
        115                 120                 125
Gln Trp Arg Thr Pro
    130
```

<210> 34827
<211> 293
<212> PRT
<213> A.fumigatus

<400> 34827

```
His Phe Leu Ser Ser Phe Ala Ala Asn Gly Lys Thr Glu Gln Pro Arg
1               5                  10                  15
Met Phe Ala Gln Pro Phe Asp His Ala Phe Asn Asp Leu Phe Ser Gln
            20                  25                  30
Tyr Val Asp Met Asp Ser Ser Met Val Asp Gly Asn Lys Asp Val Ser
        35                  40                  45
Ile Pro Ser Asp Phe Asp Gln Ile Phe Ser Leu Asp Ser Leu Ser Ser
    50                  55                  60
Asp Cys Gly Asp His Ser Pro Pro Val Pro Thr Lys Pro Thr His Gln
65                  70                  75                  80
Ser Pro Gln Pro Trp Ala Thr Asp Leu Trp Ser Leu Pro Gln Asp Ala
                85                  90                  95
Ala Ser Ser Ala Ser Gln Cys Ser Phe Thr Phe Gln Asp Thr Val His
            100                 105                 110
Pro Ser Ala Val Ser Asp Leu Ser Phe His Leu Glu Ala Pro Pro Thr
        115                 120                 125
Ser His Pro Val Pro Ala Val Thr Cys Lys Ala Ser Ser Arg Ser Pro
    130                 135                 140
Ser Thr Pro Pro Ala Thr Pro His His Lys Ser Thr Lys Ser Ala Leu
```

```
145                 150                 155                 160
Val Thr Pro Lys Ser Ile Arg Arg His Arg Asp Ser His Glu Arg Lys
                165                 170                 175
Leu Leu Arg Lys Gln Ser Phe Ser Pro Ser Leu Met Arg Pro Ser Gln
            180                 185                 190
Leu Gln Ala Gly Arg Met Met Tyr Pro Glu Ala Trp Ala Gln Arg Phe
        195                 200                 205
Gln Asn Phe Ser Leu His Ser Ser Gly Glu His Leu Pro Leu Ser Pro
    210                 215                 220
Pro Pro Ser Asp Ile Leu Val Gln His Glu Asn Thr Pro Ala Asp Asn
225                 230                 235                 240
Val Val Thr His Met Asn His Ser Thr Glu Gly Leu Ser Arg Asn Pro
                245                 250                 255
Ala Glu Met Ala Ser His Tyr Glu Thr Gly Ile Phe Asn His Ser Pro
            260                 265                 270
Ala Ile Phe Tyr Ala Ile Thr Val Arg Gln Val Ala Asn Ala Thr Ala
        275                 280                 285
Ala Ala Gln Pro Ile
    290
```

<210> 34828
<211> 266
<212> PRT
<213> A.fumigatus

<400> 34828

```
Arg Leu Ile Pro Tyr Val Ala Ala Ser His Pro Thr Ser Lys Ala Gly
1               5                   10                  15
Leu Ile Gln Pro Thr Thr Met Pro Leu Ile Pro Asp Asp Ser Ser Leu
            20                  25                  30
Ala Ser His His Asn Ile Ser Ser Pro Pro Glu Arg Leu Val Thr Arg
        35                  40                  45
Ser Thr Pro Ala Ser Ala Ile His Ser Arg Glu Ala Ser Ala Val Arg
    50                  55                  60
Gly Arg Ala Ala Asp Pro Ser Ala Leu Ala Pro Ser Thr Leu Gln Pro
65                  70                  75                  80
Gln Asn Asn Arg Arg Gly Gln Ser His Ser Lys Ser Pro Asp Pro Thr
                85                  90                  95
Ala Ala Arg Pro Gly Ile Gly Tyr Asp Val Ser Leu Glu Arg Arg Pro
            100                 105                 110
Ser Asn Ser Tyr Gly His His Arg Gln Thr Ser Ile Val His Gly Val
        115                 120                 125
Gln His Ser Arg Asn Pro Ser Phe Ala Ala Ser Ser Asn Ser Thr Ser
    130                 135                 140
Pro Leu Ser Pro Glu Leu Ile Ala Ser Leu Gly Arg Gly Ala Gly Asn
145                 150                 155                 160
Glu Gln Glu Ile Ser Ser Ala Gly Arg Leu Asp Gln Asn Glu Met Pro
                165                 170                 175
Thr Ile His His Ser Pro Gly Gly Asn Gly Thr Ser His Ile Leu Gln
            180                 185                 190
Gly Thr Leu Ser Thr Ile Glu Asp Gln Asp Thr Gly Glu Val Gly Asn
        195                 200                 205
Ala Asn Ser Ala Ser Ser Val His Arg Arg Met Asn Ser Ala Gly Lys
    210                 215                 220
Ser Trp Lys Glu Arg Ser His Ser Arg Ser His Ser Arg Gln Gln His
225                 230                 235                 240
```

```
Ser Glu Ser Lys Thr Val Gly Glu Tyr Ala Leu His His Leu Phe Asn
                245                 250                 255
Ser Val Ser Thr Thr Phe Cys Thr Gln Arg
            260                 265

<210> 34829
<211> 96
<212> PRT
<213> A.fumigatus

<400> 34829
Leu Leu Leu Gln Phe Val Gly Gln Ala Asp Asn Lys Val Asn Gln Ala
1               5                   10                  15
Ile Met Lys Leu Gly His Ser Asp Ala Pro Val Glu Glu Val Cys Gly
            20                  25                  30
Pro Gly Val Asp Pro Asn Phe Asp Gln Leu Ile Ser Ala Leu Gly His
        35                  40                  45
Ile Ser Arg Gln Lys Pro Lys Pro Leu Ile Asp Thr Ile Met Leu Trp
    50                  55                  60
Arg Lys Ala Lys Gly Asp Ala Ala Ile Met Ala Lys Gln Ala Ser Gln
65                  70                  75                  80
Val Cys His Glu Ile Met Lys Pro Leu Val Tyr Ile Ala Leu Lys Gly
                85                  90                  95

<210> 34830
<211> 217
<212> PRT
<213> A.fumigatus

<400> 34830
Leu Val Leu Lys Gln Lys Pro Ser Thr Ser Asp Asn Val Pro Ile Ala
1               5                   10                  15
Arg Arg Asn Thr Glu Pro Ser Gln Asn Val Val Asp Ser Ala Ala Pro
            20                  25                  30
Thr Asp Ser Thr Thr Ser Ser Thr Ile Leu Thr Arg Gln Glu Asp Val
        35                  40                  45
Val Leu Ala Glu Arg Arg Ala Thr Val Ser Val Tyr Leu Val Cys Arg
    50                  55                  60
Val Leu Ile Glu Ile Phe Asn Gln Ser Asn Ile Ala Ser Ile Thr Ile
65                  70                  75                  80
Asp Met Ala Glu Arg Leu Glu Asp Ile Val Phe Gly Gln Leu Lys Thr
                85                  90                  95
Val Asp Pro Asp Gln Ile Ser Ala Ser Pro Leu Arg Met Ala Asn Trp
            100                 105                 110
Arg Ile Tyr Ser Gln Leu Leu Gly Ile Met Ser Glu Thr Asn Phe Thr
        115                 120                 125
Ser Val Thr Gly Arg Phe Leu Ala Glu Leu Glu Arg Tyr Gln Lys Glu
    130                 135                 140
Glu Met Leu Arg Gly Pro Ser Arg Glu Gly Asp Ser Arg Ala Glu Leu
145                 150                 155                 160
Leu Ile Leu Gly Met Arg His Ile Arg Ile Arg Thr Tyr Ser Asp Asn
                165                 170                 175
Trp Ser Lys Ser Cys Asp Phe Met Arg Ser Leu Ala Pro Leu Phe Gly
            180                 185                 190
Asn Ala His Gly Gln Arg Phe Lys Gln Val Thr Val Thr Phe Ser Lys
        195                 200                 205
```

```
Lys Ser Ser Trp Pro Leu Pro Pro Ile
    210                 215

<210> 34831
<211> 386
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (40),(57)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34831
Leu Ser Met Ser Pro Pro Glu Ile Asp Asp Glu Lys Lys Pro Arg Ser
1               5                  10                  15
Thr Asp Asp Ser Arg Gly Ser Ala Arg Ile Val Ser Ser Arg Glu Ser
            20                  25                  30
Lys Gln Pro Phe Pro Pro Leu Xaa Ala Asp Glu His Ala Thr Thr Met
        35                  40                  45
His Asp Ala Pro Asn Asn Ser Tyr Xaa Gly Leu Asp Asp Ser Asp Met
    50                  55                  60
Leu Ser Pro Thr Thr Asp Asp Leu Val Glu Glu Glu Glu Asp Pro Asp
65                  70                  75                  80
Phe His Ser Ser Tyr Ser Leu Asp Asn Gln Ser Phe Ser Asp Glu Ser
                85                  90                  95
Met Glu Ser Asp Glu Glu Ala Ala Glu Asp Gly Ile Ala Met His His
            100                 105                 110
Pro Phe Arg Gln Ser Ser Ser Ser Leu His Gly Pro Asn Ala Phe Ala
        115                 120                 125
Pro Pro Phe Tyr Asn Arg Pro Pro Thr Pro Leu Pro Pro Ser Pro Ser
    130                 135                 140
Leu Thr Ser Leu Leu Arg Pro Pro Phe Ser Thr Thr Thr Ser Arg Pro
145                 150                 155                 160
Thr Thr Pro Asp Ser Ser Asp Val Glu Thr Pro Asn Asp Thr Glu Ala
                165                 170                 175
Ala Val Ala Lys Ser Ala Arg Arg Ala Thr Thr Val Pro Arg Ala Ser
            180                 185                 190
Pro Lys Val Pro Thr Tyr Glu Tyr Tyr Gly Phe Val Leu Tyr Leu Ala
        195                 200                 205
Ser Ser Leu Ala Phe Cys Glu Ser Asn Pro Met Arg Cys Arg Lys Arg
    210                 215                 220
Ser Pro Ile Leu Ile Leu Pro Thr Val Ile Tyr Ile Leu Trp Ser Tyr
225                 230                 235                 240
Leu Pro Ser Pro Phe Leu His Gln Leu Gly Ile Tyr Tyr Tyr Pro Asn
                245                 250                 255
Arg Trp Trp Ser Leu Ala Ile Pro Ala Trp Leu Val Met Leu Ile Ile
            260                 265                 270
Tyr Ile Tyr Val Ala Leu Ala Ser Tyr Asn Thr Gly Tyr Leu Thr Leu
        275                 280                 285
Pro Met Asn Ser Ile Glu Asn Ile Val Asp Glu Val Ala Asn Val Ala
    290                 295                 300
Val Ile Asp Gly Lys Gly Arg Arg Arg Pro Gly Gly Ala Ala Lys Met
305                 310                 315                 320
Lys Pro Gly Ala Thr Ser Tyr Gln Ile Met Gly Pro Gln Asn Arg Lys
                325                 330                 335
```

```
Val Asn Trp Lys Asp Ile Trp Ser Glu Gly Thr Asp Ala Val Met Asp
            340                 345                 350
Val Pro Val Gly Gly Val Cys Glu Val Leu Tyr Gly Gln Glu Arg Asp
        355                 360                 365
Asp Gly Glu Leu Ser Asp Gly His Thr Gly Phe Ala Pro Gly Thr Ala
    370                 375                 380
Glu Thr
385
```

<210> 34832
<211> 211
<212> PRT
<213> A.fumigatus

```
<400> 34832
Ser His Gln Glu Ile Asn Arg Met Lys Ala Lys Ala Ile Arg Glu Gln
1               5                   10                  15
Arg Glu Ala Glu Glu Ala Lys Lys Arg Val Ala Thr Pro Ser Ser Leu
            20                  25                  30
Ser Ser Val Ser Gly Val Lys Arg Thr Tyr Ser Ser Met Thr Ala Ser
        35                  40                  45
Glu Thr Pro Ala Thr Leu Arg Asp Ala Ser Ala Asn Arg Pro Leu Asp
    50                  55                  60
Ala Ile Lys Pro Ala Arg Asn Phe Ala Lys Tyr Val Glu Tyr Asp Phe
65                  70                  75                  80
Ser Lys Met Thr Asp Thr Lys Gly Gly Phe Leu Thr Gln Glu Asp Asp
                85                  90                  95
Pro Tyr Asn Lys Ala Leu Asn Val Arg Asp Gly Lys Glu Glu Gln Lys
            100                 105                 110
Pro Ala His Met Thr Gln Lys Glu Trp Glu Arg Gln Gln Leu Val Asp
        115                 120                 125
Ser Leu Arg Arg Glu Arg Ala Gly Pro Phe Glu Pro Gly Leu Ser Val
    130                 135                 140
Leu Glu Asp Lys Ser Lys Gln Lys Lys Cys Arg Glu Cys Gly Ser Leu
145                 150                 155                 160
Glu Ile Asp Trp Lys Trp Glu Glu Leu Leu Arg Cys Cys Val Cys His
                165                 170                 175
Ala Cys Lys Glu Lys Tyr Pro Glu Lys Tyr Ser Leu Leu Thr Lys Thr
            180                 185                 190
Glu Ala Lys Glu Asp Tyr Leu Leu Thr Asp Arg Glu Tyr Ile Pro Asn
        195                 200                 205
Ala Phe Leu
    210
```

<210> 34833
<211> 77
<212> PRT
<213> A.fumigatus

```
<400> 34833
Arg Ala Asp Cys Leu Glu Ser Leu Cys Leu Leu Ser Met Glu Tyr Ser
1               5                   10                  15
Gln Leu Ser Ile Asn Cys Arg Ile Val Ser Cys Thr Gln Ile Ile Leu
            20                  25                  30
Ser Trp Thr Tyr Ala Ser Pro Ile Phe Leu Leu Val Thr Tyr Ala Tyr
        35                  40                  45
```

```
Thr Asp Leu Thr Glu Thr Leu Gly Phe Tyr Gln Phe Met Ile Leu Gln
    50                  55                  60
Tyr Phe Val Ala Thr Pro Phe Trp Cys Tyr Glu Trp Ile
65                  70                  75

<210> 34834
<211> 140
<212> PRT
<213> A.fumigatus

<400> 34834
Ala Val Trp His Leu Val Val Lys Ile Ser Gly Pro Glu Tyr Ala Ser
1               5                   10                  15
Tyr Tyr Ala Val Gln Ile Thr Leu Lys Gly Ala Ile Tyr Ser Leu Lys
            20                  25                  30
Leu Lys Trp Glu Phe Ala Val Leu Gly Arg Leu Val Asp Val Ile His
        35                  40                  45
Gly His Arg Arg Pro Met Ile Gly Arg Asp Ala Val His Leu Cys Ser
    50                  55                  60
Leu Glu Phe Asn Thr Gly Pro Asn Asn Gly Thr Val Pro Pro Gly Met
65                  70                  75                  80
Asn Gly Asp Val Asn Val Cys Glu Ile Ser Ala Met Asn Asn Ala Glu
                85                  90                  95
Ala Gly Lys Ile Lys Arg Thr Thr Thr Gly Ser Phe Asn Gly Arg Ile
            100                 105                 110
Ser Asp Gly Lys Ile Leu Ala Met Thr Glu Phe Ser Thr Trp Val Glu
        115                 120                 125
His Arg Cys His Gly Asn Gly Asp Arg Arg Met Ala
    130                 135                 140

<210> 34835
<211> 193
<212> PRT
<213> A.fumigatus

<400> 34835
Arg Thr Cys Lys Ala Ser Ser Ala Met Glu Cys Asp Ile Thr Asn His
1               5                   10                  15
Thr Ala Arg Glu Pro Asp Gly Cys Leu Ala Leu Ser Asp Glu Gly Ser
            20                  25                  30
Glu Ser Phe Ser Ser Ser Val Gly Ala Ser Leu Ala Val Ala Ser Thr
        35                  40                  45
Met Ala Ala Ser Ser Ser Gly Ser Ser Gly Arg Thr Arg Leu Arg Thr
    50                  55                  60
Asn Pro Met Thr Ala Val Ile Ala Asn Pro Phe Ser Met Thr Ser Ser
65                  70                  75                  80
Thr Ala Phe Asn Arg Pro Ser Arg Ala Trp Leu Ser Pro Leu Tyr Val
                85                  90                  95
Lys Lys Tyr Glu Asn Gln Ser Gly Thr Ser Val Ala Ala Ile Pro Thr
            100                 105                 110
Ala Lys Glu Ala Val Arg Ile Asn Arg Leu Arg Arg Val Asn Gly Ile
        115                 120                 125
Val Glu Met Ile Arg Met Pro Glu Met Ala Thr Asp Glu Asn Lys Asn
    130                 135                 140
Val Val Met Pro Pro Arg Thr Gly Leu Gly Met Ala Thr Met Ala Ala
145                 150                 155                 160
```

```
Ala Asn Leu Ala Lys Thr Pro Met Thr Thr Arg Lys Lys Gln Gln Gln
                165                 170                 175
Tyr Pro Ala Leu Arg Leu Ala His Phe Val Arg Ala Met Thr Pro Leu
            180                 185                 190
Phe
```

<210> 34836
<211> 461
<212> PRT
<213> A.fumigatus

<400> 34836

```
Glu Thr Ser Glu Tyr Phe Met Thr Val Ala Leu Leu Ser Leu Asn Leu
1               5                  10                  15
Leu Val Thr Pro Gly Leu Tyr Val Ser Ser Met Leu Ser Gln Leu Thr
            20                  25                  30
Tyr Ser Phe Thr Asn Val Gln Gln Asp Ala Val Lys Ala Leu Leu Ser
        35                  40                  45
Thr Ala Gly Ile Ser Leu Leu Ser Ile Leu Pro Val Ile Ile Ile Ile
    50                  55                  60
Val Arg Gln Tyr Ser Ser Ala His Pro Arg Gln Pro Arg Gly Cys Arg
65                  70                  75                  80
Arg Leu Gly Leu Pro Pro Gly His Thr Asn Leu His Asp Glu Phe Asp
                85                  90                  95
Pro Lys Tyr Ser Lys Gly Thr Ser Ser Asp Val Asp Gly Lys Gly Gln
            100                 105                 110
Pro Ser Trp Ser Ile Lys Ala Leu Phe Thr His Pro Ile Lys Ser Cys
        115                 120                 125
Ala Ala Ile Glu Leu Asp Val Thr His Val Val Ser Thr Gly Phe Ala
    130                 135                 140
Phe Arg Arg Gln Phe Cys Phe Ala Glu Gln Phe Thr Pro Asp Gln Ala
145                 150                 155                 160
Ser Ala Ser Asp Gly Lys Thr His Pro Tyr Trp Asp Ala Arg Asn Leu
                165                 170                 175
Arg Lys Arg Ala Ile Thr Ala Gly Leu Thr Leu Ile Arg Pro Glu Ile
            180                 185                 190
Trp Val Pro Asp Pro Ala Ala Pro Asp Tyr Ala Pro Asp Leu Asp Glu
        195                 200                 205
Val Arg Ser Gln Gly Val Met Val Val Tyr Tyr Pro Arg Pro Ala Glu
    210                 215                 220
Arg Gly Arg Ser Ser Phe Leu Ile Lys Leu Gly Val Ala Leu Arg Leu
225                 230                 235                 240
Val Pro Arg Glu Leu Ser Phe Arg Val Pro Leu Val Pro Pro Ser Asp
                245                 250                 255
Arg Ala Ser Ala Tyr Pro Ser Val Pro Val Arg Ile Trp Lys Asp Thr
            260                 265                 270
Pro Val Ala Tyr Asp Tyr Gly Arg His Leu Pro His Ser Leu Arg Glu
        275                 280                 285
Phe Leu Ala Pro Thr Ala Ala Asp Ala Gly Val Ser Arg Pro Leu Thr
    290                 295                 300
Leu Phe Arg Val Asp Pro Thr His His Arg Gln Val Phe Arg Asn Ala
305                 310                 315                 320
Pro Arg Lys Glu Glu Leu Gly Phe Gln Pro Val Thr Gly Phe Ala Asp
                325                 330                 335
Ala Tyr Pro Leu His Ile Leu Asn Ile Ala Ser Val His Asp Val Ala
```

```
            340                 345                 350
Ala Arg Cys Ala Arg Asp Ile Pro Arg Leu Ser Val Arg Arg Phe Arg
        355                 360                 365
Ala Asn Ile Ile Val Glu Gly Pro Glu Ala Phe Ala Glu Asp His Trp
    370                 375                 380
Lys Arg Ile Leu Ile Arg Pro Ala Gly Gly Lys Ser Asp Ala Asp Ser
385                 390                 395                 400
Gly Val Glu Ile His Val Ala Cys Arg Thr Met Arg Cys Arg Leu Pro
                405                 410                 415
Asn Val Asp Pro Ala Thr Gly Ile Arg His Ala Ser Glu Pro Asp Arg
            420                 425                 430
Thr Leu Lys Ser Tyr Arg Arg Ile Asp Pro Gly Asp Pro Thr Asn Ala
        435                 440                 445
Cys Leu Gly Met Gln Cys Val Pro Ala Ala Gln Gly Ser
    450                 455                 460
```

<210> 34837
<211> 374
<212> PRT
<213> A.fumigatus

<400> 34837

```
Thr His Phe Pro Gly Leu Trp Leu Arg Val Leu Thr Val Leu Leu Ile
1               5                   10                  15
Glu Ala Ser Leu Ile Lys Ser Gly Met Arg Asp Trp Pro Gly Gly Ser
            20                  25                  30
Gly Cys Gly Ser Asp Pro Ser Ala Arg Ala Leu Cys Pro Ser Ala Gly
        35                  40                  45
Ala Pro His Ala Leu Pro Trp Gly Ser Ala Glu Phe Ile Gly Leu Gly
    50                  55                  60
Phe Leu Val Phe Val Thr Ile Ile Leu Cys Glu Arg Phe Gly Ser Pro
65                  70                  75                  80
Ile Met Lys Ser Cys Ala Val Val Val Gly Leu Leu Val Gly Cys Ile
                85                  90                  95
Val Ala Ala Ala Cys Gly Tyr Phe Asp Arg Ser Gly Ile Asp Ser Ala
            100                 105                 110
Pro Val Val Ser Phe Ile Trp Val Lys Thr Phe Pro Leu Thr Ile Tyr
        115                 120                 125
Ala Pro Leu Ile Leu Pro Phe Leu Ala Leu Tyr Ile Val Ile Met Met
    130                 135                 140
Glu Ser Ile Gly Asp Ile Thr Ala Thr Cys Asp Val Ser Gln Leu Glu
145                 150                 155                 160
Val Glu Gly Ala Asp Phe Asp Ser Arg Val Gln Gly Gly Val Leu Gly
                165                 170                 175
Asn Gly Leu Thr Cys Leu Leu Ala Gly Leu Phe Thr Ile Thr Pro Met
            180                 185                 190
Ser Val Phe Ala Gln Asn Asn Gly Val Ile Ala Leu Thr Lys Cys Ala
        195                 200                 205
Asn Arg Lys Ala Gly Tyr Cys Cys Cys Phe Phe Leu Val Val Met Gly
    210                 215                 220
Val Phe Ala Lys Phe Ala Ala Ala Ile Val Ala Ile Pro Lys Pro Val
225                 230                 235                 240
Leu Gly Gly Met Thr Thr Phe Leu Phe Ser Ser Val Ala Ile Ser Gly
                245                 250                 255
Ile Arg Ile Ile Ser Thr Ile Pro Phe Thr Arg Arg Asn Arg Phe Ile
            260                 265                 270
```

```
Leu Thr Ala Ser Phe Ala Val Gly Met Ala Ala Thr Leu Val Pro Asp
        275                 280                 285
Trp Phe Ser Tyr Phe Phe Thr Tyr Ser Gly Asp Asn His Ala Leu Glu
    290                 295                 300
Gly Leu Leu Asn Ala Val Glu Leu Val Met Glu Asn Gly Phe Ala Ile
305                 310                 315                 320
Thr Ala Val Ile Gly Leu Val Leu Asn Leu Val Leu Pro Glu Asp Pro
                325                 330                 335
Glu Asp Glu Ala Ala Ile Val Glu Ala Thr Ala Arg Asp Ala Pro Thr
            340                 345                 350
Glu Glu Leu Lys Asp Ser Asp Pro Ser Ser Leu Lys Ala Arg Gln Pro
        355                 360                 365
Ser Gly Ser Leu Ala Val
    370
```

<210> 34838
<211> 334
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (33)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34838

```
Gly His Ala Trp Met Leu Phe Gln Met Lys Ser Ser Arg Leu Arg Ile
1               5                   10                  15
Ser Thr Ala Arg Leu Thr Asn Leu Phe Ala Lys Ile Ser Ala Gln Ser
            20                  25                  30
Xaa Arg Ser His His Ser Phe Phe Leu Gly Ala Gly Glu Asn Ser Ser
        35                  40                  45
Phe Asn Pro Gln Ser Leu Ser Phe Asp Ala Arg Lys Trp Ala Arg Ala
    50                  55                  60
Phe Tyr Asn Ala Arg Tyr Arg Gln Asp Asp Gly His Pro Leu Arg Val
65                  70                  75                  80
Val Gly Val Ala Phe Lys Asn Leu Asn Val Phe Gly Tyr Gly Ser Pro
                85                  90                  95
Val Asp Tyr Gln Met Ser Val Gly Asn Ala Leu Leu Lys Val Pro Thr
            100                 105                 110
Met Val Arg Gln Ala Leu Gly Gly Gly Lys Gln Arg Val Asp Ile Leu
        115                 120                 125
His Asp Val Glu Gly Leu Val Leu Pro Gly Glu Gln Leu Cys Val Leu
    130                 135                 140
Gly Pro Pro Gly Ser Gly Cys Ser Thr Phe Leu Arg Thr Ile Ala Gly
145                 150                 155                 160
Glu Thr His Gly Leu Asn Val Asp Ala Ala Ser Tyr Ile Asn Tyr His
                165                 170                 175
Gly Ile Ser Pro Lys Gln Met Ser Thr Ala Phe Arg Gly Glu Ala Ile
            180                 185                 190
Tyr Thr Ala Glu Val Asp Ala His Phe Pro Met Leu Ser Val Gly Asp
        195                 200                 205
Thr Leu Tyr Phe Ala Ala Leu Ala Arg Ala Pro Gln Val Ile Pro Gly
    210                 215                 220
Gly Leu Ser Arg Gln Glu Tyr Ala Lys His Leu Arg Asp Val Ile Met
225                 230                 235                 240
```

```
Ala Met Phe Gly Ile Gly His Thr Ile Asn Thr Arg Val Gly Asn Asp
                245                 250                 255
Phe Val Arg Gly Val Ser Gly Gly Glu Arg Lys Arg Val Thr Ile Ala
            260                 265                 270
Glu Ala Ala Leu Gly Tyr Ser Pro Leu Gln Cys Trp Asp Asn Ser Thr
        275                 280                 285
Arg Gly Leu Asp Ser Ala Asn Ala Val Glu Phe Cys Arg Thr Leu Arg
    290                 295                 300
Thr Gln Ser Asp Val Phe Gly Ile Thr Ser Cys Val Ala Ile Tyr Gln
305                 310                 315                 320
Ala Pro Gln Ala Ala Tyr Asp Val Ser Glu Ile Pro Leu Glu
                325                 330
```

<210> 34839
<211> 68
<212> PRT
<213> A.fumigatus

<400> 34839

```
Gly Val Ser Gly Ala Gly Lys Thr Thr Leu Leu Asp Val Leu Ala Ser
1               5                   10                  15
Arg Thr Thr Val Gly Val Val Thr Gly Glu Thr Leu Val Asp Gly Arg
            20                  25                  30
Gln Arg Asp Ser Ser Phe Gln Arg Lys Thr Gly Tyr Val Gln Gln Gln
        35                  40                  45
Asp Ile Ser Pro Leu Ser Val Phe Thr Thr Ser Ala Trp Ile Ser Asp
    50                  55                  60
Arg Leu Arg Pro
65
```

<210> 34840
<211> 542
<212> PRT
<213> A.fumigatus

<400> 34840

```
Val Lys Tyr His Trp Asn Glu Pro Ala Arg His Gln Leu Met Asp Gly
1               5                   10                  15
Gln Leu Phe Asp Lys Val Leu Val Leu Tyr Glu Gly Trp Gln Ile Tyr
            20                  25                  30
Phe Gly Ala Ala His Glu Ala Gln Ala Tyr Phe Glu Gln Leu Gly Phe
        35                  40                  45
Gln Cys Pro Glu Ser Gln Thr Thr Ala Asp Phe Leu Thr Ser Met Cys
    50                  55                  60
Ser Pro Ala Glu Arg Ile Val Lys Pro Gly Phe Glu His Met Ala Pro
65                  70                  75                  80
Arg Thr Pro Glu Glu Phe Ala Gln Arg Trp Lys Glu Ser Pro Gln Arg
                85                  90                  95
Gln Ser Leu Leu His Ala Ile Glu Lys Tyr Ser Thr Glu His Pro Leu
            100                 105                 110
Asp Gly Pro Asp Leu His Gln Phe Ala Leu Ser Arg Arg Ala Glu Lys
        115                 120                 125
Ser His Arg Gln Arg Glu Lys Ser Pro Tyr Thr Leu Ser Tyr Trp Gly
    130                 135                 140
Gln Val Lys Leu Cys Leu Trp Arg Glu Trp Gln Arg Leu Lys Asn Asp
145                 150                 155                 160
```

```
Pro Ser Val Thr Leu Ala Met Leu Ile Gly Asn Phe Phe Glu Ala Leu
                165                 170                 175
Ile Ile Ala Ser Ile Phe Tyr Asn Leu Thr Gly Asp Thr Ser Ser Phe
            180                 185                 190
Tyr Tyr Arg Gly Ala Leu Leu Phe Met Met Val Leu Leu Asn Ala Phe
        195                 200                 205
Ala Ser Val Leu Glu Ile Leu Thr Leu Tyr Glu Lys Arg Thr Ile Val
    210                 215                 220
Glu Lys Gln Ser Arg Tyr Ala Tyr Tyr His Pro Ser Ala Glu Ala Leu
225                 230                 235                 240
Ser Ser Phe Ile Met Ser Leu Pro Tyr Lys Phe Val Asn Ser Ser Leu
                245                 250                 255
Val Asn Leu Thr Leu Tyr Phe Met Ser Asn Leu Arg Arg Glu Pro Gly
            260                 265                 270
Pro Phe Phe Phe Phe Leu Leu Ile Ser Thr Ser Met Met Leu Ala Met
        275                 280                 285
Ser Met Phe Phe Arg Trp Phe Ala Ser Leu Thr Lys Thr Ile Asp Gln
    290                 295                 300
Ala Leu Ala Pro Ser Ser Ile Ile Leu Leu Ala Leu Val Leu Tyr Thr
305                 310                 315                 320
Gly Phe Thr Ile Pro Val Ser Tyr Met Arg Gly Trp Ala Ser Trp Ile
                325                 330                 335
Arg Trp Leu Asn Pro Val Ser Tyr Gly Phe Glu Ala Val Met Ile Asn
            340                 345                 350
Glu Phe His Gly Arg Glu Phe Pro Cys Ser Ser Phe Val Pro Ser Gly
        355                 360                 365
Pro Gly Tyr Glu Asp Val Ser Arg Thr Gln Arg Val Cys Ser Thr Val
    370                 375                 380
Gly Ala Thr Ser Gly Ser Asp Val Val Ser Gly Asp Val Phe Val Arg
385                 390                 395                 400
Ser Ser Tyr Gly Tyr Val Asn Ser His Arg Trp Arg Asn Phe Gly Ile
                405                 410                 415
Ile Ile Ala Met Thr Val Phe Leu Ala Val Cys His Phe Val Thr Thr
            420                 425                 430
Glu Leu Val Ala Ser Lys Arg Ser Lys Gly Glu Val Leu Val Phe Arg
        435                 440                 445
Arg Gly Ser Ala His Ile Ala Arg Ala Lys Gln Gly Gln Arg Asp Glu
    450                 455                 460
Glu Gln Pro Ser Ala Ser Ala Val Pro Ser Glu Lys Tyr Ser Glu Ala
465                 470                 475                 480
Pro Thr Pro Val Glu Gly Val Glu Thr Gln Thr Ser Ile Phe His Trp
                485                 490                 495
Glu Asp Val Cys Tyr Asp Val Lys Ile Lys Asn Glu Thr Arg Arg Ile
            500                 505                 510
Leu Asp His Val Asp Gly Trp Ile Lys Pro Gly Thr Leu Thr Ala Leu
        515                 520                 525
Met Val Ser Leu Phe Cys Leu Ser Val Thr Phe Glu Arg Arg
    530                 535                 540
```

<210> 34841
<211> 186
<212> PRT
<213> A.fumigatus

<400> 34841
Val Thr Leu Ser Val Gly Leu Ser Ser Pro Val Val Lys Thr Arg Ala

```
1               5                   10                  15
Phe Gly Ile Pro Val Asn Thr Phe Ser Asn Glu Val Val Thr Leu Trp
            20                  25                  30
Tyr Arg Ala Pro Asp Val Leu Leu Gly Ser Arg Thr Tyr Asn Thr Ser
        35                  40                  45
Ile Asp Ile Trp Ser Ala Gly Cys Ile Met Ala Glu Leu Tyr Thr Gly
    50                  55                  60
Arg Pro Leu Phe Pro Gly Thr Thr Asn Glu Asp Gln Leu Gln Lys Ile
65                  70                  75                  80
Phe Arg Leu Met Gly Thr Pro Ser Glu Arg Ser Trp Pro Gly Ile Ser
                85                  90                  95
Gln Leu Pro Glu Tyr Lys Pro Asn Phe His Val Tyr Ala Thr Gln Asp
            100                 105                 110
Leu Gly Leu Ile Leu Pro Gln Ile Asp Pro Leu Gly Leu Asp Leu Leu
        115                 120                 125
Asn Arg Met Leu Gln Leu Arg Pro Glu Met Arg Ile Ser Ala Ala Asp
    130                 135                 140
Ala Leu Gln His Pro Trp Phe His Asp Leu Pro Gln Leu Gln Ala Gln
145                 150                 155                 160
Leu Gln Gln Gln Gln Gln Gln Gln Gln Gln Met Ala Gly Gly Tyr
                165                 170                 175
Gly Gly Met Val Pro Pro Gln Gln Thr Tyr
            180                 185
```

<210> 34842
<211> 92
<212> PRT
<213> A.fumigatus

<400> 34842

```
Trp Leu Leu Phe Ala Cys Arg Arg Phe Met Pro Ala Asp Ala Leu Trp
1               5                   10                  15
Thr Leu Ala Met Ala Cys Asn Val Tyr Leu Thr Phe Phe His Lys Tyr
            20                  25                  30
Asn Ser Glu Gln Leu Arg Gln Leu Glu Trp Lys Tyr Val Leu Phe Cys
        35                  40                  45
Tyr Gly Leu Pro Phe Ile Pro Ala Phe Val Tyr Phe Phe Ile Glu Thr
    50                  55                  60
Glu Ala Arg Gly Lys Val Tyr Gly Ser Ala Ile Val Ser Ala Thr Phe
65                  70                  75                  80
Val Val Gly Glu Ser Val Ile Cys Arg Val Thr Leu
                85                  90
```

<210> 34843
<211> 83
<212> PRT
<213> A.fumigatus

<400> 34843

```
Lys Lys His Val Arg Leu Asp Met His Lys Ile Trp Thr His Phe Phe
1               5                   10                  15
Phe Leu Ser Phe Arg Phe Leu Phe Phe Phe Cys Leu Cys Leu Ser Ala
            20                  25                  30
Ser Pro Phe Tyr Ser Leu Gly Glu Thr Val Phe Ile Pro Asn Trp Leu
        35                  40                  45
Leu Leu Met Val Glu Asp Gln Pro Leu Val Leu Leu Leu Met Asp Glu
```

```
    50                  55                  60
Phe Phe Ile Gly Gln Asn Leu Asn Met Arg Asn His Leu Val Arg Ser
65                  70                  75                  80
Pro Val His
```

<210> 34844
<211> 279
<212> PRT
<213> A.fumigatus

<400> 34844

```
Gly Ile Phe Gln Pro Arg Val Lys Thr Met Ser Lys Ala Ser Val Gln
1               5                   10                  15
Met Ile Leu Ser Thr Thr Gly Phe Gly Ser Gln Val Asp Leu Ser Arg
            20                  25                  30
Ile Gln Thr Ala Ser Gln Gln His His Thr Ala Asn Thr Gly Pro Ala
        35                  40                  45
Arg Asp Ser Gly Arg Ser Ser Phe Asp Gln Arg Gln Arg Phe Thr His
    50                  55                  60
Val Pro Arg Arg Gln Thr Gln Val Arg Gln Ser Arg Pro Leu Pro Lys
65                  70                  75                  80
Phe Asp Met Asp Leu Ala Asp Leu Phe Asn Asp Pro Gly Pro Val Pro
                85                  90                  95
Asp Arg Ala Gly Ser Ser Thr Arg Lys Pro Val Gln Ala Tyr Pro Arg
            100                 105                 110
Arg Ser Glu Tyr Pro Glu Pro Ser Thr Pro Asn Phe Gly Ser Asp Leu
        115                 120                 125
Pro Pro Arg Pro His Pro Gln Arg Thr Pro Ser Met Glu Tyr Tyr Gly
    130                 135                 140
Gly Tyr Glu Asn Pro Val Ser Pro Arg Thr Gln Gln Gln Gln Tyr Phe
145                 150                 155                 160
Tyr Ser Asn Ser Pro Gln His Ser Val Ser Ser Ser Gly Ala Ala Pro
                165                 170                 175
Asn Val Gly Gln His Gln Phe Ser Pro Val Asp Gln Glu Ser Ala Ala
            180                 185                 190
Gly Ile Ser Leu Asp Phe Leu Asp Phe Asp Ser Thr Gly Ala Glu Asn
        195                 200                 205
Thr Val Ser Val Gly Ser Asp Gly Asn Pro Glu Tyr Asn Met Ser Ala
    210                 215                 220
Val Pro Ser Leu Gly His Gly Ala Gly His Ser Val Gly Ile Asp Leu
225                 230                 235                 240
Gly Phe Gly Met Ala Val Asp Phe Gln His Asp Trp Ser Glu Asn Ala
                245                 250                 255
Asn Tyr Asp Met Leu Glu Gly Tyr Phe Phe Gly Gly Ser Val Gly Asn
            260                 265                 270
Pro Pro Gly Asp Gly Ser Ile
        275
```

<210> 34845
<211> 189
<212> PRT
<213> A.fumigatus

<400> 34845

```
Val Arg Arg Arg Asp Cys Leu Gln Gly Phe Leu Cys Glu Ser Phe Val
```

```
1               5                   10                  15
Val Asn Leu Phe Pro Ala Leu Lys Tyr His Pro Asp Arg Asn Pro Gly
            20                  25                  30
Arg Glu Leu Glu Phe Asn Ala Lys Phe Gln Ala Ile Gln Ala Ala His
        35                  40                  45
Glu Ile Leu Ser Asp Pro Gln Gln Arg Leu Lys Tyr Asp Thr Asp Arg
    50                  55                  60
Leu Arg Ala Gly Tyr Gly Lys Leu Tyr Gly Pro Asn Lys Ala Asn Thr
65                  70                  75                  80
Ala Arg Lys Ala Pro Thr Asn Pro Tyr Ala Ser Ala Ser Thr Ala Lys
                85                  90                  95
Pro Gln Thr Pro Lys Pro Pro Phe Ser Ser Arg Pro Gln Ser Phe His
            100                 105                 110
Asn Gly Pro Ser Thr Gly Ala Gln Arg Tyr Ala Ser Tyr Ala Arg Ala
        115                 120                 125
Ala Pro Lys Gln Pro Trp Glu Lys Thr Gln Asp Glu Gly Gln Thr Arg
    130                 135                 140
Ala Asp Ala Tyr Arg Gly Phe Gln Glu Met Lys Gly Ile Ser Pro Pro
145                 150                 155                 160
Gly Trp Ser His Leu Asp Pro Arg Ser Gly Arg Thr Arg Tyr Leu Gly
                165                 170                 175
Ala Ala Pro Pro Asp Ser Thr Pro Lys Gly Ala Pro His
            180                 185
```

<210> 34846
<211> 66
<212> PRT
<213> A.fumigatus

<400> 34846

```
Gly His Glu Ser Ile Ser Gln Ser Phe Thr Ile Asp Thr Trp Leu Gly
1               5                   10                  15
Ala Gly Tyr Ala Ala Pro Thr Thr Ser Ser Gly Ala Ser Ser Tyr Arg
            20                  25                  30
Gln Val Ala Lys Cys Lys Trp Pro Val Arg Asp Ile Gly Asn Glu Glu
        35                  40                  45
Leu Ala Asp Leu Asp Ala Lys Thr Ala Ala Pro Arg Tyr Gly Thr Arg
    50                  55                  60
Phe Gly
65
```

<210> 34847
<211> 824
<212> PRT
<213> A.fumigatus

<400> 34847

```
Ser Val Arg Leu Ile Glu Glu Ser Leu Ser Pro Pro Pro Pro Pro Tyr
1               5                   10                  15
Phe Leu Pro Ser Gln Gln Gln Gln His Pro Gln Ser Arg Glu His Val
            20                  25                  30
Asn His Glu Ser Ser Asn Arg Gly Ser Val Ser Pro Ser Ala Ala Pro
        35                  40                  45
Ser Tyr His Val Glu Pro His Val Glu Tyr Arg Gln Arg Ala Ile Pro
    50                  55                  60
Arg Thr Arg Pro Leu Ser Met Ala Ser Pro Gly Asp Ala Ala His Gly
```

```
65                  70                  75                  80
Arg Gln Met Ser Leu Pro Pro Pro Pro Leu Pro Gln Gly Ala Thr
                85                  90                  95
Gly Ser Arg Ser Ser Ser Gln Ser Arg Val Asp Ala Tyr Gly Asp Arg
            100                 105                 110
Ala Ser Phe Ser Thr Gly Gln Arg Pro Cys Thr Ala Val Ser Gln Ala
        115                 120                 125
Gln Glu Ser Leu Gln Ser Ser Ser Ser Ala Ser Glu Gln Tyr Gln Leu
    130                 135                 140
Asn Pro Thr Pro Gln Phe Asp Asn Phe Thr Arg Ala Pro Gly Ala Lys
145                 150                 155                 160
Arg Ala Val Ser Ala Gly Pro Met Ile Gly Ser Ala Ser Ser Ser Arg
                165                 170                 175
Ala Thr Ser Gln Ser Arg Ser His Ser Pro Ser Thr His Gly Trp Glu
            180                 185                 190
Pro Gly Met Pro Leu Pro Pro Pro Pro Pro Gly Pro Pro Pro Thr Ala
        195                 200                 205
Arg Ser Gln Ser Val Ser Gly Leu Ser Glu Thr Ser Gly Met Arg Asn
    210                 215                 220
Ser Gln Ile Ser Met Arg Arg Arg Pro Pro Pro Val Met Gly Pro Gly
225                 230                 235                 240
Leu Asp Ser Ile Pro Pro Thr Pro Ala Gly Trp Ala Asp Glu Gly Ser
                245                 250                 255
Gly Gln Asn Gly His Arg Gln Asp Arg Glu Leu Pro Asn Ile Asp Thr
            260                 265                 270
Ser Ser Ala Ala Leu Ala Asn Arg Gly Ile Thr Gly Ser Glu Ser Arg
        275                 280                 285
Asp Pro Ala His Ala Ser Gln Thr Ser Ala Asn Ser Gly Leu Phe Arg
    290                 295                 300
Ser Pro Ala Ile Arg Asp Ala Ser Ala Lys Gly Ile Arg Glu Arg Arg
305                 310                 315                 320
Ile Glu Arg Arg Asn Arg Gln Ser Gln Val Phe Glu Asp Phe Ser Ala
                325                 330                 335
Val Ser Ser Ser Ser Asn Pro Trp Ala Asp Ala Leu Asp Gln Val Lys
            340                 345                 350
Pro Ser Asp Leu Ile Leu Asp Asn Ser Asn Ala Ser His Gly Asn Gly
        355                 360                 365
Arg His Pro Asn Ser Thr Lys Phe Thr Pro Arg Ser Thr Ala Ser Ala
    370                 375                 380
Gly Ser Asp Gly Gln Gln Leu Gly Thr Arg Ser Arg Ala Ser Ser Thr
385                 390                 395                 400
Gly Leu Phe Ser Gly Arg Ser Ser Phe Ser Thr Pro Arg Ala Glu Pro
                405                 410                 415
Ser Pro Ala Gly Pro Pro Arg Thr Phe Ala Gln Thr Pro Pro Phe Ser
            420                 425                 430
Pro Asp Asn Glu Asn Val Ser Pro Thr Phe Ala Lys Ala Ala Ala Ser
        435                 440                 445
Gln Ala Leu Pro Pro Lys Ala Leu Pro Thr Pro Pro Leu Gln Ser Gly
    450                 455                 460
Gln Asp Val Arg Ser Ser Ser Arg Leu Thr Pro Ser Glu Glu Arg Pro
465                 470                 475                 480
Val Ser His Ile Leu His Leu Pro Asn Asp Ala Leu Pro Ala Val Ala
                485                 490                 495
Pro Leu Ser Pro Arg Arg Leu Ala Ala Gln Gln Gly Ser Ser Leu Asp
            500                 505                 510
Ser Val Leu Ser Gln Asp Leu Gly Phe Ile Arg Asp Ala Met Gln Arg
```

```
        515                 520                 525
His Lys Glu Phe Ile Glu Lys Glu Ala Ser Ala Val Asn Glu Thr Glu
    530                 535                 540
Ala Leu Arg Ile Phe Ala Asp Phe Ile Ile Ala Glu Ser Gln Ile Arg
545                 550                 555                 560
Arg Glu Arg Tyr Gly Lys Val Trp Asp Ser Gly Thr Phe Asp Val Glu
                565                 570                 575
Ala Ala Arg Arg Lys Leu Phe Glu Leu Pro Pro Lys Pro Ile Val Glu
            580                 585                 590
Pro Gln Asn Asn Ile Ser Ala Thr Val Ser Leu Ser Arg Gln Pro Ser
        595                 600                 605
Arg Gly Pro Arg Ala Val Pro Ala Leu Asp Ile Pro Thr Ser Arg Pro
    610                 615                 620
Glu Ser Ala Trp Trp Ser Asn Tyr Lys Pro Cys Leu Ser Pro Ile Ala
625                 630                 635                 640
Ser Met Ser Met Ser Asn Asp Glu Met Ser Ser Arg Gly Arg Pro Pro
                645                 650                 655
Ser Arg Trp Trp Glu Ser Lys Thr Gly Ser Glu Ser Glu Gly Gly Glu
            660                 665                 670
Arg Lys Val Gln Arg Ser Lys Arg Glu Ser Lys Tyr Met Gly Val Pro
        675                 680                 685
Arg Glu Ala Met Gln Trp Ala Glu Gly Gln Gly Ser Phe Gly Ala Ser
    690                 695                 700
Gln Arg Ser Tyr Glu Ser Asn Ala Thr Ser Gln Tyr Ala Ala Tyr Gly
705                 710                 715                 720
Pro Asp Glu Tyr Pro Pro Glu Lys Val Gly Trp His Glu Glu Gln Glu
                725                 730                 735
Pro Ala Pro Ser Asp Phe Pro Ser Ser Ala Pro Arg His Gly Phe Gly
            740                 745                 750
Arg Thr Arg Glu Val Gln Lys Leu Asp Val Ser Arg Leu Ile Thr Leu
        755                 760                 765
Pro Pro Pro Tyr Pro Arg His His Pro Ala Val Asn Asn Ser His Pro
    770                 775                 780
Asp Leu Val Ala Tyr Arg Thr Leu Val Arg Pro Ile Ser Asn Leu Ser
785                 790                 795                 800
Glu Ile Lys Ala Thr Arg His Gly His Gln Ser Gly Arg Gly Thr Phe
                805                 810                 815
Ile Glu Glu Pro Ser Gly Asp Ser
            820
```

<210> 34848
<211> 90
<212> PRT
<213> A.fumigatus

<400> 34848

```
Ala Val Trp Phe Ser Glu Gly Val Ile Leu Met Leu Ser Arg Arg Phe
1               5                   10                  15
Gly Ile Glu Phe Ala Pro Glu Val Val Lys Ala Asp Gly Asn Val His
            20                  25                  30
Asn Leu Ala Arg Arg Ile Cys Asn Ala Lys Arg Val Leu Val Cys Ser
        35                  40                  45
Arg Leu Pro Pro Tyr Leu Thr Thr Tyr Phe Phe Leu Ala Ala Glu Ala
    50                  55                  60
Asp Tyr Glu Tyr Tyr Ile Ala Gln Ala Pro Tyr Ser Leu Thr Arg Asn
65                  70                  75                  80
```

```
Gly Ala Thr Thr Pro Thr Glu Gly Lys Glu
                85                  90

<210> 34849
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34849
Ser Gly Val Phe Gly Lys Val Phe Cys Phe Leu Gln Gly Phe Cys Arg
1               5                  10                  15
Ser Arg Thr Glu Lys Asn Val Ser His His Glu Glu Asp Met Gly Gly
            20                  25                  30
Val Thr Val Lys Asp Val Ser Lys Thr Tyr Leu Thr Glu Pro Thr Glu
        35                  40                  45
Ser Ala Ser Tyr Gln Arg Leu Asp Glu Lys Phe Leu Ser Asp Glu Leu
    50                  55                  60
Val Ser Lys Thr Ala Trp Ser Lys Ala Ser
65                  70

<210> 34850
<211> 139
<212> PRT
<213> A.fumigatus

<400> 34850
Ala Glu Ser Lys Pro Ile Trp Arg Arg Pro Val Pro Asp Ile Lys Gln
1               5                  10                  15
Ala Val Phe Cys Glu Gly Val Glu Thr Ala His Cys Ala Gln Gly Asp
            20                  25                  30
Asn Ala Ala Val Ala Gln Leu Leu Gly Ile Thr Ser Pro Ser Val Arg
        35                  40                  45
Leu Asp Ser Gln Ala Lys Tyr Cys Ser Ile Ala Arg Gly Ala Gly Asp
    50                  55                  60
Ile Tyr Leu Arg Leu Pro Val Arg Lys Asp Tyr Gln Glu Lys Ile Trp
65                  70                  75                  80
Asp His Ala Ala Gly Asp Leu Ile Val Arg Glu Ala Gly Gly Gln Val
                85                  90                  95
Thr Asp Ile Tyr Gly Gln Arg Leu Asp Phe Ser Lys Gly Arg Thr Leu
            100                 105                 110
Ala Ala Asn Lys Gly Val Val Ala Ala Pro Glu Ala Ile Gln Asp Gln
        115                 120                 125
Val Ile Ser Ala Val Lys Thr Val Leu Lys Leu
    130                 135

<210> 34851
<211> 302
<212> PRT
<213> A.fumigatus

<400> 34851
Val Leu Pro Leu Gln Gly Ser Cys Arg Pro Val Cys Ser Arg Gln Gly
1               5                  10                  15
Ile Ile Asp Ala Ser Leu Ile Met Lys Leu Gly Thr Leu Val Pro Ser
            20                  25                  30
His Asp Ala Pro Ala Glu Ile Asp Leu Val Ser Phe Leu Gln Ser Lys
```

```
        35                  40                  45
Thr Gln Gln His Asp Ala Ile Phe Thr Glu Ala Val Gln Leu Leu Glu
    50                  55                  60
Ser Met Lys Ser Ser Pro Ser Cys Asn Arg Val Ala Ala Ser Arg Leu
65                  70                  75                  80
Val Ala Ser Cys Gln Ser Ile Gly Gly Thr Thr Asp His Thr Glu Gln
                85                  90                  95
Ser Thr Tyr Leu Thr Leu Glu His Val Arg Ser Leu Tyr Ala Ala Arg
            100                 105                 110
Leu Ala Val Cys Glu Leu Asp Gly Ala Gly Ala Ser Ile Pro Pro Pro
        115                 120                 125
Cys Leu Pro Val Thr Leu Glu Ala Pro Arg Lys Lys Gly Phe Phe Gly
    130                 135                 140
Phe Ser Ser Asn His Lys Ser Thr Thr Ile Thr Ala Asp Ser Met Pro
145                 150                 155                 160
Thr Glu Ile Leu Glu Ser Cys Leu Arg Ser Leu Glu Ser Arg Pro Gln
                165                 170                 175
Trp Trp Thr Ser Tyr Ser Asn Ser Arg Gln Asn Ala Met Val Ile Cys
            180                 185                 190
Gln Ala Thr Arg Leu Glu Thr Glu Lys Glu Glu Leu Leu Glu Leu His
        195                 200                 205
Arg Ser Ile Val Glu Ser Ser Ile Lys Leu Ser His Gly Leu Glu Glu
    210                 215                 220
Ala Leu Glu Met Ala Tyr Ala Glu Ser Ser Gln His Gln Ala Phe Ile
225                 230                 235                 240
Glu Ala Thr Ala Ala Leu Gln Ala Lys Leu Arg Gln Asp Leu Glu Ala
                245                 250                 255
Thr Glu Thr Gly Phe Lys Ala Leu Leu Gly Asn Leu Met Glu Gly Ile
            260                 265                 270
Lys Ser Ala Val Asp Ser Gly Val Thr Thr Val Thr Ser Thr Leu Ala
        275                 280                 285
Arg Val His Asn Asp Ala Ala Ser Leu Glu Thr Val Arg Val
    290                 295                 300
```

<210> 34852
<211> 129
<212> PRT
<213> A.fumigatus

<400> 34852

```
Leu Val Arg Leu Leu Gly Thr Met Arg Ala His Leu Gln Asn Tyr Val
1               5                   10                  15
Leu Gly Val Ser Glu Gly His Ile Cys Ile Leu Ser Leu Val Gly Val
            20                  25                  30
Gly Tyr Arg Ala Ser Ile Glu Ser Thr Ala Thr Thr Val Glu Pro Glu
        35                  40                  45
Tyr Pro Gly Gln Gln Phe Val Ser Leu Lys Val Gly Tyr Ser His Pro
    50                  55                  60
Ile Glu Leu Gly Val Pro Lys Gly Val Lys Ala Ser Thr Pro Gln Pro
65                  70                  75                  80
Thr Arg Ile Leu Leu Glu Gly Val Asp Lys Asn Val Val Thr Gln Phe
                85                  90                  95
Ala Ala Glu Ile Arg Glu Trp Arg Lys Pro Glu Pro Tyr Lys Gly Lys
            100                 105                 110
Gly Ile Phe Val Asn Gly Glu Thr Ile Arg Leu Lys Ala Lys Lys Ile
        115                 120                 125
```

Arg

<210> 34853
<211> 286
<212> PRT
<213> A.fumigatus

<400> 34853
Leu Thr Gln Ser Pro Gly Ile Glu Phe Ser Arg Gln Asp Val Ser Leu
1 5 10 15
Thr Asp Leu His Glu Ile Thr Ser Ala Thr Thr Pro Val Ala Ile Thr
20 25 30
Ile Asp Gly His Ala Val Arg Asp Ala Pro Ser Pro Lys Gly Leu Pro
35 40 45
Phe Phe Gly Asn Phe Phe Gln Ile Phe Pro Asp His Leu Gly Asn His
50 55 60
Gln Arg Leu Phe Glu Gln Tyr Gly Pro Leu Ile Lys Thr Asn Thr Leu
65 70 75 80
Gly Arg Thr Val Tyr Gln Thr Asn Asp Pro Ile Leu Ser Ala Ile Val
85 90 95
Phe Asn Glu Ser Asp Phe Phe Thr Lys Lys Ile Asn Glu Ala His Pro
100 105 110
Leu Tyr Ser Leu Lys Thr Pro Ala Ala Gly Val Phe Leu Gly Asp Thr
115 120 125
Asp Thr Pro Glu Trp Arg Val Ala His Lys Phe Leu Pro Pro Ala Leu
130 135 140
Gly Pro Lys Ala Val Arg His Tyr Ala Pro Thr Met Gln Lys Thr Val
145 150 155 160
Glu Asp Ala Cys Thr Ile Phe Asp Gln Leu Asp Ala Gln Gly Glu Ala
165 170 175
Trp Asn Val Tyr Gln Tyr Met Leu Lys Leu Gly Ser Gln Ala Val Gly
180 185 190
Lys Leu Thr Leu Gly Leu Asp Phe Glu His Phe Ser Ser Ala Asp Ala
195 200 205
Pro Ile His Glu Met Val His Leu Ile Ala Glu Val Leu Ser Leu Asn
210 215 220
Lys Lys Val Thr Ser Lys Gly Asp Trp Tyr Ala Ser Leu Pro Phe Gly
225 230 235 240
Asp Pro Lys Arg Leu Arg Asp Thr Lys Ala Arg Ile Glu Gln Leu Val
245 250 255
Glu Glu Ser Val Gln Lys Ala Gln Arg Gly Gly Val Glu Asp Leu Pro
260 265 270
Leu Gln Asp Ala Ala Leu Arg Ala Ala Asn Met Val Gly Glu
275 280 285

<210> 34854
<211> 249
<212> PRT
<213> A.fumigatus

<400> 34854
Thr Asn Gln Asn Pro Ser Pro Ala Pro Gln Lys Gly Ser Thr Pro Val
1 5 10 15
Lys Gln Gln Thr Asp Tyr Ala Leu Arg Ala Thr Asp Asn Lys Gly Glu
20 25 30

```
Lys Leu Pro Lys Ser Ser Leu Val Trp Ala Leu Val Val Ala Thr Gly
        35                  40                  45
Ala Gly Phe Thr Thr Thr Ser Ser Leu Leu Ser Trp Leu Ile Tyr Gly
    50                  55                  60
Leu Val Thr Tyr Pro Gly Met Gln Asp Arg Leu Leu Gln Glu Leu Val
65                  70                  75                  80
Asp His Gly Phe Asp Asp Thr Thr Glu Ile Thr Ala Asp Phe Ala Asp
                85                  90                  95
Gln Leu Thr Phe Leu Asp Lys Tyr Ile Lys Glu Thr Gln Arg Arg His
            100                 105                 110
Asn Pro Ser Phe Gln Pro Gly Arg Thr Ala Lys Leu Asp Leu Ile Leu
        115                 120                 125
Pro Gly Gly Tyr Lys Ile Pro Gln Asp Ala Val Val Ile Pro Ala Leu
    130                 135                 140
His His Ile His Asn Asn Pro Ala Ile Trp Asp Asn Pro Ala Arg Phe
145                 150                 155                 160
Asn Pro Asp Arg Trp Asp Thr Asp Glu Val Lys Gln Arg His Lys Ala
                165                 170                 175
Ala Tyr Ile Pro Phe Gly Thr Gly Pro Arg Met Cys Ile Gly Phe Asn
            180                 185                 190
Phe Ala Leu Gln Glu Ile Lys Val Phe Leu Pro Lys Leu Ile Tyr Arg
        195                 200                 205
Tyr Lys Phe Thr Arg Glu Gly Asp Gly Pro Ile Glu Tyr Asp Pro Met
    210                 215                 220
Phe Gln Leu Ile Arg Pro Asn Asn Leu Tyr Val Arg Ala Glu Arg Arg
225                 230                 235                 240
Val Lys Trp Pro Tyr Lys Ser Asp Ala
                245
```

<210> 34855
<211> 133
<212> PRT
<213> A.fumigatus

<400> 34855

```
Ala Ile Glu Met Ala Ser Gln Gln Phe Tyr Leu Leu Gly Glu Pro Ile
1               5                   10                  15
Ser Ser Ala Arg Thr Ile Ser Leu Asp Gly Ile Asn Asp Leu Glu Gly
            20                  25                  30
Leu Arg Asn Leu Ile Ala Ser His Phe Ala Ile Val Glu Pro Ser Gly
        35                  40                  45
Glu Ser His Leu Arg Val Pro Thr Asp Ser Thr Asn Leu Pro Asn Pro
    50                  55                  60
Gln Glu Ser Asn Ser Leu Asp Lys Thr Tyr Pro Ser Pro Ile Ser Thr
65                  70                  75                  80
Lys Ser Pro Gln Pro Gln Leu Pro Ser Pro Ser Pro Ser Thr Ala Met
                85                  90                  95
Leu Ser Gly Thr Pro Pro Pro Pro Arg Gly Ser Pro Ser Ser Ala Thr
            100                 105                 110
Ser Ser Arg Tyr Ser Gln Thr Thr Trp Ala Thr Thr Ser Val Ser Leu
        115                 120                 125
Ser Ser Thr Val Pro
    130
```

<210> 34856
<211> 132

<212> PRT
<213> A.fumigatus

<400> 34856
Arg Glu Phe Pro Arg Tyr Arg Ala Met Leu Phe Leu Ile Gly Cys Ser
1 5 10 15
Pro Pro Leu Leu Val Pro Ala Met His Ile His Leu Leu Asn Cys Lys
20 25 30
Ser Asp Asp Pro Leu Thr Arg Gln Leu Ser Leu Asn Lys Leu Asp Phe
35 40 45
Cys Met Leu Ile Leu Lys Val Met Gln Asp Val His Thr Ala Ala Ser
50 55 60
Tyr Tyr Arg Gly Ile Phe Ser Glu Ala Ile Arg His Leu Ser Ser Thr
65 70 75 80
Thr Ser Lys Pro Thr Gly Gln Gly Pro Val Val Val Glu Thr Pro Ala
85 90 95
Ser Leu Pro Gly Glu Pro Thr Met Glu Thr Leu Leu Ser Gly Asp Phe
100 105 110
Leu Asp Gly Leu Met Asp Glu Ala Ser Phe Phe Asn Phe Trp Glu Pro
115 120 125
Leu Ser Asn Met
130

<210> 34857
<211> 70
<212> PRT
<213> A.fumigatus

<400> 34857
Ser Val Asp Ser Ser Thr Lys Ser Ile Val Tyr Ile Gln Phe Ser Asp
1 5 10 15
Ser Pro His Met Arg Ser Asn Gly Arg Asp Ser Tyr Ala Ser Asp Leu
20 25 30
Tyr Gly His Leu Thr Leu Leu Ser Ala Arg Thr Tyr Arg Leu Phe Gly
35 40 45
Arg Ile Asn Trp Asn Ile Gly Ser Tyr Ser Met Gly Pro Ser Pro Ser
50 55 60
Arg Val Asn Leu Tyr Arg
65 70

<210> 34858
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34858
Leu Arg Cys Ile Ser Gln Ser Val Asn Thr Ala Ser Phe Lys Gln Phe
1 5 10 15
Ile Lys Arg Gly Ser Lys Glu Asp Tyr His Leu Leu Asn Tyr Ser Lys
20 25 30
Ser Thr Ser Ser Met Leu Pro Ser Phe Val Glu Ile Leu Cys His Asn
35 40 45
Pro Cys Trp Ser Lys Glu Pro Phe Arg Trp Val Leu Phe Pro Ile
50 55 60

<210> 34859

<211> 115
<212> PRT
<213> A.fumigatus

<400> 34859
Pro Trp Val Leu Ala Ala Ile Val Gln Ser Tyr Arg Arg Ser Ser Phe
1 5 10 15
Gly Gly Gly Arg Lys Phe Val Ile Ile Leu Pro Ser Asn Val Glu Gly
20 25 30
Gly Val Met Glu Trp Lys Gly Ala Arg Glu Trp Ala Ile Glu Arg Asn
35 40 45
Ser Ile Ser Asn Lys Glu Glu Tyr Ala Lys Arg Trp Gly Tyr Glu Leu
50 55 60
Glu Ile Val Asn Met Leu Ala Lys Lys Arg Tyr Ser His Glu Trp Arg
65 70 75 80
Glu Ser Trp Glu Lys Val Asp Ile Ile Arg Asp Ala Met Arg Lys Tyr
85 90 95
Pro Asn Ala Glu Trp Ser Val Lys Pro Cys Met Trp Ser Leu Pro Arg
100 105 110
Leu Thr Asp
115

<210> 34860
<211> 162
<212> PRT
<213> A.fumigatus

<400> 34860
Cys Arg Phe Trp Trp Leu Asp Leu Asn Thr Trp Ile Met Glu Tyr Ser
1 5 10 15
Tyr Ser Leu Gln Asp Gln Ile Phe Asp Arg Leu Gly Asp Leu Thr Tyr
20 25 30
Arg Asp Ile Asn Leu Tyr Asn Pro Leu Asn Ile Ser His Pro Pro Thr
35 40 45
Ala Pro Tyr Leu Asp Glu Leu Ser Arg Ser Ala Glu Gly Asp Gly Asn
50 55 60
Pro Ser Ser Ile Asp Leu Leu Leu Ser Gln Asp Cys Gly Gly Phe Asn
65 70 75 80
Leu Gly Ser Phe Phe Ile Lys Arg Ser Leu Trp Ser Asp Arg Leu Leu
85 90 95
Asp Leu Trp Trp Asp Pro Val Met Tyr Glu Gln Lys His Met Asp Trp
100 105 110
Glu His Lys Glu Gln Asp Ala Leu Glu Tyr Leu Tyr Gln Ser Gln Pro
115 120 125
Trp Ile Arg Ser Asn Val Ala Phe Thr Pro Gln Arg Tyr Ile Asn Ser
130 135 140
Phe Pro Pro Gly Ala Cys Gly Glu Gly Asp Asp Pro Asp Val His Tyr
145 150 155 160
Ser Glu

<210> 34861
<211> 686
<212> PRT
<213> A.fumigatus

<400> 34861

```
Trp Ile Cys Ser Ala Leu Thr Asn Gln Lys Lys Phe Leu Leu Ser Met
1               5                  10                  15
Pro Ala His Phe Phe Arg Ala Cys Phe Tyr Arg Gly Thr Cys Thr Ser
            20                  25                  30
Pro Arg Asp Thr Ser Ala Ser Thr Pro Ile Ser Pro Lys Lys Ser Thr
        35                  40                  45
Val Ala Ile Lys Ser Gly Tyr Leu His Lys Arg Gly Arg Lys Asn Pro
    50                  55                  60
Lys Tyr Ser Arg Tyr Trp Phe Ser Leu Lys Gly Asp Val Leu Ser Tyr
65                  70                  75                  80
Tyr Ala Asp Pro Ser Asn Leu Tyr Phe Pro Ser Gly His Val Asp Leu
                85                  90                  95
Arg Tyr Gly Ile Ser Ala Ser Leu Gly Asp Pro Lys Glu Lys Gly Arg
            100                 105                 110
Glu Pro Arg Asp Phe Gln Val Thr Thr Asp Gln Arg Thr Tyr Tyr Phe
        115                 120                 125
Arg Ala Asp Ser Ala Met Ser Ala Lys Glu Trp Val Lys Ala Leu Gln
    130                 135                 140
Lys Val Ile Phe Arg Thr His Asn Glu Gly Glu Ser Val Lys Ile Ser
145                 150                 155                 160
Phe Pro Ile Glu Ser Ile Ile Asp Ile Glu Glu Ser Pro Met Val Asp
                165                 170                 175
Phe Ala Glu Thr Phe Lys Ile Arg Val Ile Glu Asp Asp Asp Ser Tyr
            180                 185                 190
Ala Ile Asp Glu Val Cys Leu Phe Thr Thr Ile Arg Leu Tyr Lys Ala
        195                 200                 205
His Gly Ser Gln Tyr Phe Phe Thr Phe Phe Asn Ser Gly Arg Glu Ala
    210                 215                 220
Phe Glu Phe Leu Lys Ile Leu Ile Asn Asp Gln Ser Leu Lys Ile Ser
225                 230                 235                 240
Ser Gln His Leu Ser Pro Gln Pro Asp Arg Ser Pro Arg Ser Asp Arg
                245                 250                 255
Thr Arg Lys Ser Arg Asn Arg Trp Ser Leu Thr Ser Gly Thr Ser Arg
            260                 265                 270
Ala Glu Thr Gln Arg Lys Arg Ser Ala Ser Thr Ser His Met Ser Leu
        275                 280                 285
Ala His Asp Ile Val Lys Ser Ser Pro Ala Thr Arg His Gln Asp Ser
    290                 295                 300
Ser Asp Ser Ile Leu Asn Ser Phe Glu Gln Ala Thr Glu Ser Ser Ala
305                 310                 315                 320
Ala Trp Gln Ser Ile Thr Asp Ala Ala Glu Ser Ala Ser Gln Ile Leu
                325                 330                 335
Asn Arg Ser Asp Val Phe Gln Ser Pro Thr Ile Tyr Gly Leu Asp Arg
            340                 345                 350
Arg Pro Ser Gly Arg Glu Arg Arg Gly Arg Arg Asn Ser Asp Glu Thr
        355                 360                 365
Ala Arg Ser Pro Ser Thr Arg Ala Asn Val Gly Thr Gly Gln Gln Ile
    370                 375                 380
Asp Glu Leu Asp Arg Arg Thr Asp Gly Asn Thr Ser Gly Arg Glu Ala
385                 390                 395                 400
Arg Asp Thr Thr Ser Glu Ser Asp Gln Tyr Thr Gln Asp Pro Thr Lys
                405                 410                 415
Ser Phe Ser Gly Ala Pro Ser Leu Asn Glu Leu Val Lys Ala Gly Val
            420                 425                 430
Tyr Pro Leu Gln Arg Ala Ala Gly Leu Ala Glu Tyr Leu Arg Thr Arg
```

```
        435                 440                 445
Ser Lys Gln Met Ser Asn Leu Leu Ala Ser Glu Ser Met Gly Tyr Ile
    450                 455                 460
Glu Lys Val Ser Gly Met Trp Thr Gly Gly Arg Lys His Tyr Gly Glu
465                 470                 475                 480
Ala Glu Asp Val Leu Pro Asp Asp Gln Asp Val Asp Pro Glu Asp Lys
                485                 490                 495
Glu Asp Gly Cys Asn Tyr Gly Asp Arg Phe Arg Ala His Phe Ala Leu
            500                 505                 510
Pro Pro Thr Glu Lys Leu Gln Ala Thr Tyr Phe Ala Tyr Leu His Arg
        515                 520                 525
Val Leu Pro Leu Tyr Gly Lys Ile Tyr Val Ser Gln Lys Lys Leu Cys
    530                 535                 540
Phe Arg Ser Leu Ile Pro Gly Thr Arg Thr Lys Met Ile Leu Pro Leu
545                 550                 555                 560
Arg Asp Ile Glu Asn Val Glu Lys Glu Lys Gly Phe Arg Phe Gly Tyr
                565                 570                 575
His Gly Leu Val Ile Ile Ile Arg Gly His Glu Glu Leu Phe Phe Glu
            580                 585                 590
Phe Arg Thr Ser Asp Ala Arg Asp Asp Cys Ala Val Thr Leu His Gln
        595                 600                 605
His Leu Glu Ala Val Lys Phe Met Ala Glu Ser Gly Leu Leu Ala Glu
    610                 615                 620
Gln Glu Gln Asn Glu Ser Glu Ala Ala Met Thr Glu His Arg Met Leu
625                 630                 635                 640
Gln Glu Ala Arg Tyr Tyr Asp Tyr Gly Glu Asn Asp Leu Arg Pro Leu
                645                 650                 655
Asn Glu Ser Ser Glu Leu His Pro Ile Phe Asp Asp Pro Arg Ala Ser
            660                 665                 670
Ile Val Asn Phe Lys Pro Ala Glu Ser Leu Arg Ile Thr Cys
        675                 680                 685
```

<210> 34862
<211> 306
<212> PRT
<213> A.fumigatus

<400> 34862

```
Ser Thr Ser Arg Met Arg Pro Phe Leu Asp Asp Ala Lys Arg Arg Val
1               5                   10                  15
Asp Arg Lys Leu Ser Ala Arg Arg Gln Ser Leu Ser Ala Ser Arg Phe
            20                  25                  30
Leu Pro Ser Ala Leu Pro Asp Arg Leu Lys Asp Asn His Asp Ala Gln
        35                  40                  45
Val Asp Phe Thr Ala Pro Pro Gly Gly Ser Gly Ser Arg Glu Gly His
    50                  55                  60
Leu Gln Tyr Met Gln Gln Ser Ile Phe Gly Ile Ile Ala Ala Val Gly
65                  70                  75                  80
Ser Arg Ser Asp Phe His Ala Arg Phe Asp Glu Ser Ser Asp Ser Asp
                85                  90                  95
Gly Glu Thr Gly Gln Arg Pro Arg Lys Glu Ser Ser Val Arg Lys Gly
            100                 105                 110
Thr Ser Val Ser Val Asn Thr Ser Ser Leu Asp Pro Ser Gln Arg Ser
        115                 120                 125
Ser Ser Gln Thr Asp Gly Asn Ser Glu Lys Asp Leu Gly Thr Arg Gly
    130                 135                 140
```

```
Arg Arg His Arg Arg Thr Ile Ser Asp His Lys Leu Leu Arg Pro Phe
145                 150                 155                 160
Met Ser Asn Ser Lys His Glu Pro Asp Pro Ser Thr Gly Asp Glu Met
                165                 170                 175
Pro Thr Val Ser Pro Pro Ser Arg Pro Arg Ser Ala Thr Pro Arg Ala
            180                 185                 190
Ala Pro Ile Leu Ser Arg Met Val Glu Ala Gln Ala Gln Phe Asp Leu
        195                 200                 205
Lys Ala Ser Ser Thr Glu Arg Ser Gln Ser Ser Leu Asn Glu Thr Gly
    210                 215                 220
Ala Lys Gly Pro Arg Asp Ala Ser Val Ser Pro Leu Ser Thr Arg Leu
225                 230                 235                 240
Met Asp Met Phe Gly Phe Asp Lys Pro Glu Lys Val Leu Val Glu Tyr
                245                 250                 255
Ala Cys Ser Leu Leu Gln Ser Met Leu Leu Gln Gly Tyr Met Tyr Val
            260                 265                 270
Thr Glu Gly His Ile Cys Phe Tyr Ala Tyr Leu Pro Gln Glu Ile Tyr
        275                 280                 285
Ser Ser Tyr Gln Val Trp Ile Ser Ser Gln Ala Trp Pro Lys Glu Pro
    290                 295                 300
Gln Val
305
```

<210> 34863
<211> 401
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (111)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34863

```
Gln Gln Gly Ile Val Val Met Pro Thr Glu Ala Glu Asp Val Arg Ala
1               5                   10                  15
Ala Leu Leu Trp Ala Pro Glu His Gln Ile Asp Leu Ala Val Lys Gly
            20                  25                  30
Gly Gly His Ser Val Ala Gly Thr Ser Ser Ser Asp Gly Gly Leu Val
        35                  40                  45
Ile Asp Leu Ser Leu Met Asn Ser Val Ser Val Asp Pro Ala Ala Lys
    50                  55                  60
Thr Val Thr Val Gly Gly Gly Ala Thr Trp Lys Glu Val Asp Glu Ala
65                  70                  75                  80
Ala Ala Ala His Gly Leu Ala Ala Val Gly Gly Thr Val Asn His Thr
                85                  90                  95
Gly Val Gly Gly Leu Thr Leu Gly Gly Gly Tyr Gly Trp Leu Xaa Gly
            100                 105                 110
Gln Tyr Gly Leu Thr Ile Asp Asn Leu Leu Ser Ala Thr Val Val Leu
        115                 120                 125
Ala Thr Gly Gln Val Val Thr Ala Ser Ala Thr Glu Asn Ala Asp Leu
    130                 135                 140
Phe Trp Gly Leu Arg Gly Ala Gly Tyr Asn Phe Gly Val Val Thr Ser
145                 150                 155                 160
Phe Thr Phe Arg Ala His Glu Gln Pro Asn Pro Val Tyr Ala Gly Leu
                165                 170                 175
```

```
Leu Ala Phe Pro Pro Asp Gln Val Glu Ala Val Ile Glu Gln Leu Asn
            180                 185                 190
Arg Thr Leu Glu His Pro Asp Pro Arg Ser Gly Ala Ile Cys Ile Phe
        195                 200                 205
Ala Gln Pro Pro Gly Ala Pro Val Pro Met Val Asn Val Ile Val Phe
    210                 215                 220
Tyr Asn Gly Thr Gln Ala Gln Gly Glu Lys Arg Phe Ala Gly Leu Leu
225                 230                 235                 240
Ala Leu Asn Pro Val Val Asn Thr Thr Ala Thr Ile Pro Tyr Ser Gln
                245                 250                 255
Val Asn Ala Leu Gln Asn Pro Met Ala Thr Tyr Gly Gly Arg Lys Ser
            260                 265                 270
Phe Lys Gly Val Phe Phe His Pro Pro Leu Ala Pro Ser Phe Ala Arg
        275                 280                 285
Ser Met Leu Asp Asp Leu Thr Ala Arg Leu Gln Ala Glu Pro Asp Leu
    290                 295                 300
Ala Ala Ser Ala Leu Leu Leu Glu Phe Tyr Asp Met Arg Ala Ile Cys
305                 310                 315                 320
Ala Val Pro Arg Glu Ala Thr Ala Phe Ala Ser Arg Ser Trp Thr Gln
                325                 330                 335
Asn Gly Leu Ile Asn Leu Arg Trp Thr Asp Ala Arg Lys Asp Gly Glu
            340                 345                 350
His Arg Ala Trp Ala Arg Glu Arg Gln Ala Arg Trp Lys Ala Glu Leu
        355                 360                 365
Asp Ala Arg Val Gln Glu Gly Val Pro Gln Tyr Ile Asn Tyr Ala Glu
    370                 375                 380
Arg Thr Ser Leu His Leu Leu Ser Ser Ser Leu Ala Ile Ala Asp Lys
385                 390                 395                 400
Cys
```

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<210> 34864
<211> 192
<212> PRT
<213> A.fumigatus

<400> 34864

```
Val Ala Tyr Arg His Arg Pro Lys Asn Leu Leu Leu His Asp Gly Arg
1               5                   10                  15
Ile Leu Gly His Val Arg Lys Arg Arg Ile Leu His Glu Ile Pro Gly
            20                  25                  30
Leu Ala Asp Leu Leu Pro Ala Lys Gln Gln Pro Arg Ala Arg Leu Leu
        35                  40                  45
Ala Leu Arg Asp Val Pro Gln Asp Pro Pro Val Leu Gly Pro Ile Asp
    50                  55                  60
Asp Arg Pro Leu Gly Gly Gly Arg Val Gln Arg Ile Ala His His Pro
65                  70                  75                  80
Gly Val Leu Leu Gly Gly Thr His Ile Arg Arg Glu Glu Leu Val Val
                85                  90                  95
Asp Arg Val Leu Asp Val Asp Ala Arg Ser Arg Arg Ala Asp Leu Pro
            100                 105                 110
Val Val Gly Gly Asp Ala Asp Pro Arg Pro Glu Glu Arg Val Val Gln
        115                 120                 125
Ile Ala Val Val Glu His Asp Gly Gly Ala Leu Ala Ala Glu Leu Gln
    130                 135                 140
Arg Asp Leu Phe Gln Val Arg Leu Gly Arg Gly Gly Glu Asp Leu Pro
```

```
145                 150                 155                 160
Pro Gly Gly Ala Gly Ala Gly Glu Gly His Phe Ala Asp Gly Arg Val
                165                 170                 175
Leu Gly Glu Ala Leu Ala Gly Gly Glu Gly Pro Arg Pro Arg Gly Cys
            180                 185                 190
```

<210> 34865
<211> 218
<212> PRT
<213> A.fumigatus

<400> 34865

```
Thr Gly Asp Ser Val Asp Arg Thr Lys Cys Asn Tyr Ile Ile Ile Tyr
1               5                   10                  15
Leu Thr Val Leu Thr Asp Val His Pro Ser Ser Ala Ser Ser Pro Met
            20                  25                  30
Ser Arg Pro Asn Pro Leu Ser Leu Thr Pro Pro Asn Gly Ala Phe Ala
        35                  40                  45
Leu Ser Ile Ala His Ala Leu Thr Val Thr Trp Pro Asp Ser Ser Ala
    50                  55                  60
Arg Leu Thr Arg Cys Ala Arg Phe Thr Leu Val Val Lys Ile Ala Ala
65                  70                  75                  80
Leu Arg Pro Cys Arg Val Ser Phe Ala Leu Arg Met Thr Ser Ser Ser
                85                  90                  95
Val Glu Asn Leu Ala Ile Leu Cys Ile Ser Ser Ile Ser Ile Val Pro
            100                 105                 110
His Leu Phe Leu Val Arg Ala Asp Pro Gly Arg Leu Leu Thr Ala Thr
        115                 120                 125
Gly Pro Lys Ile Ser Ser Phe Met Met Ala Ala Ser Ser Ala Thr Ser
    130                 135                 140
Ala Asn Ala Val Phe Ser Thr Lys Tyr Pro Val Ser Pro Thr Phe Ser
145                 150                 155                 160
Pro Pro Asn Ser Ser Arg Ala Pro Val Ser Leu Pro Cys Ala Met Tyr
                165                 170                 175
Pro Arg Ile Leu Arg Cys Trp Ala Pro Leu Thr Ile Gly Pro Leu Val
            180                 185                 190
Val Ala Gly Ser Ser Gly Ser Pro Thr Thr Pro Gly Phe Ser Leu Ala
        195                 200                 205
Ala Arg Thr Tyr Ala Ala Arg Asn Leu Ser
    210                 215
```

<210> 34866
<211> 348
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (61)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34866

```
Pro Val Pro His Glu Leu Arg Leu Arg Gly Pro Ser Gly Gln Asn Arg
1               5                   10                  15
Asp Gly Arg Arg Arg Arg His Leu Glu Gly Gly Arg Arg Ser Arg Cys
            20                  25                  30
```

```
Arg Ala Arg Ala Gly Arg Arg Gly Arg His Arg Gln Pro Tyr Arg Gly
        35                  40                  45
Gly Arg Ala Asp Pro Gly Arg Gly Val Trp Leu Ala Xaa Arg Pro Val
    50                  55                  60
Arg Pro His His Arg Gln Pro Ala Leu Gly Asn Gly Arg Pro Gly His
65                  70                  75                  80
Arg Thr Gly Gly Asp Ser Val Arg Asp Gly Lys Arg Arg Pro Leu Leu
                85                  90                  95
Gly Pro Pro Arg Arg Arg Val Gln Leu Trp Arg Arg Asp Glu Leu His
            100                 105                 110
Leu Pro Gly Pro Arg Ala Ala Gln Pro Arg Leu Arg Gly Ala Ala Gly
        115                 120                 125
Leu Pro Pro Gly Pro Ser Arg Ser Gly His Arg Ala Ala Gln Pro His
    130                 135                 140
Pro Arg Ala Pro Arg Pro Pro Gln Arg Arg His Leu His Leu Arg Pro
145                 150                 155                 160
Ala Pro Arg Arg Ser Arg Pro His Gly Gln Arg Asp Arg Val Leu Gln
                165                 170                 175
Arg His Pro Gly Ala Gly Arg Glu Ala Leu Arg Gly Ser Ala Gly Pro
            180                 185                 190
Gln Pro Arg Arg Gln His His Arg His Asp Pro Leu Leu Pro Gly Gln
        195                 200                 205
Arg Pro Pro Glu Pro Asp Gly His Leu Arg Arg Pro Gln Ile Phe Gln
    210                 215                 220
Gly Arg Leu Leu Pro Pro Ala Ala Gly Pro Val Val Cys Ala Gln His
225                 230                 235                 240
Ala Gly Arg Pro Asp Arg Pro Ala Ala Gly Arg Ala Arg Ser Arg Arg
                245                 250                 255
Val Gly Pro Pro Ala Arg Val Leu Arg Tyr Ala Arg His Leu Cys Arg
            260                 265                 270
Ala Ala Arg Gly His Gly Val Cys Gln Pro Gln Leu Asp Ala Glu Arg
        275                 280                 285
Thr Asp Gln Pro Ala Val Asp Arg Cys Ala Gln Gly Arg Gly Ala Pro
    290                 295                 300
Gly Leu Gly Ala Arg Thr Ala Gly Ala Leu Glu Ser Arg Val Gly Arg
305                 310                 315                 320
Pro Gly Ala Gly Gly Gly Pro Ala Val His Gln Leu Cys Arg Ala Tyr
                325                 330                 335
Val Ser Ser Ser Pro Leu Phe Ile Pro Cys His Ser
            340                 345
```

<210> 34867
<211> 231
<212> PRT
<213> A.fumigatus

<400> 34867

```
Ser Lys Pro Ser Gly Asn Ser Pro Leu Ser Arg Thr Glu Ala Arg Pro
1               5                   10                  15
Ile His Arg Arg Thr Arg Val Pro Pro Pro Gly Ser Ser Thr Ser Ser
            20                  25                  30
Arg Ala Trp Ala Phe Pro Ala Gly Gln Ser Phe Ala Glu His Pro Ala
        35                  40                  45
Ile Arg Lys Val Ser Phe Thr Gly Ser Ser Ala Thr Gly Arg Lys Ile
    50                  55                  60
Phe Ala Ala Ala Ala Lys Thr Asn Leu Lys Lys Val Ser Leu Glu Leu
```

```
65                  70                  75                  80
Gly Gly Lys Gly Pro Ser Ile Val Phe Asp Asp Cys Asp Leu Asp Asn
                85                  90                  95
Ala Leu Leu Trp Thr Arg Ile Gly Ile Thr Ala Asn Asn Gly Gln Ile
            100                 105                 110
Cys Ala Ala Gly Ser Arg Ile Tyr Val Gln Asp Thr Ile Tyr Asp Lys
        115                 120                 125
Phe Leu Ala Ala Tyr Val Arg Ala Ala Lys Glu Asn Pro Gly Val Val
    130                 135                 140
Gly Asp Pro Leu Asp Pro Ala Thr Thr Lys Gly Pro Ile Val Asn Gly
145                 150                 155                 160
Ala Gln His Arg Arg Ile Leu Gly Tyr Ile Ala Gln Gly Lys Glu Thr
                165                 170                 175
Gly Ala Arg Leu Leu Phe Gly Gly Glu Lys Val Gly Glu Thr Gly Tyr
            180                 185                 190
Phe Val Glu Asn Thr Ala Phe Ala Asp Val Ala Glu Asp Ala Ala Ile
        195                 200                 205
Met Lys Glu Glu Ile Phe Gly Pro Val Ala Val Ser Asn Leu Pro Gly
    210                 215                 220
Ser Ala Arg Thr Arg Asn Lys
225                 230
```

<210> 34868
<211> 100
<212> PRT
<213> A.fumigatus

<400> 34868

```
Gly Thr Ile Leu Met Leu Leu Met Gln Ser Ile Ala Lys Phe Ser Thr
1               5                   10                  15
Glu Glu Glu Val Ile Arg Lys Ala Asn Asp Thr Leu His Gly Leu Ser
            20                  25                  30
Ala Ala Ile Phe Thr Thr Asn Val Asn Arg Ala His Arg Val Ser Arg
        35                  40                  45
Ala Leu Glu Ser Gly Gln Val Thr Val Asn Ala Trp Ala Met Leu Ser
    50                  55                  60
Ala Asn Ala Pro Phe Gly Gly Val Lys Glu Ser Gly Phe Gly Arg Asp
65                  70                  75                  80
Met Gly Glu Glu Ala Leu Glu Gly Trp Thr Ser Val Lys Thr Val Lys
                85                  90                  95
Tyr Met Ile Met
            100
```

<210> 34869
<211> 409
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (282)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34869

```
Arg Glu Glu Met Lys Arg Arg Thr Leu Gly Ile Val Asp Val Leu Arg
1               5                   10                  15
```

```
Asp Pro Leu Leu His Pro Gly Val Gln Leu Gly Phe Pro Ala Arg Leu
            20                  25                  30
Pro Phe Ala Arg Pro Gly Pro Val Leu Pro Val Leu Ala Arg Ile Gly
        35                  40                  45
Pro Pro Gln Val Asp Gln Ser Val Leu Arg Pro Thr Ala Ala Gly Lys
    50                  55                  60
Arg Arg Gly Leu Ala Arg His Gly Thr Asp Gly Ala His Ile Val Glu
65                  70                  75                  80
Leu Glu Gln Glu Gly Arg Arg Gly Glu Ile Gly Leu Gly Leu Gln Pro
                85                  90                  95
Gly Gly Gln Val Val Gln His Ala Ala Arg Lys Arg Arg Gly Gln Arg
            100                 105                 110
Arg Val Glu Glu Asp Ala Leu Glu Arg Phe Ala Ala Ala Val Gly Gly
        115                 120                 125
His Arg Val Leu Glu Gly Val Asp Leu Gly Val Gly Asp Arg Gly Gly
    130                 135                 140
Gly Val Asp Asp Gly Val Glu Gly Gln Gln Thr Arg Glu Ala Leu Leu
145                 150                 155                 160
Ala Leu Arg Leu Gly Ala Val Val Glu His Asp His Val Asp His Gly
                165                 170                 175
Asp Gly Ser Ala Gly Gly Leu Gly Glu Asp Ala Asp Gly Ala Ala Ala
            180                 185                 190
Gly Val Gly Val Leu Glu Gly Ala Val Glu Leu Leu Asp Asp Arg Phe
        195                 200                 205
Asp Leu Val Arg Gly Glu Gly Gln Gln Pro Arg Val Asp Gly Val Gly
    210                 215                 220
Leu Leu Val Gly Pro Glu Gly Glu Ala Arg His Asp Ala Lys Val Val
225                 230                 235                 240
Pro Gly Ala Ala Glu Ala Pro Glu Glu Val Gly Val Phe Arg Arg Gly
                245                 250                 255
Arg Cys His His Leu Ser Gly Gly Gln Asp Asp Arg Cys Arg Glu Gln
            260                 265                 270
Val Val Asp Gly Glu Ala Val Leu Ala Xaa Glu Pro Ala Ile Pro Pro
        275                 280                 285
Ala Gln Gly Gln Pro Ala His Pro Gly Met Val Asp Gly Ala Ser His
    290                 295                 300
Gly Gly Gln Pro Val Arg Gly Ser Gly Phe Val Asp Leu Leu Pro Gly
305                 310                 315                 320
Gly Ala Ala Ala Asp Arg His Gly Phe Gly Arg Trp Val His Gly Asp
                325                 330                 335
Gly Val His Glu Gly Gln Val Asn His Gln Ala Ala Val Gly Arg Ala
            340                 345                 350
Gly Ala Arg Asp Arg Val Ala Ala Thr Phe Asp Gly Glu Val Asp Leu
        355                 360                 365
Val Leu Trp Gly Pro Glu Glu Ser Gly Pro Asn Ile Leu Gly Leu Ser
    370                 375                 380
Gly His His His Asp Ser Leu Leu Ser Thr Ser Val Met Ile Arg Val
385                 390                 395                 400
Trp Ser Ile Ala Gln Pro Trp Lys Thr
                405
```

<210> 34870
<211> 135
<212> PRT
<213> A.fumigatus

<400> 34870
Lys Arg Ser Arg Trp Ser Ser Ala Ala Arg Ala Pro Pro Ser Cys Ser
1 5 10 15
Thr Thr Ala Ile Trp Thr Thr Arg Ser Ser Gly Arg Gly Ser Ala Ser
20 25 30
Pro Pro Thr Thr Gly Arg Ser Ala Arg Arg Asp Arg Ala Ser Thr Ser
35 40 45
Arg Thr Arg Ser Thr Thr Ser Ser Ser Arg Arg Met Cys Val Pro Pro
50 55 60
Arg Arg Thr Pro Gly Trp Trp Ala Ile Arg Trp Thr Arg Pro Pro Pro
65 70 75 80
Arg Gly Arg Ser Ser Met Gly Pro Ser Thr Gly Gly Ser Trp Gly Thr
85 90 95
Ser Arg Arg Ala Arg Arg Arg Ala Arg Gly Cys Cys Leu Ala Gly Arg
100 105 110
Arg Ser Ala Arg Pro Gly Ile Ser Trp Arg Ile Arg Arg Leu Arg Thr
115 120 125
Trp Pro Arg Met Arg Pro Ser
130 135

<210> 34871
<211> 176
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (62)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34871
Thr Gly Leu Gly Cys Ser Trp Ala Arg Lys Val Lys Leu Val Thr Thr
1 5 10 15
Pro Lys Leu Tyr Pro Ala Pro Arg Arg Pro Gln Lys Arg Ser Ala Phe
20 25 30
Ser Val Ala Asp Ala Val Thr Thr Cys Pro Val Ala Arg Thr Thr Val
35 40 45
Ala Glu Ser Arg Leu Ser Met Val Arg Pro Tyr Trp Pro Xaa Ser Gln
50 55 60
Pro Tyr Pro Pro Pro Arg Val Ser Pro Pro Thr Pro Val Trp Leu Thr
65 70 75 80
Val Pro Pro Thr Ala Ala Ser Pro Cys Ala Ala Ala Ala Ser Ser Thr
85 90 95
Ser Phe Gln Val Ala Pro Pro Pro Thr Val Thr Val Leu Ala Ala Gly
100 105 110
Ser Thr Glu Thr Glu Phe Met Arg Asp Arg Ser Ile Thr Arg Pro Pro
115 120 125
Ser Asp Glu Leu Val Pro Ala Thr Glu Trp Pro Pro Pro Leu Thr Ala
130 135 140
Arg Ser Ile Trp Cys Ser Gly Ala Gln Arg Arg Ala Ala Arg Thr Ser
145 150 155 160
Ser Ala Ser Val Gly Ile Thr Thr Ile Pro Cys Cys Gln Pro Gln Ser
165 170 175

<210> 34872
<211> 390

<212> PRT
<213> A.fumigatus

<400> 34872

```
Pro Pro Ala Ile Phe Leu Leu Ile Lys Thr Phe Arg Lys Phe Pro Ala
1               5                  10                  15
Val Thr Asp Arg Ser Ser Pro Asn Ser Ser Ser Asn Pro Gly Ser Pro
            20                  25                  30
Pro Gly Val Val Asn Ile Leu Ala Gly Val Gly Leu Pro Arg Arg Pro
        35                  40                  45
Glu Leu Arg Arg Ala Pro Gly His Pro Gln Ser Val Leu His Arg Leu
    50                  55                  60
Gln Arg His Arg Ala Glu Asp Leu Arg Arg Arg Gly Gln Asp Glu Pro
65                  70                  75                  80
Glu Lys Gly Leu Ala Gly Ala Arg Arg Gln Gly Pro Leu His Arg Val
                85                  90                  95
Arg Arg Leu Arg Ser Gly Gln Arg Ala Pro Leu Asp Ala Asp Arg His
            100                 105                 110
His Arg Gln Gln Arg Ala Asp Leu Arg Gly Gly Ile Ala His Leu Arg
        115                 120                 125
Pro Gly His Asp Leu Arg Gln Val Pro Arg Gly Val Cys Ala Cys Arg
    130                 135                 140
Gln Gly Glu Pro Arg Gly Gly Gly Arg Ser Ala Gly Pro Gly His His
145                 150                 155                 160
Gln Gly Ala Asp Arg Gln Trp Gly Pro Ala Pro Glu Asp Pro Gly Val
                165                 170                 175
His Arg Ala Gly Gln Gly Asp Gly Arg Ala Ala Ala Val Trp Arg Gly
            180                 185                 190
Glu Gly Arg Arg Asp Arg Val Phe Arg Gly Glu Tyr Gly Val Cys Gly
        195                 200                 205
Arg Gly Arg Gly Cys Gly His His Glu Gly Gly Asp Phe Trp Ala Gly
    210                 215                 220
Gly Gly Lys Gln Pro Thr Arg Ile Gly Thr Tyr Glu Lys Gln Val Arg
225                 230                 235                 240
Tyr Tyr Thr Asn Ala Ala Asp Ala Glu Tyr Arg Gln Val Leu Asp Arg
                245                 250                 255
Arg Gly Ser His Pro Gln Gly Glu Arg His Pro Ala Arg Pro Gln Arg
            260                 265                 270
Gly Asp Leu His His Gln Arg Glu Ser Arg Ala Pro Gly Glu Pro Arg
        275                 280                 285
Ala Gly Val Gly Pro Gly Asp Gly Gln Arg Val Gly Asp Ala Gln Arg
    290                 295                 300
Glu Cys Ala Val Trp Arg Gly Gln Gly Glu Arg Val Arg Ser Gly His
305                 310                 315                 320
Gly Arg Gly Gly Ala Gly Gly Val Asp Val Gly Gln Asp Gly Gln Val
                325                 330                 335
Tyr Asp Tyr Val Val Ala Phe Arg Pro Ile Tyr Arg Ile Ala Gly Leu
            340                 345                 350
His Thr Asp Arg Val His Leu Met Lys His Ile Val Arg Ile Ile Leu
        355                 360                 365
Gly Leu Glu Leu Leu Gln Ser Pro Gln Ile Leu Ala Val Asp Val Val
    370                 375                 380
Asp His Arg Val Thr Arg
385                 390
```

<210> 34873

<211> 170
<212> PRT
<213> A.fumigatus

<400> 34873
Arg Leu Leu Arg Thr Leu Ala Ser Ala Val Ala Val Pro Glu His Asp
1 5 10 15
Ile Leu Pro Pro Ser Pro Asp Ala Thr Leu Lys Arg Arg Asn Ser Ser
20 25 30
Thr Thr Asp Pro Asp Pro Asp Ser Lys Arg Arg Arg Leu Ser Thr Gln
35 40 45
Glu Glu Lys Asp His Pro Ala Ser Asp Arg Lys Pro Ser Ile Leu Asp
50 55 60
Thr Ala Glu Gln Arg Pro Gly Arg Arg Ala Ser Arg Gln Ala Asn Gly
65 70 75 80
Arg Glu Glu Glu Arg Lys Arg Gly Gln Arg Leu Phe Gly Ala Leu Leu
85 90 95
Gly Thr Leu Ser Gln Arg Ser Ser Thr Ala Ala Glu Lys Arg Arg Ala
100 105 110
Asp Ile Glu Arg Lys Gln Gln Val Lys Leu Lys Leu Gln Asp Glu Glu
115 120 125
Tyr Asp Glu Leu Lys Lys Lys Lys Arg Glu Glu Arg Val Ala Leu Arg
130 135 140
Lys Lys Gln Gln Arg Tyr Tyr Glu Glu Glu Ser Val Ser Ala Arg Cys
145 150 155 160
Ser Gln Phe Thr Ser Leu Arg Ala Tyr Gly
165 170

<210> 34874
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34874
Asn Cys Leu Val Gly Val Ala Ile Met Phe Val Asp Lys Ile Asn Val
1 5 10 15
Thr Gly Asp Pro Arg Val Gln Phe Arg Gln Ala Arg Val Asn Gly Lys
20 25 30
Gln Tyr Gly Met His Leu Val Thr Ser Ala Arg Cys Ala Arg Phe Ser
35 40 45
Gly Arg Arg Pro Glu Leu Leu Arg Cys Arg Thr Asp Tyr Ala Gly Gly
50 55 60
Thr Ile Ala Asn His Ile Leu Thr Ile Tyr
65 70

<210> 34875
<211> 84
<212> PRT
<213> A.fumigatus

<400> 34875
Asp Ala Pro Glu Asp Ile Ser Leu Tyr Ser His Lys Gln Cys Ala Asp
1 5 10 15
Asp Ile Lys Glu Leu Ala Leu Gln Leu Gly Ala Asp Lys Ile Ile Val
20 25 30
Gly Gly His Asp Trp Tyr Val Pro Pro Gly Phe Asn Phe Tyr Ile Leu

```
        35                  40                  45
Arg Val Pro Val Thr Asp Tyr Ile Leu Gln Gly Arg Cys Ile Cys Val
    50                  55                  60
Pro Ser Cys Pro Leu Val Ser Arg Pro Arg Tyr Ser Ser Val His Gly
65                  70                  75                  80
Leu Arg Thr Val
```

<210> 34876
<211> 139
<212> PRT
<213> A.fumigatus

<400> 34876

```
Pro Phe Phe Ser Leu Gln Tyr Tyr Lys Pro Trp Gln Leu Arg Pro Glu
1               5                  10                  15
Asp Glu Asp Leu Ile Cys Arg Gln Ile Glu Glu Ala Glu Ala Thr Ile
            20                  25                  30
Ser Arg Glu Arg Ala Glu Phe Glu Ala Arg His Pro Pro Gln Glu Glu
        35                  40                  45
Ser Glu Ser Lys Glu Glu Thr Glu Phe Gln Thr Gly Asn Gln Gln Glu
    50                  55                  60
Ala Pro Gln Pro Asp Ala Asp Val Gln Gln Pro Lys Asp Thr Thr Glu
65                  70                  75                  80
Glu Ser Ser Asp Gln Ala Asn Ala Gly Thr Lys Glu Ser Gln Asn Asn
                85                  90                  95
Glu Ala Ser Val Pro Asp Thr Val Asp Asp Ile Pro Ala Ser Val Asn
            100                 105                 110
His Thr Gly Ser Asp Asp His Arg Ala Ala Asp Asp Asp Gly Gly Glu
        115                 120                 125
Val Val Glu Asp Asn Glu Asp Thr Val Ile Tyr
    130                 135
```

<210> 34877
<211> 120
<212> PRT
<213> A.fumigatus

<400> 34877

```
Ile Ala Asn Gly Thr Thr Val Asn Trp Tyr Arg Thr Arg Glu Val Asn
1               5                  10                  15
His Lys Glu Glu Leu Ala Ile Leu Asp Arg Arg Ile Thr Ala Pro Val
            20                  25                  30
Leu Phe Ile Gln Ala Leu Arg Asp Ala Ala Leu Pro Ala His Leu Gly
        35                  40                  45
Lys Gly Met Thr Lys Thr Ile Pro His Leu Thr Tyr Lys Gln Val Asn
    50                  55                  60
Thr Ser His Trp Ala Leu Trp Glu Lys Pro Lys Glu Val Asn Glu Met
65                  70                  75                  80
Ile Ala Trp Trp Leu Glu Glu Val Gly Ser Leu Ile Leu Val Cys Ser
                85                  90                  95
Ser Cys Glu Gly Cys Ile Lys Ile Ala Phe Tyr Thr Ile Val Cys Asp
            100                 105                 110
Ser Ile Cys Val Ile Leu Arg Asn
        115                 120
```

<210> 34878
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34878
Pro Ala Ala Pro Tyr Arg Ser Ala Trp Gly Phe Asp Thr Ala Ile Pro
1 5 10 15
Ser Thr Gly Leu Gly Ser His Gly Ala Lys Lys Glu Ser Val Thr Arg
20 25 30
Pro Glu His Val Gly Glu Leu Glu Leu Thr Asp Lys Glu Asp Gly Gly
35 40 45
Ser Val Arg Ala Cys Phe Arg Phe Ala Ile Lys Val Thr
50 55 60

<210> 34879
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34879
Phe Glu Leu His Val Glu Ser Ile Leu Thr Ile Cys Ser Thr Leu Lys
1 5 10 15
Thr Gly Leu Val Ala Lys Ala Ile Lys Ala Gly Lys Thr Val Asp Glu
20 25 30
Lys Thr Leu Gln His Phe Tyr Glu Thr Glu Lys Val Ser Ala Ile Glu
35 40 45
Thr Val Gly Leu Ser Asp Ala Lys Thr Pro His Ser Ser Arg Thr Pro
50 55 60

<210> 34880
<211> 322
<212> PRT
<213> A.fumigatus

<400> 34880
Ser Val Arg Asn Pro Ser Gly Gly Gly Asn Gln Thr Asn Thr Gln Arg
1 5 10 15
Gln Gln Gln Ala Gln Lys Pro Thr Leu Ser Leu Phe Gly Asn Gln Asn
20 25 30
Ala Ala Pro Gln Leu Ser Thr Gln Gln Thr Ala Thr Ser Gly Thr Val
35 40 45
Val Pro Gly Val Lys Val Asp Leu Ser Asn Leu Leu Pro Thr Thr Lys
50 55 60
Tyr Glu Ser Cys Ala Asp Glu Ile Arg Ser Glu Leu Glu Lys Phe Asp
65 70 75 80
Asn Tyr Val Leu Leu Gln Ile Lys Leu Cys Asn Glu Val Ser Asn Met
85 90 95
Leu Pro Thr Ile Ala Ser Gln Ala Glu Thr Ile Pro Asn Asp Val Asp
100 105 110
Phe Val Gln Gly Lys Leu Glu Thr Ile Glu His Ala Leu Glu Asn Asp
115 120 125
Ala Arg Asp Ile Asp Gln Leu Arg Ser Leu Val Ser Arg Asp Ala Ala
130 135 140
Glu Ala Gln Val Ala Phe Arg Ala Ile Asp Thr Leu Lys Leu Pro Leu
145 150 155 160

```
Gln Tyr Gln Ser Ala Gly Gly Ala Gly Trp Trp Ser Ala Gln Asp Gln
                165                 170                 175
Lys Gly Ser Asp Arg Gln Ala Leu Arg Ser Thr Arg Lys Asn Thr Leu
            180                 185                 190
Ala Leu Pro Asp Asp Val Glu Thr Asp Ala Ser Ser Ala Thr Ser Ile
        195                 200                 205
Asn Gly Val Pro Val Asn Leu Val Asp Tyr Phe Ser Gln Arg Ser Asp
    210                 215                 220
Glu Met Gly Thr Val Leu Glu Arg Tyr Thr Arg Asn Leu Lys Glu Ile
225                 230                 235                 240
Glu Asp His Leu His Gly Ile Glu Leu Ser Leu Asn Arg Gln Ile Gln
                245                 250                 255
Glu Phe Val Ala Ser Arg Ser Arg Asp Gly Ala Thr Ala Gly Thr Gln
            260                 265                 270
Lys Ser Lys Leu Asn Asp Leu Ala Ala Val Leu Gly Asp Val Glu Asn
        275                 280                 285
Gly Ile Leu Gly Val Ala Ser Arg Leu Gly Ala Val Thr Glu Gln Val
    290                 295                 300
Leu Glu Val Val Leu Gly Pro Pro Ser Gly Asp Gly Met Leu Asn Tyr
305                 310                 315                 320
Lys Pro
```

<210> 34881
<211> 174
<212> PRT
<213> A.fumigatus

<400> 34881

```
Thr Glu Glu Tyr Thr Met Ala Pro Leu Leu Glu Glu Pro Ala Ala Thr
1               5                  10                  15
Pro Tyr Leu Gly His Phe Thr Val Pro Lys Lys Glu Pro Ala Glu His
            20                  25                  30
Asn Lys Phe Trp Tyr Glu Pro Gly Arg Thr Thr Val Lys Arg His Asp
        35                  40                  45
Asp Tyr Pro Tyr Glu Asp Leu Leu Pro Ser Phe Pro Asp Val Arg Trp
    50                  55                  60
Glu Pro Ile Gly Glu Val Pro Tyr Glu Asp Lys Gly Leu Arg Gly Asp
65                  70                  75                  80
Pro Lys Phe Arg His Leu Leu Gln Asp Ala Thr Asp Val Phe Asp Tyr
                85                  90                  95
Thr Pro Arg Ile Gly Thr Glu Ile His Gly Val Asn Leu Ala Arg Leu
            100                 105                 110
Asn Asp Ala Gln Arg Asp Asp Leu Ala Arg Leu Ile Ala Val Arg Gly
        115                 120                 125
Val Val Phe Phe Arg Asn Gln Lys Asp Phe Asp Ile Asp Ala Gln Arg
    130                 135                 140
Glu Leu Gly Lys Tyr Phe Gly Thr Leu His Lys Val Ser Leu Asn Ser
145                 150                 155                 160
Pro Arg Ser Ser Ser Gly Arg Asp Trp Ser Leu Thr Val Val
                165                 170
```

<210> 34882
<211> 225
<212> PRT
<213> A.fumigatus

<400> 34882
His Ala Thr Thr Ala Val Pro Lys Lys Lys Gly Leu Glu Asp Val His
1 5 10 15
Val Val Tyr Thr Gly Asp Asn Ser Ser Asp Gln Arg Ala Leu Phe Ser
20 25 30
Pro Ser Phe Leu Trp His Ser Asp Val Thr Tyr Glu Ile Gln Pro Pro
35 40 45
Ser Tyr Thr Ser Leu Lys Val Leu Thr Gly Pro Pro Arg Gly Gly Gly
50 55 60
Gly Asp Thr Leu Trp Ser Ser Gln Tyr Ala Ala Tyr Asp Ala Leu Ser
65 70 75 80
Ser His Met Gln Asn Tyr Leu Lys Gly Leu Thr Ala Leu His Thr Ala
85 90 95
Asn Met Gln Ala Ser Asp Ser Arg Ala Leu Gly Arg Thr Val Arg Arg
100 105 110
Glu Pro Ile Thr Thr Glu His Pro Leu Ile Arg Thr Asn Pro Val Thr
115 120 125
Gly Trp Asn Ser Leu Phe Phe Asn Pro Gly Phe Val Thr Lys Ile Val
130 135 140
Gly Ile Pro Lys Thr Glu Ser Asp Ala Ile Ile Arg Tyr Leu Thr Glu
145 150 155 160
Val Val Ala Thr Thr Gln Glu Ala His Val Arg Phe Gln Trp Gly Glu
165 170 175
Asn Asp Val Ala Leu Trp Asp Asn Arg Thr Thr Val Ser Asp Ala Gln
180 185 190
Ile Phe Pro Met Ile Pro Pro Asp Phe Leu Val Glu Ser Leu Arg Phe
195 200 205
Leu Trp Leu Phe Ser Ser Pro Ser Ser Cys Arg Ser Ser Arg Leu Pro
210 215 220
Arg
225

<210> 34883
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34883
Ala Cys Arg Ser Arg Phe Ile Ile Lys His Thr Ile Ser Arg Arg Arg
1 5 10 15
Thr Gln Tyr His Phe Gln His Leu Phe Arg Asp Arg Thr Glu Pro Thr
20 25 30
Ser Asn Ala Lys Tyr Thr Val Phe His Ile Ser Lys Asp Arg Cys Lys
35 40 45
Ile Ile Glu Leu Arg Phe Leu Gly Ser Ser Gly Arg Ser Ile Ser Thr
50 55 60
Ser
65

<210> 34884
<211> 146
<212> PRT
<213> A.fumigatus

<400> 34884

```
Pro Leu Leu Gln Ser Gly Ala Thr His Leu Val Ala Gly Gly Glu Pro
1               5                  10                  15
Tyr Lys Asn Val Lys Asp Gly Lys Gly Phe Phe Ile Ala Pro Thr Ile
            20                  25                  30
Phe Thr Asn Val Lys Asp Asp Met Arg Ile Tyr Arg Glu Glu Val Phe
        35                  40                  45
Gly Pro Phe Val Val Ile Ser Ser Phe Lys Thr Glu Glu Glu Ala Ile
    50                  55                  60
Thr Arg Ala Asn Asp Thr Thr Tyr Gly Leu Gly Ala Ala Val Phe Thr
65                  70                  75                  80
Lys Asp Ile Glu Arg Ala His Arg Val Ala Ser Glu Ile Glu Ala Gly
                85                  90                  95
Met Val Trp Ile Asn Ser Ser Asn Asp Ser Asp Phe Arg Val Pro Phe
            100                 105                 110
Gly Gly Val Lys Gln Ser Gly Ile Gly Arg Glu Leu Gly Glu Ala Gly
        115                 120                 125
Leu Glu Ala Tyr Thr Gln Ile Lys Ala Val His Val Asn Leu Gly Thr
    130                 135                 140
Lys Leu
145
```

<210> 34885
<211> 77
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (35)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 34885
Leu Gln Leu Gln Val Ala Asn Gly Gln Val Val Ile Glu Leu Pro Gly
1               5                  10                  15
Ser Pro Ser Asp Pro Asn Gly Phe Lys Val Arg Val Pro Gly Cys Leu
            20                  25                  30
Ala Leu Xaa Tyr Gly Lys Ile Gln Lys Tyr Asn Arg Glu Asn Lys Tyr
        35                  40                  45
Gln Gly Ala Gly Phe Thr Lys His Ala Phe Ile Leu Met Cys Gly Ala
    50                  55                  60
Ser Lys Leu Val Gly Leu Asn Phe Thr Gly Leu Leu Leu
65                  70                  75
```

<210> 34886
<211> 410
<212> PRT
<213> A.fumigatus

```
<400> 34886
Ala Arg Met Ser Lys Gly Asp Met Val Asn Ser Trp Tyr Ala Arg Lys
1               5                  10                  15
Tyr Ala Pro Ala Trp Glu Ala Ala Ser Ser Leu Gly Arg Thr Ser Asp
            20                  25                  30
Ala Ser Met Leu Arg Arg Arg Ile Asn Pro Phe Asp Gly Ala Asp Lys
        35                  40                  45
Met Arg Leu Tyr Ser Gln Asp Pro Gly Asp Leu Asn Phe Leu Phe Leu
```

```
    50                  55                  60
Ser Thr Thr Leu Phe His Pro Phe Gln Ala Ile His Met Ser His Ala
65                  70                  75                  80
Met Glu Asp Asp Ala Leu His Gln Leu Gln Gln Glu Gln Ser Lys Leu
                85                  90                  95
Leu Asp Lys Ile Asp Glu Leu Arg Thr Ile Gly Val Gly Gly Leu Val
            100                 105                 110
Glu Leu Pro Gln Leu Ile Val Cys Gly Asn Gln Ser Ser Gly Lys Ser
        115                 120                 125
Ser Val Leu Glu Ala Ile Ser Arg Val Arg Phe Pro Ala Lys Ser Asn
    130                 135                 140
Val Cys Thr Arg Phe Ala Thr Glu Val Ile Leu Arg Arg Asn Ala Ala
145                 150                 155                 160
Phe Ser Lys Ile Lys Val Ser Ile Glu Pro Gly Pro Ser Arg Thr Asp
                165                 170                 175
Glu Asp Glu Arg Arg Arg Leu Arg Ser Phe Thr Tyr Glu Asp Phe Ser
            180                 185                 190
Asn Gly Asp Asp Leu Pro Pro Leu Ile Glu Lys Ala Lys Val His Met
        195                 200                 205
Gly Ile Thr Glu Ser Val Asn Thr Gly Phe Ser Asp Asp Val Leu Lys
    210                 215                 220
Val Glu Ile Ser Gly Pro Asp Lys Pro Glu Leu Thr Leu Val Asp Leu
225                 230                 235                 240
Pro Gly Leu Tyr Tyr Ser Thr Ser Gln Glu Gln Asp Leu Gln Gly Ile
                245                 250                 255
Leu Ile Ile Arg Lys Leu Thr Glu Arg Tyr Met Ser Asn Pro Arg Ser
            260                 265                 270
Ile Ile Leu Ala Val Ile Ser Ala Lys Thr Asp Tyr His Leu Gln Glu
        275                 280                 285
Val Leu Asn Ile Ala Glu Gln Phe Asp Pro Lys Arg Glu Arg Thr Leu
    290                 295                 300
Gly Ile Ile Thr Gln Pro Asp Thr Leu Glu Ala Asn Ser Glu Glu Glu
305                 310                 315                 320
Asp Thr Tyr Leu His Phe Val Lys Asn Glu Lys Ile Pro Leu Glu Leu
                325                 330                 335
Gly Trp His Val Leu Arg Asn Arg Ser Phe Glu Thr Arg Asp Ile Ser
            340                 345                 350
Asp Asp Ala Arg Asp Glu Met Glu Lys Ala Phe Phe Asn Gln Gly Arg
        355                 360                 365
Trp Ala Ser Leu Ser Arg Glu Cys Val Gly Ile Glu Ser Leu Arg Arg
    370                 375                 380
Arg Leu Ser Gly Val Leu Leu Lys Leu Ile Arg Arg Asn Leu Pro Arg
385                 390                 395                 400
Ala Asn His Arg Asp Pro Arg Gln Gly Val
                405                 410
```

<210> 34887
<211> 119
<212> PRT
<213> A.fumigatus

<400> 34887

```
Gly Gly Leu Leu His Pro Arg Arg Tyr Asp Thr Phe Phe Asp Ser Cys
1               5                   10                  15
Thr Asn Gly Gln Gly Lys Val Asn Pro Asn Leu Tyr Glu Asp Gly Arg
            20                  25                  30
```

```
Ile Cys Leu Ser Ile Leu Gly Thr Trp Pro Thr Lys Ser Pro Glu Glu
        35                  40                  45
Ser Trp Ser Pro Val Lys Ser Thr Ala Leu Gln Ile Leu Val Ser Ile
    50                  55                  60
Met Gly Leu Val Leu Val Lys Asn Pro Phe Tyr Ser Lys Tyr Ile Leu
65                  70                  75                  80
Glu Leu Leu Asp Val Leu Asn His Leu Val Ile Ser Gln Thr Arg Pro
                85                  90                  95
Ala Met Thr Pro Leu Leu Trp Ala Thr Ile Val Ala Ser Ser Pro His
            100                 105                 110
Asn Ile Gln Lys Arg His Ser
        115
```

<210> 34888
<211> 98
<212> PRT
<213> A.fumigatus

<400> 34888

```
Arg Ala Phe Ala Ser Val Pro Arg Arg Arg Arg Arg Leu Thr Arg Lys
1               5                   10                  15
Arg Tyr Pro Leu Arg Lys Ala His Phe Thr Leu Ile Ala Lys Leu Ser
            20                  25                  30
Gln Ala Glu Ser Ala Ser Glu Lys Glu Glu Met Thr Pro Lys Ser Lys
        35                  40                  45
Lys Arg Gly Arg Ala Gln Thr Lys Asp Glu Pro Glu Glu Lys Ala Thr
    50                  55                  60
Thr Pro Lys Thr Lys Arg Val Lys Lys Gly Ser Arg Ile Lys Gln Lys
65                  70                  75                  80
Ser Asp Thr Glu Asp Asp Val Ser Ser Pro Arg Gly Trp Lys Glu Pro
                85                  90                  95
Arg His
```

<210> 34889
<211> 85
<212> PRT
<213> A.fumigatus

<400> 34889

```
His Ala Thr Arg Gly Cys Val Thr Pro Lys Ile Ile Ala Asn Leu Asn
1               5                   10                  15
Glu Ala Val Glu Glu Ala Ser Gly Asp Ser Lys Asp Leu Asp Ala Ile
            20                  25                  30
Asp Gly Phe Glu Glu Leu Pro Ser Glu Tyr Gln Glu Lys Val Arg Lys
        35                  40                  45
Ala Leu Glu Gln Gly His Val Asp Asp Glu Asp Trp Lys Gly Val Gly
    50                  55                  60
Phe Ala Pro Phe Ala Pro Asn Leu Tyr Arg Phe Gln Asp Glu Thr Asn
65                  70                  75                  80
Thr Gly Leu Gly Ser
                85
```

<210> 34890
<211> 148
<212> PRT

<213> A.fumigatus

<400> 34890

```
Val Tyr Pro Arg Thr Thr Arg Arg Ser Lys Ser Leu Ser Tyr Leu Thr
1               5                  10                  15
Asp Glu Ala Gly Tyr Asp Ala Leu Ala Val Gly Asp Asn Arg Arg Val
            20                  25                  30
Glu Ser Ser Gln Tyr Thr Glu Lys Ala Phe Leu Met Thr Arg Asn Phe
        35                  40                  45
Ile Lys His Ala Leu His His Pro Val Ala Gly Leu Glu Asp Val Leu
    50                  55                  60
Thr Trp Asn Tyr Ile Lys Ser Glu Gln Lys Asp Asp Ala Ser Ser Arg
65                  70                  75                  80
Pro Asn Leu Leu Arg Arg Ala Ile Asp Ser Ala Val Gly Met Ile Asp
                85                  90                  95
His His Asn Asn Thr Ser Ala Thr Asp Lys Leu Asp Glu Glu Ser Ala
            100                 105                 110
Ala Ala Pro Phe Val Ser Arg Leu Ser Leu Gly Ala Val Val Met Leu
        115                 120                 125
Arg Lys His Val Thr Asp Leu Gly Asn Ile Glu Ser Thr Ile Ile Ala
    130                 135                 140
Asn Asn Ser Ser
145
```

<210> 34891
<211> 198
<212> PRT
<213> A.fumigatus

<400> 34891

```
Gly His Ser Ile Ser Met Ser Thr Cys Lys Ala Val Ala Gln Arg Trp
1               5                  10                  15
Pro Arg Tyr Leu His Arg His Ile Pro Phe Val Ala Pro Ser Pro Ser
            20                  25                  30
Ile Arg Pro Ala Leu Arg Arg Cys Arg Met Ser Lys Gln Pro Ser Leu
        35                  40                  45
Leu Arg Ser Tyr Ala Ser Ile Ser Ala Ala Asp Leu Lys Phe Gly Gln
    50                  55                  60
Pro Leu His Glu Thr His Pro His Leu Leu Asn Pro Gly Glu Cys Val
65                  70                  75                  80
Tyr Met Leu Pro Ile Ala Cys Glu Cys Asp Thr Thr Lys Asn Glu Arg
                85                  90                  95
Ile Asn Leu Lys Leu Val Thr Pro Gly Ile Thr Ala Leu Glu Tyr Ala
            100                 105                 110
Gln Arg Arg Ser Arg Leu Ala Asn Lys Leu Pro Lys Asn Ala Ile Ala
        115                 120                 125
Val Leu Ala Ala Ser Glu Val Thr Tyr Arg Ala Thr Gly Ile Phe Asn
    130                 135                 140
Asn Tyr Arg Gln Asp Ser Asn Phe Phe Tyr Leu Thr Gly Met Leu Ser
145                 150                 155                 160
Leu Gln Val Glu Asn Lys Ala Ser Ser Ser Leu Asp Ile Leu Ser Ile
                165                 170                 175
Gly Phe Asn Glu Pro Asn Ala Leu Ala Ile Ile Gly Lys Thr Gly Leu
            180                 185                 190
Pro Val Lys Arg Leu Arg
        195
```

<210> 34892
<211> 91
<212> PRT
<213> A.fumigatus

<400> 34892
Met Phe Met Ile Val Pro Asp Ile Val Glu Val Arg Ile Ser Lys Gln
1 5 10 15
Ala Ser Ala Ser Pro Ser Asn Arg Lys Tyr Ser Ser Ser Leu Thr Phe
20 25 30
Gly Thr Phe Leu Ile Arg Leu Pro Ser Gly Ile Tyr Val Pro Asp Ser
35 40 45
Glu Arg Trp Pro Glu Gln Phe Arg Gly Ile Gly Ile Arg Ile Glu Asp
50 55 60
Ser Val Cys Val Gly Asp Asp Asn Pro Ile Val Leu Thr Thr Glu Ala
65 70 75 80
Val Lys Glu Val Ser Ser Asn Ser Ile His Phe
85 90

<210> 34893
<211> 139
<212> PRT
<213> A.fumigatus

<400> 34893
Leu Phe Glu Gln Thr Gly Asp Ile Gly Arg Ile Gly Asp Ile Leu Pro
1 5 10 15
Thr Ile Leu Ser Gly Ala Thr Glu Ile Tyr Thr Asp Ile Pro Ala Phe
20 25 30
Asn Pro Gly Arg Ser Ser Leu His His Phe Leu Tyr Gly Pro Thr Asn
35 40 45
Ala Ser Glu Lys Leu Lys Lys Met Val Asp Tyr His Lys Val Lys Pro
50 55 60
Leu Arg Asn Ile Leu Asn Glu Met Arg Val Phe Lys Ser Glu Asp Glu
65 70 75 80
Val Val Gln Leu Arg Arg Val Gly Gln Ala Ser Gly Arg Ala Phe Thr
85 90 95
Glu Thr Met Arg Gln Thr Phe Thr Lys Glu Lys Asn Leu Asn Ser Phe
100 105 110
Leu Glu Tyr Asn Phe Lys Val Asn Gly Cys Asp Gly Ser Ala Phe Val
115 120 125
Pro Val Val Ala Gly Gly Ser Val Ser Thr Ser
130 135

<210> 34894
<211> 142
<212> PRT
<213> A.fumigatus

<400> 34894
Arg Asn Gly Asp Met Val Leu Val Asp Gly Gly Gly Val Arg Thr Phe
1 5 10 15
Ser Ile Leu Gly Thr Asp Cys Asp Thr Asn Arg Leu Gln Glu Trp Gly
20 25 30
Thr Tyr Ile Ser Asp Ile Thr Arg Thr Trp Pro Val Asn Gly Lys Phe

```
        35                  40                  45
Ser Asp Pro Gln Arg Asp Leu Tyr Asn Ala Val Leu Asn Val His Arg
    50                  55                  60
Ser Cys Val Ser Leu Cys Arg Glu Ser Ala Gly Leu Ser Leu Asp Lys
65                  70                  75                  80
Leu His Ser Ile Ala Glu Asn Gly Leu Lys Asp Gln Leu Gln Gln Leu
                85                  90                  95
Gly Phe Asp Val Ser Gly Ser Val Ser Arg Leu Asp Val Lys Val Pro
            100                 105                 110
Ile Arg Gln Ala Asp Pro Cys Leu Pro Arg Thr Gly Asn Gly His Pro
        115                 120                 125
Phe Pro Ser Ser Ser Gly Thr Leu His Trp Val Arg Cys Ser
    130                 135                 140
```

<210> 34895
<211> 65
<212> PRT
<213> A.fumigatus

<400> 34895

```
Leu Phe Ile Val Cys Leu Phe Ser Arg Leu Thr Leu Leu Gln Tyr Ser
1               5                   10                  15
His Gln Arg Leu Ser Ser Val Asp Ala Ala Ser Gln Val Asn Leu Tyr
            20                  25                  30
Cys Thr Ile Thr Tyr Glu Trp Val Ser Met Cys Tyr Ser Arg Phe Phe
        35                  40                  45
Tyr Leu Val Pro Lys Arg Leu Asp Ile Ile Asn Leu Phe Asn Ile Leu
    50                  55                  60
Tyr
65
```

<210> 34896
<211> 81
<212> PRT
<213> A.fumigatus

<400> 34896

```
Leu Tyr Arg Ile Gly His His Gln Leu His Leu Asp Gly Leu Thr Tyr
1               5                   10                  15
Phe Cys Leu Gly Phe Thr Asn Tyr Leu Lys Thr Tyr Leu Met Phe Leu
            20                  25                  30
Ile Asp Leu Met Tyr Tyr Thr Val Arg Tyr Arg Cys Cys Arg Arg Leu
        35                  40                  45
Thr Leu Gly Phe Pro Gly Trp Ile Gly Ile Val Trp Thr Leu His Asp
    50                  55                  60
Ser Lys Val Cys Phe Lys Phe Gly Thr Ile Ile Val Leu Leu Ile Leu
65                  70                  75                  80
Trp
```

<210> 34897
<211> 95
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (23),(24)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34897
Arg Pro Thr Thr Ile Asp His Ile Pro Phe Val Lys Ala Leu Asn Leu
1 5 10 15
Glu Ala Leu Gly Ser Asn Xaa Xaa Cys Ile Ala Gln Tyr Thr Gly Ile
20 25 30
His Arg Ile Gly Asp Val Leu Asp Val His Ala Val Leu Glu His Ile
35 40 45
Val Gly Asn Ala Val Gly Asn Val Val Ala Leu Asp Gly Asp Val Asp
50 55 60
Val Asp Gly Asp Phe Val Ile Leu Asn Val Asp Ala Gly Lys Thr Val
65 70 75 80
Val Ile Arg Leu Ala Thr Trp Phe Val Ser Trp Val Val Thr Leu
85 90 95

<210> 34898
<211> 155
<212> PRT
<213> A.fumigatus

<400> 34898
Ser Ser Asn Val Ser Phe Phe Lys Val Lys Gln Leu Ala Gln Pro Tyr
1 5 10 15
Glu Ser Ser Gly Gly His Arg Asp Cys Cys Thr Val Thr Ile Asn Glu
20 25 30
Trp Ser Cys Ser Lys Gly Glu Asp Arg Val Asn Ile Ala Ser Thr Thr
35 40 45
Leu Leu Ser Thr Ser Lys Met Asn Cys Arg Ser Gln Val Asn Trp Gly
50 55 60
Gln Leu Lys Lys Met Leu Glu Tyr Pro Leu Gly His Ala Tyr Ile Arg
65 70 75 80
Ser Ile Asn Asp Gly Ser Leu Arg Gly Arg His Ser Gly Gly Ile Cys
85 90 95
Ala Thr Ile Ile Gln Pro Ala Pro Pro Thr Pro Ile Phe Gln Ser Ser
100 105 110
Lys Ala Phe Lys Ser Thr Ile Ser Phe Tyr Leu Leu Asn Arg Glu Leu
115 120 125
Val Ile Glu Val Arg Cys Leu Leu Leu Val Ile Cys Phe Trp Tyr Leu
130 135 140
Leu Phe Pro Thr Tyr Tyr Leu Val Leu Leu Ser
145 150 155

<210> 34899
<211> 262
<212> PRT
<213> A.fumigatus

<400> 34899
Trp Ser Ile Leu Leu Leu Val Gly Cys Ala Ala Ala Ile Asp Val Pro
1 5 10 15
Arg Gln Pro Tyr Ala Pro Thr Gly Ser Gly Lys Lys Arg Leu Thr Phe
20 25 30
Asn Glu Thr Val Val Lys Arg Ala Ile Ser Pro Ser Ala Ile Ser Val

```
        35                  40                  45
Glu Trp Ile Ser Thr Ser Glu Asp Gly Asp Tyr Val Tyr Gln Asp Gln
    50                  55                  60
Asp Gly Ser Leu Lys Ile Gln Ser Ile Val Thr Asn His Thr Gln Thr
65                  70                  75                  80
Leu Val Pro Ala Asp Lys Val Pro Glu Asp Ala Tyr Ser Tyr Trp Ile
                85                  90                  95
His Pro Asn Leu Ser Ser Val Leu Trp Ala Thr Asn Tyr Thr Lys Gln
            100                 105                 110
Tyr Arg His Ser Tyr Phe Ala Asp Tyr Phe Ile Gln Asp Val Gln Ser
        115                 120                 125
Met Lys Leu Arg Pro Leu Ala Pro Asp Gln Ser Gly Asp Ile Gln Tyr
    130                 135                 140
Ala Gln Trp Ser Pro Thr Gly Asp Ala Ile Ala Phe Val Arg Gly Asn
145                 150                 155                 160
Asn Val Phe Val Trp Thr Asn Ala Ser Thr Ser Gln Ile Thr Asn Asp
                165                 170                 175
Gly Gly Pro Asp Leu Phe Asn Gly Val Pro Asp Trp Ile Tyr Glu Glu
            180                 185                 190
Glu Ile Leu Gly Asp Arg Phe Ala Leu Trp Phe Ser Pro Asp Gly Ala
        195                 200                 205
Tyr Leu Ala Phe Leu Arg Phe Asn Glu Thr Gly Val Pro Thr Phe Thr
    210                 215                 220
Val Pro Tyr Tyr Met Asp Asn Glu Glu Ile Ala Pro Pro Tyr Pro Arg
225                 230                 235                 240
Glu Leu Glu Leu Arg Tyr Pro Lys Ala Arg Leu His His Gly Glu Arg
                245                 250                 255
Ser Thr Ala His Arg Ile
            260
```

<210> 34900
<211> 129
<212> PRT
<213> A.fumigatus

<400> 34900

```
Thr Ile Glu Pro Gly Pro Ile Ile Ile Ile Ile Ile Ile Asn Ala Val
1               5                   10                  15
Ser His Leu Asn Thr Ala Phe Ser Ser Leu Lys Leu Asn Cys Gln Thr
            20                  25                  30
Pro Thr Asn Ser Lys Met Gln Phe Ser Thr Ile Leu Ser Leu Leu Ala
        35                  40                  45
Val Ala Gly Met Thr Met Ala Ala Pro Ser Val Ala Arg Thr Ser Pro
    50                  55                  60
Asn Pro Tyr Arg Val Thr Thr Gln Leu Thr Asn Gln Val Ala Asn Leu
65                  70                  75                  80
Ile Thr Thr Val Leu Pro Ala Ser Thr Leu Arg Ile Thr Lys Ser Pro
                85                  90                  95
Ser Thr Ser Thr Ser Pro Ser Arg Ala Thr Thr Leu Pro Thr Ala Leu
            100                 105                 110
Pro Thr Met Cys Ser Arg Thr Ala Trp Thr Ser Ser Thr Ser Pro Met
        115                 120                 125
Arg
```

<210> 34901

<211> 255
<212> PRT
<213> A.fumigatus

<400> 34901
Ser Ala Val Thr Asp Tyr Gly Ser Arg Val His His Gln Leu Leu Arg
1 5 10 15
Gln Ser Thr Gly Asn Gly Pro Pro Pro Ala Met Ala Ala Asp Ala His
20 25 30
Asp Ser Leu Asp Arg Glu Asp Ala Pro Phe Leu Ala Ser Ser Ala Glu
35 40 45
Ser Ser Ala Ser Ser Ser Arg Ile Gly Asp Gln Asp Asp Glu Ala Glu
50 55 60
Leu Lys His Val Tyr Asn Asp Asn Glu Ala Glu Asp Asp Gly Leu Asp
65 70 75 80
Asn Arg Lys Gly Thr Lys Ala Ile Glu Lys Ile Arg Phe Arg Phe Met
85 90 95
Val Thr Leu Phe Ala Met Ile Leu Ala Phe Glu Val Gly Ile Val Met
100 105 110
Ala Asn Gly Pro Met Thr Arg Ile Tyr Glu Ser Ile Ala Cys Arg Gln
115 120 125
Tyr Tyr Ala Glu Tyr Asp Pro Arg Gln Ile Ala Ala Asp Gly Gln Val
130 135 140
Ala Glu Ser Met Cys Lys Ile Lys Glu Val Gln Thr Glu Leu Ala Ala
145 150 155 160
Val Lys Gly Tyr Met Glu Phe Phe Asp Gly Val Leu Ser Ala Phe Leu
165 170 175
Ala Ile Pro Tyr Gly Leu Leu Ala Asp Arg Ile Gly Arg Lys Pro Ile
180 185 190
Ile Cys Leu Ser Ile Pro Ala Phe Ala Leu Asn Ser Gly Ile Met Leu
195 200 205
Ala Val Met Trp Tyr Ser Asp Ile Phe Pro Leu Arg Ala Val Trp Ala
210 215 220
Ser Cys Leu Ala Trp Leu Leu Gly Gly Gly Pro Val Val Ala Phe Ala
225 230 235 240
Ile Ile Trp Thr Met Met Ser Asp Val Thr Ala Glu Asp Glu Arg
245 250 255

<210> 34902
<211> 89
<212> PRT
<213> A.fumigatus

<400> 34902
Gly Thr Leu Arg Ala Phe Gln Ser Gly Arg Ile Ser Tyr Val Phe Lys
1 5 10 15
Trp Ser Gly Pro Ser Leu Thr Leu Asp Thr Ala Cys Ser Ser Ser Met
20 25 30
Val Ala Ile His Gln Ala Ala Arg Ala Leu Gln Ala Gly Asp Cys Arg
35 40 45
Ser Ala Leu Val Gly Gly Val Asn Val Ile Thr Ser Pro Asp Val Ser
50 55 60
Glu Ser Phe His Lys His Asp Ala Val Gln Ala Met Glu Pro His Phe
65 70 75 80
Tyr Lys His Tyr Glu Leu Thr Ala Pro
85

<210> 34903
<211> 100
<212> PRT
<213> A.fumigatus

<400> 34903
Met Tyr Leu Gly Leu Asp Arg Ala His Phe Leu Ser Pro Thr Gly Gln
1 5 10 15
Cys Lys Pro Phe Asp Asp Thr Ala Asp Gly Tyr Cys Arg Ser Glu Gly
20 25 30
Cys Ala Ala Phe Val Ile Lys Lys Leu Gly Asp Ala Ile Ser Glu Gly
35 40 45
Asp Arg Ile Leu Gly Val Ile Arg Gly Ile Glu Ile Asn Gln Ser Gly
50 55 60
Asn Ala His Ser Ile Thr His Pro His Ser Pro Thr Gln Glu Asp Leu
65 70 75 80
Phe Arg Thr Leu Leu Lys Lys Thr Arg Ile His Pro His Glu Val Arg
85 90 95
His Pro Ser Gly
100

<210> 34904
<211> 262
<212> PRT
<213> A.fumigatus

<400> 34904
Gln Ile Thr Val Val Glu Thr His Gly Thr Gly Thr Gln Ala Gly Asp
1 5 10 15
Pro Asn Glu Leu Val Ser Ile Arg Gly Ala Phe Cys Lys Gly Arg Asp
20 25 30
Pro Ala Asn Leu Leu His Phe Thr Ser Ile Lys Ala Asn Ile Gly His
35 40 45
Cys Glu Ala Ala Ser Gly Gly Ala Ala Leu Ala Lys Leu Leu Leu Met
50 55 60
Met Arg His Gly Gln Ile Pro Pro Gln Ile Ser Leu Gln Thr Leu Asn
65 70 75 80
His Lys Ile Lys Asp Leu Gly Thr Asp Gly Ser Val Ile Asp Arg Asp
85 90 95
Gly Ala Thr Trp Pro Arg Pro Ser Arg His Pro Arg Leu Ala Leu Leu
100 105 110
Asn Asn Phe Gly Ala Ala Gly Ser Asn Gly Ala Leu Ile Leu Gln Glu
115 120 125
Tyr Ser Arg Leu Asn Ala Pro Pro Gln Asp Glu Glu Gln Arg Glu Ala
130 135 140
Pro Ser Tyr Ile Leu Gly Leu Ser Ala Arg Ser Ser Ser Arg Leu Leu
145 150 155 160
Ala Tyr Lys Asp Ala Leu Ile Ser Tyr Leu Glu Ala Pro Ser Ile Arg
165 170 175
Ser Ser Leu Arg Asp Val Ala Tyr Thr Ser Thr Ala Arg Arg Gln Ile
180 185 190
Phe Asp Tyr Arg Ile Ser Val Thr Gly Ser Thr Ile Gln Glu Ile Val
195 200 205
Asp Asn Leu Arg Asn Ala Glu Ile Tyr Asn Ile Arg Glu Ser Ala Asn
210 215 220

```
Pro Gln Pro Arg Ala Val Phe Ala Phe Ser Gly Gln Gly Ser Gln Val
225                 230                 235                 240
Lys Leu His Arg Cys Thr Ser Gly Phe Thr Asn Leu Ser Glu Ile Val
                245                 250                 255
Val Pro Thr Asn Gly Pro
            260
```

<210> 34905
<211> 142
<212> PRT
<213> A.fumigatus

<400> 34905

```
Ile Pro Ser Ser Arg Phe His Val Glu Asp Phe Tyr Gln Lys Lys Asp
1               5                   10                  15
Gly Arg Thr Leu Arg Thr Lys Tyr Gly Asn Phe Leu Glu Asn Pro Phe
            20                  25                  30
Met Phe Asp Asn Glu Leu Phe Gly Ile Ser Arg Arg Glu Ala His Ser
        35                  40                  45
Met Asp Pro Gln Gln Arg Val Met Leu Gln Thr Ala Tyr Arg Ala Leu
    50                  55                  60
Glu Asp Ala Gly Tyr Val Pro Asp Ser Thr Pro Ser Phe Ser Arg Glu
65                  70                  75                  80
Thr Phe Gly Cys Phe Ile Gly Asn Ala Thr Leu Asp Tyr Thr Asp Asn
                85                  90                  95
Leu Arg Asp Asn Ile Asp Val Tyr Tyr Ser Pro Gly Lys Ser Cys His
            100                 105                 110
Ala Trp Leu Arg Ser Arg Leu Trp His Ala Asn His Leu Ser Val Arg
        115                 120                 125
Asn Val Thr Arg Phe Ser Glu Trp Thr Asp Gln Leu Arg Leu
    130                 135                 140
```

<210> 34906
<211> 62
<212> PRT
<213> A.fumigatus

<400> 34906

```
Met Arg Met Arg Asp Gly Met Arg Ile Ser Ala Leu Ile Asp Leu Asp
1               5                   10                  15
Ala Ser Asn Asn Ala Glu Tyr Ser Val Thr Phe Arg Tyr Arg Ile Thr
            20                  25                  30
Lys Phe Leu Asp His Glu Ser Arg Ala Ala Phe Arg Pro Ala Val Ala
        35                  40                  45
Ile Cys Cys Ile Ile Lys Trp Leu Ala Leu Ala Cys Arg Ala
    50                  55                  60
```

<210> 34907
<211> 143
<212> PRT
<213> A.fumigatus

<400> 34907

```
Leu Val Ala Asn Leu Pro Ala Ala Val Met Lys Phe Phe Pro Arg Gln
1               5                   10                  15
Leu Trp Lys Thr Ile Gln Pro Asn Phe Lys Pro Ser Val Ala Met Asp
```

```
            20                  25                  30
Gly Tyr Val Pro His Gly Pro Arg Ile Gly Val Lys Arg Gly Phe Glu
        35                  40                  45
Asp Glu Glu Glu Glu His Asp Ile Glu Glu Thr Lys Arg Arg Arg Gly
    50                  55                  60
Ile Asp Glu Asp Glu Asp Ala Glu Arg Asp Glu Arg Glu Glu Arg Glu
65                  70                  75                  80
Glu Asp Val Asp Val Leu Asp Pro Asp Glu Asp Gln Glu Glu Glu Ile
                85                  90                  95
Val Asp Asp Asp Phe Glu Asp Asp Glu Asp Glu Met Gly Gly Asp Tyr
            100                 105                 110
Asn Ala Glu Gln Tyr Phe Asp Ala Gly Asp Asp Glu Tyr Gly Asp Asp
        115                 120                 125
Gly Phe Ala Asp Gly Gly Gly Gly Gly Gly Asp Glu Asp Thr Tyr
    130                 135                 140

<210> 34908
<211> 67
<212> PRT
<213> A.fumigatus

<400> 34908
Thr Leu Leu Thr Ile Leu Pro Gln Lys Met Leu Arg Ser Phe Thr Phe
1               5                   10                  15
Thr Ile Phe Val Val Ser Thr Thr Gly Gln Gly Glu Ile Pro Ala Asn
            20                  25                  30
Ala Arg Ser Phe Trp Arg Ser Leu Leu Leu Lys Lys Leu Pro Pro Thr
        35                  40                  45
Phe Leu Ser Gly Val Asn Tyr Val Ser Phe Gly Leu Gly Asp Ser Ser
    50                  55                  60
Tyr Pro Lys
65

<210> 34909
<211> 106
<212> PRT
<213> A.fumigatus

<400> 34909
Gly Leu Leu Leu Leu Thr Ser Cys Ala Gln Arg Tyr Asn Val Pro Arg
1               5                   10                  15
Ala Arg Pro Leu Asn Pro Arg Glu Gln Lys Gln Val Asp Leu Tyr Arg
            20                  25                  30
Ala Leu Arg Asp Arg Phe His Asp Gly Pro Tyr Tyr Ser Val Leu Gln
        35                  40                  45
Ser Thr Ser Val Thr Ala Arg Lys Asp Glu Ala Ala Arg Ala His Phe
    50                  55                  60
Asp Pro Phe His Gly Met Pro Thr Tyr Ser Gly Lys Tyr Gln Lys Pro
65                  70                  75                  80
Glu Ser Gly Ile Gly Pro Glu Phe Glu Arg Thr Ser Val Arg Val Ser
                85                  90                  95
Val Val Leu Ala Gly Tyr Met Gly Trp Gly
            100                 105

<210> 34910
<211> 420
```

<212> PRT
<213> A.fumigatus

<400> 34910

```
Ser Ser Thr Gly Gly Glu Asp Thr Arg Glu Met Ile Thr Lys Val Ile
1               5                  10                  15
Ala Gln Val Thr Glu Ile Trp Phe Gln Trp Ala Ser Leu Pro Ala Ala
            20                  25                  30
Ala Ala Glu His Lys Val Leu Ser Phe Leu Pro Tyr Leu Gln His Glu
        35                  40                  45
Pro Pro Thr His Leu Gln Thr Gly Lys Thr Thr Thr Gln Arg Asp Gly
    50                  55                  60
Val Ala Gln Ser Leu Gln Ser Ala Asp Leu Ser Gln Gln Ser Glu Val
65                  70                  75                  80
Ser Ala His Ser Thr Asp Asp Pro Tyr Gly Pro Arg Arg Trp Arg Ser
                85                  90                  95
Ser Met Val Glu Leu Ser Gly Lys Asp Arg Ala Leu Asn Glu Phe Ser
            100                 105                 110
Val Glu Arg Val Gly Glu Glu Val Asp Gln His Leu Val Met Leu His
        115                 120                 125
Gly Tyr Gly Ala Gly Leu Gly Phe Phe Tyr Lys Asn Phe Glu Pro Leu
    130                 135                 140
Ser Arg Leu Lys Gly Trp Gln Leu His Ala Leu Asp Met Leu Gly Met
145                 150                 155                 160
Gly Arg Ser Thr Arg Pro Leu Phe Arg Ile Lys Ala Lys Asn Arg Glu
                165                 170                 175
Asp Ala Ile Lys Glu Ala Glu Asp Trp Phe Val Asp Ala Leu Glu Glu
            180                 185                 190
Trp Arg Val Lys Arg Lys Ile Glu Arg Phe Thr Leu Leu Gly His Ser
        195                 200                 205
Met Gly Gly Tyr Met Gly Val Ala Tyr Ala Leu Lys Tyr Pro Gly Arg
    210                 215                 220
Leu Asn Lys Leu Ile Leu Ala Ser Pro Val Gly Ile Pro Glu Asp Pro
225                 230                 235                 240
Tyr Ala Val Ser Ala Asp Met Pro Glu Pro Ser Glu Ser Thr Leu Ala
                245                 250                 255
Gln Glu Phe Thr Gln Asp Gln Gln Thr Ile Ala Gln Ser Ser Leu Ser
            260                 265                 270
Val Pro Pro Glu Val Ala Gln Lys Gly Asp Asn Asn Val Leu Leu Lys
        275                 280                 285
Gly Tyr Gly Asn Ala Ala Ala Pro Pro Glu Ser Arg Pro Ala Arg Arg
    290                 295                 300
Ser Ile Pro Lys Trp Phe Ala Tyr Leu Trp Glu Ala Asn Ile Ser Pro
305                 310                 315                 320
Phe Ser Leu Val Arg Trp Ala Gly Pro Leu Gly Pro Arg Ile Val Ser
                325                 330                 335
Gly Trp Thr Ser Arg Arg Phe Ser His Leu Pro Ala Asn Glu Ala Lys
            340                 345                 350
Ala Leu His Asp Tyr Ser Tyr Ser Ile Phe Ser Gln Arg Gly Ser Gly
        355                 360                 365
Glu Tyr Ala Leu Ala Tyr Ile Leu Ala Pro Gly Ala Phe Ala Arg Ser
    370                 375                 380
Pro Leu Ile Arg Arg Ile Gln Asn Val Gly Arg Gln Ile Ile Pro Pro
385                 390                 395                 400
Ser Asn Pro Gln Trp Gly Ala Cys Glu Arg His Gly Pro Leu Ser Leu
                405                 410                 415
```

Ala Thr Ala Phe
420

<210> 34911
<211> 139
<212> PRT
<213> A.fumigatus

<400> 34911
Phe Gly Ala Tyr Arg Thr Ser Asp Gly Arg Ser Phe Arg Leu Pro Thr
1 5 10 15
Pro Ser Gly Glu Pro Ala Asn Val Thr Asp Pro Ser Pro Ser Gln Pro
20 25 30
Pro Ser Asp Ser Ala Thr Gln Ala Ser Ser Ala Pro Gly Lys Arg Glu
35 40 45
Thr Gly Ile Pro Ile Val Phe Met Tyr Gly Asp His Asp Trp Met Asp
50 55 60
Ala Ala Gly Gly Phe Ala Ala Lys Ala Lys Ile Glu Glu Glu Lys Arg
65 70 75 80
Arg Val Leu Gln Asn Ala Ser Pro Glu Glu Arg Glu Ala Asp Asn Gly
85 90 95
Ser Ala Lys Val Val Ile Ile Lys Gly Ser Gly His His Ile Tyr Leu
100 105 110
Asp Gly Trp Glu Glu Phe Asn Lys Val Val Leu Glu Glu Met Glu Glu
115 120 125
Val Ser Gln Arg Glu Arg Ala Arg Ser Arg Thr
130 135

<210> 34912
<211> 260
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (122)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34912
Arg Val Phe Trp Phe Phe Leu Lys Glu Asn Lys Ala Pro Gly Leu Leu
1 5 10 15
Lys Leu Trp Ala Val Gly Arg Cys Pro Thr Asn Pro Gln Gly Pro Arg
20 25 30
Pro Ile Val Ser Arg Phe Ala Leu Phe Leu Val Gln Arg Pro Gly Leu
35 40 45
Ser Asp Glu Ala Val Glu Arg Gly Leu Ala Phe Pro Ser Met Ile Gly
50 55 60
Lys Glu Leu Pro Ser Pro Ala Phe Pro Cys Tyr Gly Ala Thr Pro Lys
65 70 75 80
Gln Gln Thr Phe Tyr Pro Trp Arg His Ser Gln Ala Ala Ser Cys Ser
85 90 95
Pro Asp Gly Arg Arg Gln Arg His His His Arg Ser Ala Thr Thr Ser
100 105 110
Leu Ile Pro Ser His Thr Arg Arg Ala Xaa Thr Ser Pro Ser Ala Ser
115 120 125
Arg Ser Asn Arg Ser Ala Gly Ser Gly Ala Arg Ser Arg Gly Leu Ser

```
    130                 135                 140
Pro Arg Pro Arg Ser Gln Asp Ala Ser Ser Leu Ser Thr Tyr Ser Asp
145                 150                 155                 160
Phe Phe His Ala Met Ala Ser Ala Pro Gln Ala His Ser Gln Leu His
                165                 170                 175
Leu Ser Asn Ser Ser Glu Val Pro Gly Gly Tyr Phe Ala Phe Arg Pro
            180                 185                 190
Gly Asn Gly Ala Asn Ser Ser Gly Ser Ala Val Ser Thr Gly Thr Thr
        195                 200                 205
Thr Pro Val Glu Asp Arg Ser Ser Thr Thr Ser Arg Asn Met Gly Arg
    210                 215                 220
Phe Met Ala His Tyr Pro Ala Gly Val Arg Tyr Arg Arg Arg Ser Val
225                 230                 235                 240
Ser Gly Ala Asn Leu Gly Ser Gln Leu Pro Asn Ala Ser Leu Ser Ile
                245                 250                 255
Asp Arg Pro Phe
            260
```

<210> 34913
<211> 95
<212> PRT
<213> A.fumigatus

<400> 34913

```
Gly Thr Ile Ser Ala Ala Cys Gly Ser Gln Leu His Ser Asn Ala Ser
1               5                   10                  15
Cys Asp Ile Glu Arg Lys Ile Cys Pro Asp Gln Met Pro Ile Gly Leu
            20                  25                  30
Leu Val Ala Pro Glu Pro Val Asn Asn Met Met Asn His Asn Gly Asp
        35                  40                  45
Val Cys Cys Ile Cys Lys Thr Lys Lys Thr Thr Phe Thr Pro His Phe
    50                  55                  60
His His Pro His Arg His Ala Leu Ser Met Ala Ser Leu Ile Ala Asn
65                  70                  75                  80
Thr Gly Thr Asn Met Ser Cys Asn Ser Ser Ser Ser Asp Thr Lys
                85                  90                  95
```

<210> 34914
<211> 160
<212> PRT
<213> A.fumigatus

<400> 34914

```
Ser Ser Lys Met Gly Lys Lys Asn Lys Lys Ser Ala Glu His Lys Glu
1               5                   10                  15
Arg Val Ala Ala Lys Gln Ser Lys Lys Ala Ala Gln Lys Glu Lys Arg
            20                  25                  30
His Lys Ala Lys Gly Arg Asp Ala Asp Ser Asp Ala Glu Asp Val Asp
        35                  40                  45
Leu Asp Ala Ile Leu Ala Gln Tyr Ala Glu Glu Gln Ala Lys Phe Leu
    50                  55                  60
Lys Val Thr Glu Val Val Ser Gly Pro Pro Ser Pro Arg Ser Ser Ala
65                  70                  75                  80
Thr Ile Ile Ala Ser Pro Ser Asn Arg Asn Glu Leu Leu Ile Phe Gly
                85                  90                  95
Gly Glu His Phe Asp Gly Thr Leu Ala Thr Phe Phe Asn Asn Leu Phe
```

```
            100                 105                 110
Val Tyr Asn Ile Asp Arg Asp Glu Trp Lys Glu Val Thr Ser Pro Asn
        115                 120                 125
Ser Pro Leu Pro Arg Ser Gly His Ala Trp Cys Arg Gly Gly Asn Ala
    130                 135                 140
Gly Gly Val Tyr Leu Phe Gly Gly Glu Pro Cys Ala Ser Phe Pro Gly
145                 150                 155                 160
```

<210> 34915
<211> 460
<212> PRT
<213> A.fumigatus

<400> 34915

```
Lys Trp Pro Gln Asn Asp Ile Phe Gln Gly Met Tyr Gln Asn Leu Phe
1               5                   10                  15
Thr Ser Ser Glu Tyr His Ala Glu Ala Ile Gln Asn Tyr Ile Ile Leu
            20                  25                  30
Phe Gly Gly Phe Gln Asp Thr Ser Gln Gln Thr Lys Tyr Leu Gln Asp
        35                  40                  45
Leu Trp Ile Tyr Asp Cys Ser Lys Phe Thr Trp Phe Asn Pro Thr Leu
    50                  55                  60
Pro Pro Ala Ala Gln Lys Pro Asp Pro Arg Ser Ser Phe Ser Phe Leu
65                  70                  75                  80
Pro His Glu Ser Gly Ala Val Leu Tyr Gly Gly Tyr Ser Arg Val Lys
                85                  90                  95
Ala Ser Thr Gly Val Gly Gly Lys Pro Gln Lys Gly Gly Pro Gln Arg
            100                 105                 110
Met Thr Met Lys Pro Met Val His Gln Asp Thr Trp Phe Leu Arg Ile
        115                 120                 125
Thr Pro Pro Asp Ala Asp Ala Pro Ala Ser Ala Ala Pro Thr Val Arg
    130                 135                 140
Trp Glu Arg Arg Lys Lys Pro Ala Asn Ser Pro Asn Pro Pro Arg Ala
145                 150                 155                 160
Gly Ala Thr Met Ala Tyr His Lys Gly Arg Gly Ile Met Phe Gly Gly
                165                 170                 175
Val His Asp Val Glu Leu Ser Glu Glu Gly Ile Asp Ser Glu Phe Phe
            180                 185                 190
Asp Thr Leu Leu Ala Trp Asn Thr Asp Arg Asn Arg Phe Phe Pro Leu
        195                 200                 205
Thr Leu Arg Arg Pro Arg Ala Thr Gly Lys Lys Gln Gln Ala Asn Gln
    210                 215                 220
Met Arg Ser Arg Asn Arg Ala Lys Ala Asp Glu Glu Glu Leu Leu Gln
225                 230                 235                 240
Asn Leu Arg Ala Leu Glu Ala Lys Gly Gly Leu Arg Asp Leu Asp Asp
                245                 250                 255
Asp Asp Glu Phe Gln Arg Ile Ser His Arg Met Glu Asp Ala Pro Ala
            260                 265                 270
Lys Ser Glu Lys Pro Ser Ile Val Arg Phe Glu Met Pro His Lys Arg
        275                 280                 285
Phe Asn Ala Gln Leu Ala Val Gln Asp Asp Thr Leu Phe Ile Phe Gly
    290                 295                 300
Gly Thr Phe Glu Lys Gly Asp Arg Glu Phe Thr Phe Asn Asp Met Tyr
305                 310                 315                 320
Ser Val Asp Leu Val Lys Leu Asp Gly Val Lys Glu Ile Phe Tyr Lys
                325                 330                 335
```

```
Glu Pro Glu Asn Trp His Leu Leu Asn Glu Ala Glu Ser Asp Asp Glu
            340                 345                 350
Met Asp Glu Asp Asp Glu Asp Glu Asp Glu Glu Glu Glu Asp Asp Asp
        355                 360                 365
Glu Asn Ala Met Ser Leu Asp Ser Ala Ser Pro Ala Pro Thr Glu Val
    370                 375                 380
Thr Val Pro Ser Val Thr Gln Gly Met Glu Gln Leu Glu Met Glu Glu
385                 390                 395                 400
Gln Glu Ala Glu Pro Ser Val Gln Asp Ser Arg Pro Leu Pro Arg Pro
                405                 410                 415
Phe Glu Ser Leu Arg Asp Phe Phe Ser Arg Thr Ser Glu Glu Trp Gln
            420                 425                 430
Lys Ile Leu Leu Asp Thr Leu Lys Glu Lys Gly Ile Thr Val Glu Lys
        435                 440                 445
Asn Val Lys Glu Leu Arg Leu Asn Ala Gly Ser Arg
    450                 455                 460
```

<210> 34916
<211> 212
<212> PRT
<213> A.fumigatus

<400> 34916

```
Tyr Leu Val Ala Ser Thr Leu Met Ala Leu Leu Leu Leu Ser Ser Ile
1               5                   10                  15
Ile Ser Ser Ser Thr Thr Leu Ile Glu Met Ser Gly Arg Lys Leu Arg
            20                  25                  30
Val Pro Thr Ala Leu Tyr Leu Glu Ala Gly Met His Gly Ala Val Glu
        35                  40                  45
Glu Met Pro Glu Val Ser Ile Cys Ser Glu Val Ser Pro Val Gln Val
    50                  55                  60
Ser Pro Asp Glu Ser Gly Ile Asn Cys Tyr Phe Gln Cys Ser Gly Glu
65                  70                  75                  80
Phe Ser Ser Pro Lys Gln Gly Thr Phe Tyr His Tyr Asn Asp Phe Trp
                85                  90                  95
His Leu Asp Pro Ala Thr Arg Glu Trp Thr Arg Leu Glu Thr Lys Gly
            100                 105                 110
Lys Gly Pro Pro Ala Arg Ser Gly His Arg Met Thr Tyr Phe Lys Val
        115                 120                 125
Cys Ile Lys Ile Tyr Ser His Leu Val Asn Ile Thr Leu Arg Pro Ser
    130                 135                 140
Arg Thr Ile Leu Ser Ser Ser Glu Ala Phe Arg Ile Leu His Ser Lys
145                 150                 155                 160
Gln Ser Thr Ser Arg Thr Cys Gly Phe Thr Thr Ala Gln Asn Ser Pro
                165                 170                 175
Gly Ser Thr Leu His Cys Pro Gln Gln Leu Lys Ser Leu Ile Leu Gly
            180                 185                 190
His Arg Ser His Ser Cys His Thr Asn Leu Glu Leu Tyr Cys Thr Val
        195                 200                 205
Val Thr Leu Ala
    210
```

<210> 34917
<211> 61
<212> PRT
<213> A.fumigatus

<400> 34917
Arg Ser Leu Phe Phe Leu Tyr Ser Gly Arg Asn Lys Asn Gly Arg Gly
1 5 10 15
His Val Lys Pro Val Arg Cys Ser Asn Cys Ala Arg Cys Thr Pro Lys
20 25 30
Asp Lys Ala Ile Lys Arg Phe Thr Ile Arg Asn Met Val Glu Ser Ala
35 40 45
Ala Ile Arg Thr Phe Glu Pro Leu Ser Ile Leu Tyr His
50 55 60

<210> 34918
<211> 406
<212> PRT
<213> A.fumigatus

<400> 34918
Ser Leu Leu Thr Asp Thr Arg Leu His Ser Arg Gly Asp Asp Ser Gly
1 5 10 15
Leu Tyr Leu Ala Ala Pro Gly Pro Val Ser Arg Cys Ala Ser Pro Val
20 25 30
Ser Pro Glu Gly Leu Arg Ala Gln Met Ile Gln Thr Leu Leu Ala Lys
35 40 45
Arg Pro Lys Asn Gln Ser Leu Pro Arg Arg Asp Gly Arg Gly Gly Ser
50 55 60
Phe Pro Tyr Leu His Pro Ser His Val Pro His Leu Glu Thr Leu Val
65 70 75 80
Leu Thr Asp Val Pro Ser His Val Pro Glu Gly Ser His Ile Leu Pro
85 90 95
Ala Leu Ile Arg Phe Ile Thr Ala Cys Ser Asn Glu Ala Leu Leu Ala
100 105 110
Thr Leu Leu Ala Gly Ser Asp Tyr Ser Leu Pro Pro Gly Arg Ala Arg
115 120 125
Ala His Ala Glu Gln Glu Arg Ser Arg Ser Leu Phe Ala Leu Arg Arg
130 135 140
Leu Val Leu Glu Ile Thr Pro Thr Thr His Leu Ala Gly Ala Ala Arg
145 150 155 160
Ile Ser Pro Trp Lys Ser Ile Ser Gln Gln Ser Gly Met Ser Arg Ser
165 170 175
Ser Thr Gly Asp Arg Asp Ser Glu Asn Leu Trp Ser Ala Ala Thr Gly
180 185 190
Asp Phe Ser Phe Phe Gly Glu Asp Glu Cys Gly Ile Pro Glu Asn Asp
195 200 205
Pro Gly Lys Tyr Phe Pro Met Ala Ile Leu Asn Glu Lys Val Thr Leu
210 215 220
Ile Pro Glu Asp Glu Asp Ser Gly Arg Ser Gly Ser Pro Glu Val Asp
225 230 235 240
Ala Ser Phe Ala Ser Asn Ser Phe Gln Pro Ala Gly Ala Phe Phe Arg
245 250 255
Arg Gly Arg Ser Gln Thr Asp Ser Ser Ile Ser Val Ser Gly Ser Val
260 265 270
Ala Asp Ala Arg Pro Ser Ser Thr Ala Val Asn Lys Gly Asp Gly Gly
275 280 285
His Met Pro Val Ala Asp Thr Lys Gln Val Asp Leu Val Ala Glu Leu
290 295 300
Ala Ala Phe Arg Arg Ala Lys Lys Leu Glu Tyr Glu Glu Val Val Arg

```
305                 310                 315                 320
Ala Asp Arg Glu Arg Arg Ser Met Ser Ser Ala Ala Phe Ser His Leu
                325                 330                 335
Ser Pro Pro Ala Glu Pro Thr Arg Pro Val Ser Pro Ser Pro Ser Val
            340                 345                 350
Arg Thr Met Ala Ala Val Ser Ala Pro His Leu Ser Ile Ala Gln Phe
        355                 360                 365
Val Glu Gly His Trp Lys Gly Glu Val Lys Ile Val Arg Asn Ala Val
    370                 375                 380
Pro Lys Gly Arg Thr Gly Val Val Asp Met Tyr Gly Asn Tyr Phe Glu
385                 390                 395                 400
Lys Gly Tyr Leu Tyr Pro
                405
```

<210> 34919
<211> 79
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (33),(45)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34919

```
Arg Ser Leu Trp Leu Gly Ser Lys Ser Pro Val Asn Ile Ala Asn Pro
1               5                   10                  15
Gln Ala Arg Ser Arg Ser Thr Ala Tyr Arg Asn Glu Gly Lys Ser Thr
            20                  25                  30
Xaa Leu Lys Val Gln Leu Pro Lys Asp Ile Thr His Xaa Leu Arg Phe
        35                  40                  45
Asp Arg Thr Ser Ile Asp Ile Lys Gln Pro Ala Gln Ala Ile Tyr Leu
    50                  55                  60
Ile Trp Ala Leu Leu Pro Arg Lys Phe Ile Gly Gly Thr Ile Arg
65                  70                  75
```

<210> 34920
<211> 332
<212> PRT
<213> A.fumigatus

<400> 34920

```
Arg Ser Leu Pro Phe Gln Tyr Ala Asn Phe Pro Asp Pro Val Glu Leu
1               5                   10                  15
Val Gly Asn Arg Asp Leu Ile Thr Ser Gly Ile Thr Tyr Phe Asp Arg
            20                  25                  30
Gly Gln Thr Thr Gln Ser Gly Asn Val Tyr Gly Ala Asp Ile Cys His
        35                  40                  45
Ile Leu Asp Arg Ser Gly Ile Asp Thr Asp Lys Gly Gln His Arg Arg
    50                  55                  60
Thr Ala Glu Lys Ala Ser Ser Arg Asp Arg Ser Leu Pro Lys Tyr Asp
65                  70                  75                  80
Thr Gly Ala Leu Gln Gln Ala Gly Leu Ser Gly Gly Val Thr Lys Ser
                85                  90                  95
Ala Leu Phe Pro Ala Ala Asp Tyr Leu Tyr Asn Phe Glu Phe Leu Leu
            100                 105                 110
```

```
His Asn Ser Leu Pro Glu Thr Ile Asp Thr Glu Leu Ile Ser Thr Arg
        115                 120                 125
Tyr Tyr Leu Glu Ala Gln Ile Glu Pro Ser Gly Leu Phe Ala Ser Lys
    130                 135                 140
Val Leu Cys Gln Val Asp Val Pro Val Ile Arg Leu Pro Ala Glu Asn
145                 150                 155                 160
Ser Leu Glu Leu Thr Glu Pro Ile Met Phe Ala Arg Lys Trp His Glu
                165                 170                 175
Gln Leu Ala Tyr Asp Val Cys Ile Phe Gly Lys Cys Phe Pro Leu Gly
            180                 185                 190
Ser Gln Ile Pro Ile Arg Val Lys Leu Thr Pro Leu Val Lys Leu Gln
        195                 200                 205
Cys His Arg Leu Arg Val Tyr Val Ser Glu His Val Gln His His Ala
    210                 215                 220
Lys Gly Gln Ile Ala Arg Phe Leu Gln Leu Pro Thr Lys Lys Val Leu
225                 230                 235                 240
Leu Phe Glu Lys Gln Pro Gly Leu Ala Ser Tyr Thr Ser Tyr Pro Gly
                245                 250                 255
Ser Thr Met Arg Ile Met Thr Asp Glu Gly Thr Gly Thr Pro Pro Gly
            260                 265                 270
Ile Gln Ser Met Ser Leu Leu Gly Glu Glu Phe Glu Thr Ser Glu Ile
        275                 280                 285
Asn Leu Glu Val Gln Leu Pro Arg Cys Arg Glu Met Lys Thr Lys Gly
    290                 295                 300
Lys His Gln Trp Ile His Phe Ser Thr Lys Gly Gly Ser Ser Glu Glu
305                 310                 315                 320
Ser His Trp Ile Gln Val Arg Lys Ile Lys Ile Pro
                325                 330
```

<210> 34921
<211> 163
<212> PRT
<213> A.fumigatus

<400> 34921

```
Val Leu Pro Pro Gln Ser Pro Met Thr Ile Ser Asn Asn Pro Gly Gln
1               5                   10                  15
Gln Pro Val Asp Ile Leu Val Asn Ala Ala Gly Ile Ser Ile Ser Asn
            20                  25                  30
Ile Leu Ala Lys Leu Glu Pro Asp Asp Ile Ser Gln Val Leu Arg Thr
        35                  40                  45
Asn Leu Glu Gly Ala Met Leu Ala Ser Arg Ala Leu Val Arg Ala Ser
    50                  55                  60
Ile Arg Ser Gln Met Lys Ile Arg Asn Thr Ser Ser Thr Ser Glu Val
65                  70                  75                  80
Pro Leu Pro Ser Lys Cys Ile Ile Asn Ile Ser Ser Leu Leu Ala Val
                85                  90                  95
Lys Gly Gly Thr Gly Ala Val Pro Tyr Ala Ala Ser Lys Ala Gly Ile
            100                 105                 110
Leu Gly Leu Thr Arg Ser Leu Ala Gly Glu Ala Ala Gln Ser Leu Arg
        115                 120                 125
Gly Val Val Ile Arg Ser Asn Ala Ile Val Pro Gly Tyr Ile Asp Thr
    130                 135                 140
Pro Met Ile Ala Gly Glu Ser Ser Ser Ser Gly Asp Val Thr Gly Cys
145                 150                 155                 160
Asp Asp Ser
```

<210> 34922
<211> 60
<212> PRT
<213> A.fumigatus

<400> 34922
Ser Asn Thr Asp Asp Ile Thr Thr Asp Phe Ser Ala Gly Glu Thr Ser
1 5 10 15
Arg Leu Lys Glu Ser Ile Pro Val Arg Arg Phe Gly Thr Pro His Glu
20 25 30
Val Ala Asp Ala Ala Val Phe Leu Ala Gln Asn Glu Tyr Ala Asn Asn
35 40 45
Cys Val Leu Asn Leu Asp Gly Gly Leu Ser Ala Met
50 55 60

<210> 34923
<211> 82
<212> PRT
<213> A.fumigatus

<400> 34923
Val Pro Cys Thr Leu Pro His Asp Gly Ser Phe Ile Val Lys Ala Ser
1 5 10 15
Gln Arg Met Val Val Val Tyr His Thr Asp Trp Trp Ser Ser Pro Gln
20 25 30
Ile Phe Gly Gln Ile Ser Trp Pro Asn Met Tyr Asp Tyr Arg Arg His
35 40 45
Ile Trp His Trp Ile Arg His Cys Arg Thr Ile Pro Pro Arg Arg Cys
50 55 60
Gln Ala Arg His Pro Arg Trp Gln Ile Ser Arg Thr Ala Cys Gln Ser
65 70 75 80
Arg Phe

<210> 34924
<211> 212
<212> PRT
<213> A.fumigatus

<400> 34924
Arg Lys Asp Asn Ser Asp Ser Val Met Tyr His Thr His Ile Met Arg
1 5 10 15
Ser Arg Ser Arg Gly Ala Ala Val Ser Ala Ser Trp Ala Thr Leu Gly
20 25 30
His Gln Ala Arg Gln Ala Lys Thr Lys Phe His Ala His Phe Leu Met
35 40 45
Met Ala Pro Leu Leu Ser Arg Pro Leu Ser Gly Trp Ser Trp Ser Thr
50 55 60
Thr Arg Thr Gly Gly Pro Pro Leu Lys Ser Ser Asp Arg Leu Ala Gly
65 70 75 80
Arg Thr Cys Met Ile Thr Gly Gly Thr Ser Gly Ile Gly Phe Ala Ile
85 90 95
Ala Glu Arg Phe Leu Gln Glu Gly Ala Lys Arg Val Ile Leu Val Gly
100 105 110

```
Arg Ser His Glu Arg Leu Val Lys Ala Ala Ser Arg Leu Glu Ala Pro
        115                 120                 125
Thr Ser Gly Ser Ser Phe Ala Ala Val Gln Ser Ser Asn Asp Ser Ile
    130                 135                 140
Ala Trp Glu Val Ala Ile Lys Ala Pro Glu Thr Asp Gln Gln Ser Gln
145                 150                 155                 160
Asn Lys Asp Thr Glu Ala Lys Ser His Gly Arg Leu Ile Asp Ser Ser
                165                 170                 175
Ser Arg Ile Ser Leu Leu Ile Gly Asp Ile Ser Glu Ala Gly Thr Trp
            180                 185                 190
Leu Arg Glu Leu Glu Lys Ala Met Val Ser Ser Pro Ala Pro Val Ser
        195                 200                 205
Asp Asp Asn Ile
    210
```

<210> 34925
<211> 193
<212> PRT
<213> A.fumigatus

<400> 34925

```
Lys Met His Thr Lys Gln Ile Ser Pro Ala Leu Cys Leu Thr Ala Tyr
1               5                   10                  15
Asn Thr Ala Asn His Ile Thr Ser Ile Pro Gln Ser His Ser Ala Asp
            20                  25                  30
Asp Met His Glu Lys Ala Gln Glu Ser Pro Arg Gln Ala Arg Asn Gln
        35                  40                  45
Leu Asn Gln Leu Leu Pro Ala Gln Gln Thr Ser His Pro Phe Arg Thr
    50                  55                  60
Thr His Pro Leu Pro Leu Asn Leu Asn Gln Gln Lys Glu Gly Asn Lys
65                  70                  75                  80
Lys Arg Ile Lys Met Pro Thr Pro Glu Ser Ala Ala Phe Leu Ala Lys
                85                  90                  95
Lys Pro Thr Val Pro Pro Thr Tyr Glu Gly Val Asp Phe Glu Asp Asn
            100                 105                 110
Val Ala Leu His Asn Ala Arg Asp Ala Ile Ile Arg Glu Gln Trp Val
        115                 120                 125
Arg Ser Met Met Ser Arg Leu Val Gly Glu Glu Leu Gly Lys Cys Tyr
    130                 135                 140
Ala Arg Glu Gly Val Asn His Leu Glu Lys Cys Gly Lys Leu Arg Gly
145                 150                 155                 160
Glu Phe Ser Ser Gly Gly Ser Phe Val Ser Glu Arg Cys Val Val Val
                165                 170                 175
Ala Trp Leu Met Gly Asp Asp Cys Asn Leu Gln Arg Asn Ile Leu Ser
            180                 185                 190
Cys
```

<210> 34926
<211> 317
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (25),(29),(64)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34926

```
Leu Tyr Ile Val Ile Met Ser Asp Ala Pro Arg Pro Ser Leu Lys Leu
1               5                  10                  15
Thr Leu Gly Glu Lys Lys Ala Pro Xaa Gly Ala Ser Xaa Pro Pro Asn
            20                  25                  30
Gln Pro Pro Pro Leu Ser Ser Glu Thr Pro Gln Arg Lys Ile Thr Leu
        35                  40                  45
Lys Ile Ala Arg Lys Pro Gln Pro Thr Glu Lys Glu Glu Asn Ala Xaa
    50                  55                  60
Lys Lys Asn Pro Pro Lys Lys Arg Pro Ala Glu Gly Leu Ala Gly Pro
65                  70                  75                  80
Ser Ala Pro Glu Ala Ser Ala Gln Pro Ala Gly Pro Lys Arg Ile Lys
                85                  90                  95
Leu Asn Ala Ser Lys Lys Pro Gly Val Gln Ser Ile Arg Ile Lys Asn
            100                 105                 110
Lys Gly Leu Val Pro Asn Arg Pro Val Gly Val Gly Tyr Asp Ser Glu
        115                 120                 125
Ala Ser Asp Thr Glu Ile Asp Pro Tyr Ile Glu Glu Gln Phe Ile Leu
    130                 135                 140
Arg Met Leu Pro Gly Glu Asp Cys Glu Tyr Leu Arg Gln Ala Ile Asn
145                 150                 155                 160
Glu Arg Arg Phe Asp Arg Ser Glu Phe Ser Phe Lys Pro Leu Thr Arg
                165                 170                 175
Glu Gly Arg Arg Ala Val Leu Arg Ile Arg Asp Lys Gln Tyr Ala Ala
            180                 185                 190
Ala Leu Val Asp Leu Pro Cys Ile Ile Glu Gly Met Lys Ser Trp Asp
        195                 200                 205
Arg Arg Gly Trp Tyr Lys Ser Ala Asp Ile Cys Gln Met Leu Leu Val
    210                 215                 220
Leu Gly Pro Val Ser Ser Asp Ala Glu Ala Leu Asn Tyr Pro Leu Pro
225                 230                 235                 240
Ser Asp Val Glu Ile Leu Asp Glu Lys Thr Leu Gln Tyr Pro His Gly
                245                 250                 255
Leu Thr Pro Pro Leu Arg Tyr Val Arg Lys Arg Arg Phe Arg Glu Arg
            260                 265                 270
Leu Ser Thr Arg Thr Ile Glu Gln Val Glu Lys Ala Val Glu Asp Leu
        275                 280                 285
Ile Ala Gln Asp Glu Ala Ala Ile Ala Ser Arg Tyr Glu Leu Leu Asp
    290                 295                 300
Lys Thr Ser Leu Asn Arg Ala Glu Gly Leu Val Gln Ser
305                 310                 315
```

<210> 34927
<211> 142
<212> PRT
<213> A.fumigatus

<400> 34927

```
Arg Arg Trp Ser Lys Ala Cys Leu Tyr Arg Pro Arg Lys Cys Thr Leu
1               5                  10                  15
Ser Arg Ser Arg Pro Pro Tyr Val Ser Pro Pro Thr Ile Gln Pro Ile
            20                  25                  30
Thr Ser Leu Gln Phe Pro Asn Pro Ile Pro Pro Thr Thr Cys Met Lys
        35                  40                  45
```

```
Arg His Lys Asn His Pro Asp Lys Pro Val Thr Ser Ser Thr Ser Ser
    50                  55                  60
Ser Gln His Ser Lys Pro His Ile Pro Ser Gly Gln Pro Ile Leu Phe
65                  70                  75                  80
Leu Ser Thr Ser Thr Ser Lys Lys Arg Gly Ile Lys Lys Glu Leu Lys
                85                  90                  95
Cys Pro Pro Pro Asn Pro Pro His Ser Trp Leu Arg Ser Pro Pro Cys
            100                 105                 110
Arg Arg His Thr Lys Ala Ser Thr Ser Arg Thr Thr Ser Pro Cys Thr
        115                 120                 125
Met Pro Ala Thr Pro Ser Ser Val Asn Asn Gly Cys Ala Ala
    130                 135                 140
```

<210> 34928
<211> 169
<212> PRT
<213> A.fumigatus

```
<400> 34928
Lys Gly Pro Leu Cys Ser Phe Leu Lys Leu Leu Ser Leu Pro Glu Met
1               5                   10                  15
His Phe Ser Ala Pro Thr Arg Leu Ser Leu Pro Ala Ala Arg Gln Ser
            20                  25                  30
Pro Pro Leu Ser Ser Pro Gln Ala Pro His Gln His Arg Lys Thr Asp
        35                  40                  45
Arg Pro Glu Pro Ala Arg His Gly Pro Lys Leu Ala His Ser Arg Pro
    50                  55                  60
Leu Leu Arg Gln Ser Arg Ser Ser His Ala Arg Gln Pro Phe Pro Cys
65                  70                  75                  80
Gln Gln Pro Pro Ala Pro His Thr Arg Pro His Glu Arg Thr Val Ala
                85                  90                  95
Gln Arg Ala Ala Pro Ala Pro Trp Gly Ser Pro Ala Pro Ala Pro Ser
            100                 105                 110
Ser Pro Tyr Arg Leu Gly Phe Glu Pro Val Cys Lys Pro Gln His Arg
        115                 120                 125
Ser Arg Leu Ser Thr Gln Pro Gly Val Ser Leu Gln Leu Thr Gln Val
    130                 135                 140
Thr Thr Val Pro Pro Glu Pro Pro Gly Pro Gly Leu Val Arg Arg Arg
145                 150                 155                 160
Leu Cys Ser Ser Gly Val Leu Arg Leu
                165
```

<210> 34929
<211> 484
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (26),(74),(75)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 34929
Thr Ala Ser Val Asn Arg Leu Cys Tyr Glu Asp Asp Ser Trp Pro Arg
1               5                   10                  15
Gly Asp Ile Asn Ser Gly Ser Phe Arg Xaa Leu Ile Pro Ala Ile Phe
```

```
            20                  25                  30
Asn Leu Arg Ile Ala Val Lys Lys Ser Ser Thr Met Val Tyr Ala Phe
        35                  40                  45
Ala Leu Pro Thr Thr Thr His Leu Ser Phe Gln Thr Phe Leu Ser Ser
    50                  55                  60
Ser Thr His Pro Ser Leu Pro Pro Ala Xaa Xaa Thr Ala Arg His Ala
65                  70                  75                  80
Leu Arg Leu Ala Leu Lys Ala His Lys Arg Leu Pro His Ser Pro Gln
                85                  90                  95
Arg Asp Ser His Leu Ile Thr Ile Leu Asp Ala Leu Asn Gly Tyr Leu
            100                 105                 110
Pro Tyr Leu Ala Ala Ile Ser His Gly Leu Ser Gly Arg Pro Val Glu
        115                 120                 125
Ser Gly Ser Ser Thr Gly Gly Glu Glu Ile Glu Val Thr Leu His Ser
    130                 135                 140
Glu Leu Glu Thr Glu Trp Arg Ala Thr Leu Ser Ser Thr Pro Leu Ser
145                 150                 155                 160
Leu Lys Ser Arg Pro Ile Asn Gly Arg Val Arg Gly Gln Gly Ile Asp
                165                 170                 175
Phe Glu Ile Ala Phe Val Leu Thr Thr Leu Gly Tyr Val Leu Ser Gly
            180                 185                 190
Leu Ala Arg Ser Gly Ile Leu Arg Ala Leu Tyr Ala Pro Thr Thr Pro
        195                 200                 205
Thr Pro Glu Gln Arg Thr Ala Ala Val Gln Thr Ala Thr Lys Tyr Leu
    210                 215                 220
Leu Gln Ala Ser Ser Val His Ser Leu Leu Ala Ser Ser Pro Ser Phe
225                 230                 235                 240
Ile Gly Ala Ala Arg Gln Thr Ser Thr Ala Ala Ala Val Pro Asp Leu
                245                 250                 255
Asp Pro Ala Ala Gln Ala Ala Leu Ser Ser Leu Ala Leu Ala Glu Ala
            260                 265                 270
Thr Leu Leu Ala Val Leu Lys Asp Asp Ser Tyr Val Ala Ala Cys Ile
        275                 280                 285
Gln Ala Arg Asn Pro Asn Asp Lys Asp Trp Met Val Arg Ala Pro Glu
    290                 295                 300
Ile Pro Lys Val Arg Ala Leu Leu Phe Ala Arg Leu Cys Val Arg Ala
305                 310                 315                 320
Ala Glu Tyr Ala Glu Gln Ala Ala Ala Gly Met Gly Thr Val Gly Ala
                325                 330                 335
His Gly Lys Thr Gly Ile Asp Glu Glu Val Val Gly Tyr Ala Arg Val
            340                 345                 350
Leu Gly Arg Val Ala Arg Ala Arg Ala Cys Arg Phe Phe Gly Val Asp
        355                 360                 365
Ala Glu Leu Ala Gly Lys Ile Gly Glu Gly Ile Ala Trp Leu Arg Ala
    370                 375                 380
Ala Lys Gly Ala Leu Gly Leu Arg Ser Ala Ser Gln Gly Glu Lys Glu
385                 390                 395                 400
Ala Ser Gly Lys Ser Lys Gly Gly Leu Ser Arg Leu Lys Lys Glu Trp
                405                 410                 415
Ala Glu Arg Arg Glu Glu Arg Arg Leu Glu Lys Glu Ser Gly Gly Lys
            420                 425                 430
Asp Arg Val Ala Lys Gly Glu Leu Asp Pro Gly Asp Asp Ala Gly Arg
        435                 440                 445
Glu Glu Glu Cys Arg Val Ile Glu Met Leu Glu Thr Lys Trp Glu Arg
    450                 455                 460
Met Asn Asp Thr Val Ser Leu Phe Ser Ala Ala Leu Gly His Glu Arg
```

465 470 475 480
Ser Leu Thr Val

<210> 34930
<211> 134
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (126)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34930
Pro Thr Gly Ser Ser Ile Met Ser Gly Pro Asn Leu His Asn Ala Leu
1 5 10 15
Leu Arg Pro Pro Ile Ile Gln Ile Leu Arg Ala Ala Gly Phe His Ala
20 25 30
Thr Arg Pro Ser Val Leu Asp Thr Leu Ala Asp Leu Thr Ala Arg Tyr
35 40 45
Met Met Ile Leu Ala Ser Ser Val Ala Ser His Ala Ala Asn Ala His
50 55 60
Pro Asn Asp Pro Ala Pro Ala Pro Val Leu Glu Asp Val Tyr Gln Ala
65 70 75 80
Leu Gln Asp Val Gly Ala Leu Arg Pro Gln Leu Arg Glu Trp Glu Glu
85 90 95
Asp Trp Gln Gly Glu Glu Asp Thr Arg Gly Leu Glu Asn Phe Leu Gly
100 105 110
Trp Phe Thr Gly Pro Ala Asn Arg Glu Ile Arg Arg Val Xaa Gly Ser
115 120 125
Asn Leu Ala Arg Val Thr
130

<210> 34931
<211> 74
<212> PRT
<213> A.fumigatus

<400> 34931
Val Arg Ile Asp Pro Thr Arg Ile Val Ala Glu Ser Ile Lys Glu Gly
1 5 10 15
Gln Pro Phe Leu Phe Val Ser Phe Asn Tyr Arg Leu Asn Ile Phe Ser
20 25 30
Phe Gly Asp Gly Lys Glu Lys Asn Leu Ala Ile Lys Asp Gln Arg Leu
35 40 45
Ala Ile Asp Trp Val Arg Glu Asn Ile Val Glu Phe Gly Gly Asp Pro
50 55 60
Val Ser Asp Pro Thr Leu Leu Glu Asn Thr
65 70

<210> 34932
<211> 280
<212> PRT
<213> A.fumigatus

<400> 34932
Asn Pro Thr Gln Lys His Leu Arg Asp Gly Arg Val Ser Leu Ser Gly
1 5 10 15
Thr Thr Asp Glu Arg Asp Ser Asn Gly Arg Lys Glu His Val Ala Thr
20 25 30
Ser Ser Ser Thr Pro Arg Gly Asp Thr Ile Gly Asp Ala Asn Gln Gln
35 40 45
Met Pro Arg Lys Arg Arg Phe Gly Ala Val Ala Thr Leu Leu Ala Ser
50 55 60
Asp Arg Met Leu Val Thr Leu Trp Ala Tyr Phe Ile Val Ala Val Ala
65 70 75 80
Leu Thr Ser Leu Asp Ser Val Leu Pro Leu Phe Val Gln Asp Thr Phe
85 90 95
Gly Trp Lys Gln Thr Ala Gln Gly Leu Ile Phe Ile Pro Val Ser Val
100 105 110
Pro His Val Leu Asp Pro Phe Phe Gly Tyr Ile Asn Asp Lys Phe Pro
115 120 125
Gln Ala Arg Arg Phe Val Val Gly Gly Ala Leu Leu Ile Thr Ile Pro
130 135 140
Leu Phe Val Leu Leu Arg Leu Val Thr Met Asn Ser Met Ser Gln Lys
145 150 155 160
Val Val Leu Cys Val Leu Leu Ala Leu Ile Gly Leu Cys Leu Ala Phe
165 170 175
Leu Ile Pro Pro Leu Phe Val Glu Ala Ser Tyr Val Val Gln Glu Lys
180 185 190
Glu Ala Glu Ser Pro Gly Val Phe Gly Lys Gly Gly Ala Met Ala Leu
195 200 205
Ala Tyr Gly Ile Leu Asn Ser Ala Phe Ala Ala Gly Ser Met Val Gly
210 215 220
Pro Phe Leu Ala Gly Phe Ile Arg Glu Ser Ala Gly Trp Ser Thr Met
225 230 235 240
Ser Trp Val Ile Gly Leu Leu Met Gly Val Ser Ala Ile Pro Ile Leu
245 250 255
Leu Phe Leu Gly Gly Pro Ile Trp Lys Pro Met Glu Arg His Ala Glu
260 265 270
Ser Gln Ser Ala Glu Ala Ala Gly
275 280

<210> 34933
<211> 310
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (19)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34933
Ser Asn Leu Val Gly Leu Gly Lys Thr Pro Asn Gly Glu Pro Asn Gly
1 5 10 15
Ser Gly Xaa Asp Gly Pro Gly His Glu Arg Pro Ser Val Glu Asp Pro
20 25 30
Ala Gly Glu Arg Trp Gln Pro Asp Gly Ala Thr Glu Gly Val Leu Lys
35 40 45
Leu Leu Leu Asp Ser Gly Ala Ser Pro Asn Glu Ser Arg Gln Phe Pro

```
    50                  55                  60
Arg Val Pro Leu Ser Leu Ala Ile Gln Tyr Gly His Asp Ala Ala Val
65                  70                  75                  80
Arg Val Leu Leu Ala Arg Glu Asp Thr Thr Val Thr Leu Pro Ser Ala
                85                  90                  95
Pro Phe Ser Gln Gln Pro Leu His Phe Ala Leu Gly Arg Gly Ser Leu
            100                 105                 110
Glu Cys Val Leu Leu Leu Ile Glu Arg Gly Ala Asp Leu Gln Gln Tyr
        115                 120                 125
Glu Ser Thr Gly Ser Arg Ala Leu Tyr Pro Ala Ile Ser Ser Gly Ser
    130                 135                 140
His Ala Leu Val Glu Phe Leu Val Asn Arg Gly Cys Asn Pro Leu Gly
145                 150                 155                 160
Cys Cys Gly Tyr Thr Ala Leu Ser Leu Ala Ala Val Met Gly His Gln
                165                 170                 175
Ser Leu Val Arg Tyr Phe Leu Ala Gln Gly Val Asp Pro Glu Met Arg
            180                 185                 190
Asp Arg Thr Gly Phe Thr Ala Leu Gly His Ala Ala Lys Ala Gly His
        195                 200                 205
Ala Asp Val Val Glu Thr Leu Leu Glu Trp Gly Val Arg Arg Asp Asn
    210                 215                 220
Val Gly Glu Asp Gly Glu Thr Ala Leu Cys Trp Ala Ala Arg Glu Asn
225                 230                 235                 240
His Ala Val Val Val Glu Val Leu Leu Arg His Gly Ala Asp Pro Asn
                245                 250                 255
Ser Pro Asn Pro Arg Gly Ile Arg Pro Ile His Trp Ala Val Thr Asn
            260                 265                 270
Gly Ser Val Pro Ile Phe Lys Ala Leu Val Ala Arg Gly Ala Pro Asp
        275                 280                 285
Arg His Ser Pro Arg Gly Arg Asn Thr Pro Pro Tyr Arg Arg Thr Ala
    290                 295                 300
Glu Arg Ser Ala Ala Gly
305                 310
```

<210> 34934
<211> 221
<212> PRT
<213> A.fumigatus

<400> 34934

```
Thr Ala Gly Val Ile His Ser Ala Val Ala Gly Ile Arg Arg Ser Arg
1               5                   10                  15
Leu Leu Gln Ser Trp Asp Thr Ser His Trp Cys Gly Thr Ser Trp Leu
            20                  25                  30
Arg Glu Trp Ile Arg Arg Cys Gly Thr Val Pro Asp Ser Leu Leu Ser
        35                  40                  45
Gly Thr Arg Pro Arg Arg Ala Thr Arg Met Ser Ser Arg Arg Cys Trp
    50                  55                  60
Ser Gly Ala Ser Gly Glu Thr Met Ser Ala Arg Thr Glu Arg Arg Pro
65                  70                  75                  80
Cys Ala Gly Arg Pro Ala Lys Thr Thr Gln Trp Leu Trp Arg Cys Ser
                85                  90                  95
Cys Gly Met Glu Gln Ile Gln Thr Arg Pro Thr Leu Ala Gly Tyr Ala
            100                 105                 110
Pro Ser Thr Gly Pro Ser Pro Thr Gly Pro Ser Pro Tyr Ser Lys Arg
        115                 120                 125
```

```
Ser Trp Pro Gly Val Pro Arg Ile Asp Ile His Leu Glu Gly Glu Thr
    130                 135                 140
Leu Leu His Ile Ala Ala Arg Arg Asn Asp Arg Pro Leu Val Glu Met
145                 150                 155                 160
Leu Leu Gln Leu Gly Thr Glu Val Asp Pro Arg Asp Asn Glu Gly Pro
                165                 170                 175
Asp Ser Phe Arg Cys Gly Gly Gly Arg Arg Pro Cys Arg His Asp Gly
            180                 185                 190
Ala Leu Ala Arg Gln Arg Arg Arg His Asp Tyr Pro Arg Ser Arg His
        195                 200                 205
Met Arg Ala Ala Ala Gln Gly Pro Leu Glu Leu Ser Arg
    210                 215                 220
```

<210> 34935
<211> 196
<212> PRT
<213> A.fumigatus

<400> 34935

```
Gly Arg Arg Val Leu Ala Pro Thr Arg Arg Gly Ser Gly Leu Cys Ser
1               5                   10                  15
Gly Arg Arg Phe Pro Ser Thr His Pro Arg Arg Pro Gln Ser Asn Gly
            20                  25                  30
Pro Gly His Ala Val Ser Pro Gly Thr Arg Arg Arg Ser Arg Ser Ala
        35                  40                  45
Val Glu Leu Arg Ser Tyr Pro Ala Leu Leu Val Ala Cys Glu Arg Phe
    50                  55                  60
Asp Ala Asp Asn Tyr Ala Ile Ala Gly Met Leu Leu Arg Thr Gly Arg
65                  70                  75                  80
Val Asn Val His Ala Arg Asn Ala Asp Arg Arg Thr Ala Ile Met Phe
                85                  90                  95
Ala Thr Gly Glu Asp Gly Asp Pro Gln Leu Val Arg Leu Leu Leu Ala
            100                 105                 110
His Gly Ala Asn Pro Asp Asp Gln Glu Glu Asp Gly Trp Ser Cys Leu
        115                 120                 125
Glu Arg Ala Ile Gly Ala Gly Asn Glu Glu Thr Ala Arg Ile Leu Val
    130                 135                 140
Glu Ala Gly Ala Asn Val Asn Ala Arg Asp Ser Tyr Gly Gln Thr Ala
145                 150                 155                 160
Leu His Leu Val His Ser Arg Asp Pro Phe Tyr Ala Tyr Leu Leu Glu
                165                 170                 175
Lys Gly Ala Glu Leu Cys Cys Arg His His Tyr His Ser Asp Ser Tyr
            180                 185                 190
Gln Leu Ser Lys
        195
```

<210> 34936
<211> 166
<212> PRT
<213> A.fumigatus

<400> 34936

```
Thr Phe Thr Ser Arg Glu Lys His Ser Ser Ile Ser Pro His Gly Gly
1               5                   10                  15
Thr Ile Gly Arg Trp Leu Lys Cys Ser Ser Ser Trp Ala Pro Lys Trp
            20                  25                  30
```

```
Ile His Glu Thr Thr Arg Gly Arg Thr Pro Phe Ala Val Ala Ala Ala
        35                  40                  45
Gly Gly His Val Ala Met Met Glu Leu Leu Leu Ala Asn Gly Ala Asp
    50                  55                  60
Met Thr Thr Arg Gly Arg Gly Thr Cys Ala Pro Leu His Arg Ala Leu
65                  70                  75                  80
Trp Ser Cys Gln Asp Glu Ala Ala Ala Phe Leu Leu Arg Arg Gly Ala
                85                  90                  95
Asp Pro Asp Phe Ala Ala Ala Asp Gly Ser Arg Gln Pro Ile Leu Ala
            100                 105                 110
Val Arg Ser Arg Met Val Arg Val Thr Arg Tyr Leu Leu Glu His Gly
        115                 120                 125
Val Asp Pro Asp Pro Leu Ser Asn Cys Gly Arg Thr Pro Arg Cys Leu
    130                 135                 140
Leu Pro Val Arg Gly Ser Met Arg Ile Thr Thr Arg Ser Leu Gly Cys
145                 150                 155                 160
Cys Cys Gly Pro Val Glu
                165
```

<210> 34937
<211> 275
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (267)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34937

```
Ala Val Arg Met Phe Thr Asn Asp Arg Gly Asp Gln Asp Ser Gly Met
1               5                   10                  15
Ser Val Glu Met Asp Pro Lys Tyr Arg Pro Asp Thr Asp Pro Leu Pro
            20                  25                  30
Val Ser Ser Glu Val Thr Ile Val Asp Trp Asp Gly Pro Asp Asp Pro
        35                  40                  45
Glu Asn Pro Leu Asn Trp Ser Lys Ala Arg Lys Trp Leu Ile Thr Cys
    50                  55                  60
Val Ala Leu Leu Met Thr Phe Val Ala Leu Met Asn Gly Thr Ile Ile
65                  70                  75                  80
Thr Val Ala His Glu Ala Ile Asn Glu Arg Phe Gly Ile Ser Asp Ala
                85                  90                  95
Val Phe Pro His Ser Tyr Trp Pro Val Thr Ser Trp Ala Leu Gly Gly
            100                 105                 110
Val Val Phe Ser Leu Leu Ile Leu Pro Ile Met Glu Asp Phe Gly Ile
        115                 120                 125
Arg Arg Thr Phe Leu Leu Thr His Leu Leu Phe Ile Leu Phe Val Ile
    130                 135                 140
Pro Gln Gly Val Ala Gln Asn Phe Glu Thr Leu Val Ile Thr Arg Phe
145                 150                 155                 160
Phe Ala Gly Gly Cys Val Thr Val Ile Gly Asn Ser Ala Ala Ser Val
                165                 170                 175
Ile Gly Asn Val Trp Glu Thr Glu Lys Gln Arg Ser Lys Pro Val Ser
            180                 185                 190
Leu Trp Ile Trp Ala Tyr Leu Ala Gly Ser Ser Val Gly Pro Val Ile
        195                 200                 205
```

```
Gly Ala Ser Val Phe Gln Phe Arg Ser Trp Arg Trp Ile Ser Tyr Leu
    210                 215                 220
Gln Met Ile Trp Leu Gly Val Leu Phe Pro Ile Asn Phe Leu Val Phe
225                 230                 235                 240
Arg Glu Ser Arg Ala Ala Ile Ile Leu His Gln Arg Ala Lys Arg Leu
                245                 250                 255
Arg Ala Lys Gly Gln Asn Ala Pro Phe Arg Xaa Gln Val Leu Lys Ile
            260                 265                 270
Arg Leu Pro
        275
```

<210> 34938
<211> 146
<212> PRT
<213> A.fumigatus

<400> 34938

```
Leu Pro Glu Leu Ser Ser Asn Pro Leu Val Glu His Val Tyr Arg Ser
1               5                   10                  15
Arg Pro Pro Ser Ala Ser Ala Ile Leu Pro Leu Tyr Leu Ala His Ser
            20                  25                  30
Pro Pro Arg Pro Ser Leu Leu Tyr Ile Pro Asn Ile Thr Pro Pro Val
        35                  40                  45
Thr Val Phe Ser Ile Val Gln Ser Asn Leu Leu Phe Leu Ala Leu Ser
    50                  55                  60
Glu Val Asp Thr Glu Pro Leu Leu Ala Leu Glu Phe Leu His Arg Val
65                  70                  75                  80
Val Asp Val Leu Glu Asp Phe Val Gly Ala Pro Leu Leu Ser Ser Lys
                85                  90                  95
Leu Gln Ala Asn Tyr Asp Val Val Ala Gln Leu Leu His Glu Met Cys
            100                 105                 110
Asp Ala Gly Ile Val Cys Asn Thr Glu Pro Asn Ala Leu Gln Glu Val
        115                 120                 125
Val Glu Met Pro Gly Trp Met Gly Lys Leu Leu Gly Gly Val Gly Leu
    130                 135                 140
Pro Gly
145
```

<210> 34939
<211> 85
<212> PRT
<213> A.fumigatus

<400> 34939

```
Asp Thr Arg Gln Thr Gly Met Met Ser Glu Val Asp Ala Leu Tyr Ile
1               5                   10                  15
Tyr Asp Glu His Lys Tyr Ala Leu Pro Leu Met Thr Ser Pro Arg Leu
            20                  25                  30
Asn Phe Met Ser Ala Asp Cys Leu Ser Phe Gln Ala Thr Arg Ser Trp
        35                  40                  45
Ser Met Phe Ile Ala Pro Val His Pro Pro His Gln Leu Ser Phe Pro
    50                  55                  60
Ser Ile Ser Pro Thr His Pro Leu Val Arg His Ser Ser Thr Phe Gln
65                  70                  75                  80
Ile Ser Arg Pro Arg
                85
```

<210> 34940
<211> 480
<212> PRT
<213> A.fumigatus

<400> 34940
Pro Ala Tyr Thr Ala Tyr Arg Ser Ser Thr Pro Ile Leu Gly Pro Ser
1 5 10 15
Asn Pro Leu Lys Thr Pro Leu Ser Ser Ser Asn Ile Pro Gln Gly Pro
20 25 30
Ala Ile Pro Trp Arg Lys Ala Gly Val Arg His Thr Ser Asn Glu Leu
35 40 45
Tyr Val Asp Ile Ile Glu Ser Leu Ser Val Thr Ile Ala Pro Ser Gly
50 55 60
Arg Leu Leu Ser Ala Leu Val Ser Gly Thr Ile Ala Phe Thr Ala Lys
65 70 75 80
Leu Ser Gly Val Pro Asp Leu Leu Leu Thr Leu Thr Thr Pro Ser Gly
85 90 95
Pro Gln Ala Val Gly Lys Lys Ile Asp Leu Pro Val Phe His Pro Cys
100 105 110
Val Arg Leu Ala Arg Trp Arg Glu Arg Pro Gly Glu Leu Ser Phe Val
115 120 125
Pro Pro Asp Gly Arg Phe Ile Leu Ala Gly Tyr Glu Val Asp Leu Leu
130 135 140
Pro Ile Asp Pro Asn Ile Asp Gln Pro Pro Thr His Met Glu Lys Val
145 150 155 160
Phe Leu Pro Ala Val Val Glu Val Arg Lys Ser Leu Gly Pro Thr Gly
165 170 175
Ser Glu Phe Glu Val Arg Leu Ile Leu Asn Thr Ser Phe Pro Gly Tyr
180 185 190
Ser Ser Phe Asn Arg Pro Gly Ala Gly Arg Gly Gly Ser Gly Thr Ser
195 200 205
Thr Pro Ser Phe Leu Gly Gly Gly Gly Asn Ser Ser Ala Pro Val Leu
210 215 220
Glu Glu Val Val Val Thr Val Pro Ile Pro Lys Thr Val Arg Asn Ile
225 230 235 240
Thr Asp Met Gln Ala Ser Arg Gly Glu Ala Ile Phe Ala Pro Gly Asn
245 250 255
Asp Thr Leu Glu Trp Arg Ile Pro Thr Lys Asp Ser Gly Thr Val Ser
260 265 270
Gly Thr Ala Thr Leu Arg Cys Thr Val Val Gly His Gln Asn Val Glu
275 280 285
Asp Glu Ile Glu Glu Asp Asn Asp Gly Ala Asp Ala Asp Ala Asn Phe
290 295 300
Leu Gln Gly Tyr Tyr Asp Ala Ser Thr Ala Ala Ser Tyr Gln Val Ala
305 310 315 320
Glu Glu Ala Ala Thr Gly Thr Thr Lys Arg Lys Thr Lys Lys Lys Lys
325 330 335
Lys Thr Thr Lys Thr Thr Lys Thr Thr Lys Thr Thr Lys Thr Lys Lys
340 345 350
Ser Ser Lys Ser Ala Ala Ala Ser Ala Leu Val Ala Ser Asp Gln Asp
355 360 365
Ser Val Pro Gln Thr Ser Pro Asn Pro Ser Lys Pro Gln Ser Pro Ala
370 375 380
Pro Glu Ser Ser Ser Ser Pro Ala Ala Pro Ala Pro Ala Gln Ser Ser

```
385                 390                 395                 400
Ser Gln Ser Ser Ser Leu Phe Tyr Thr Pro Pro Arg Lys Thr Lys Ala
                405                 410                 415
Gln Ile Asn Ala Ser Leu Met Pro Asn Ser Ala Ser Val Ser Phe Ser
            420                 425                 430
Val Lys Gly Trp Leu Pro Ser Gly Leu Arg Val Asp Ser Leu Asn Ile
        435                 440                 445
Asp Pro Arg Arg Ser Arg Gly Leu Gly Glu Gly Val Lys Pro Tyr Lys
    450                 455                 460
Gly Val Lys Tyr Leu Cys Val Ser Arg Lys Gly Val Glu Ala Arg Cys
465                 470                 475                 480
```

<210> 34941
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34941

```
Lys His Ile Gly Ser Ala Ala Phe Ile Gly Leu Gly Val Tyr Ser Tyr
1               5                   10                  15
Tyr Thr Gly Met Asn Asn Leu Arg Lys Gln Glu Gln Thr Ile Met Trp
            20                  25                  30
Ser Ala Thr Lys Tyr Lys Met Gly Ser Arg Arg Leu Gly Ile Ala Thr
        35                  40                  45
Ile Ser Ala Thr Leu Val Gly Met Gly Ile Trp Arg Ala Leu Asn
    50                  55                  60
```

<210> 34942
<211> 677
<212> PRT
<213> A.fumigatus

<400> 34942

```
Ala Pro Lys Glu Glu Leu Ala Thr Ser Ile Lys Arg Gly Tyr Pro Leu
1               5                   10                  15
Ser Ser Val Glu Leu Ile Ser Pro Gly Met Ser Ser Asn Asn Gly Ile
            20                  25                  30
Ile Asp Thr Phe Ser Pro Gly Ala Ala Ser Thr Asn Thr Gly Ser Arg
        35                  40                  45
Ser Thr Ser Thr Val Arg Pro Arg Thr Arg Arg Leu Ile Ser Val Asp
    50                  55                  60
Asp Val Thr Asp Glu Asp Tyr Glu Gly Pro Leu Gln Ser Thr Arg Leu
65                  70                  75                  80
Ser Thr Thr Thr Leu Ser Arg Asp Ser Ser Ala Val Arg Ser Arg Gly
                85                  90                  95
Ala Thr Pro Ser Pro His Thr Ser Arg Gly Thr Ser Pro Leu Pro Met
            100                 105                 110
Arg His Pro Ser Arg Ala Thr Glu Ser Leu Asn Leu Asp Asp Leu Asn
        115                 120                 125
Arg Phe Gly Gly Ser Leu Gly Gly His Ser Gln Thr Gly Lys Ala Gln
    130                 135                 140
Val Lys Phe Ala Asp Ser Ser Arg Ala Ala Val Asp Phe Leu Asp Ser
145                 150                 155                 160
Ser Trp Thr Ser Leu Gln Ser Leu Ala Ser Ser Phe Leu Gly Ser Asp
                165                 170                 175
Ile Ala Arg Ser Ala Pro Asn Gly Thr Ala Arg Thr His Ala Arg Lys
```

```
                180                 185                 190
Pro Ser Arg Pro Asp Pro Tyr Met Arg Ala Asn Pro Lys Thr Pro Ser
        195                 200                 205
Ala Trp Gly Pro Ser Thr Pro Ser Thr Ser Glu Ile Ala Ala Gly Thr
    210                 215                 220
Lys Glu Glu Arg Leu Ala Met Val Gln Ala Lys Lys Arg Glu Ala Leu
225                 230                 235                 240
Leu Leu Thr Asp Thr Gly Ser Glu Ala Ser Arg Asp Ile Arg His Lys
                245                 250                 255
Arg Arg Asp Ser Ser Asp Arg Thr Asp His Ala Ala Val Asp Ala Arg
            260                 265                 270
Gln Asp Glu Glu Ala Leu Val Tyr Val His His Val Gln Pro Asn Asp
        275                 280                 285
Ser Ile Thr Gly Val Ala Ile Lys Tyr Gly Cys Gln Pro Ala Ile Phe
    290                 295                 300
Arg Lys Ala Asn Gly Phe Trp Pro Thr Asp Ser Ile Gln Ser Arg Lys
305                 310                 315                 320
Thr Val Leu Leu Pro Val Thr Ser Cys Ser Val Lys Gly Arg Pro Ile
                325                 330                 335
Arg Ala Pro Thr Glu Ile Asp Leu Leu Gly Gly Asp Thr Ser Asn Arg
            340                 345                 350
Asp Ser Leu Glu Asp Leu Thr Gly Ser Ser Ile Ala Pro Ala Pro Ser
        355                 360                 365
Ser Asp Ala Arg Ala Ser Ser Thr Glu Gly Glu Ala Pro Thr Glu Ala
    370                 375                 380
Pro Leu Glu Gly Glu Ala Asp Lys Ile Trp Lys His Gln Ser Trp Val
385                 390                 395                 400
Gln Ile Asp Arg Phe Ser Ala Pro Val Glu Ile Gly Arg Val Pro Arg
                405                 410                 415
Lys Ala Leu Gly Phe Phe Pro Arg Thr Arg Arg Lys Ser Leu Ser Tyr
            420                 425                 430
Thr Asp Ser Glu Pro Arg Ser Ser Ile Ser Gly Arg Glu Arg Thr Ala
        435                 440                 445
Ala Leu Thr Ser Ala Leu Pro Ser Pro Thr Glu Ser Pro Ser Ser Gln
    450                 455                 460
Ala Ser Thr Ala Gln Asn Arg Ser Ser Thr Asp Pro Ser Gly Ala Arg
465                 470                 475                 480
Ala Ile Ser Ser Ala Lys Pro Arg Pro His His Gln Arg Gln Arg Ser
                485                 490                 495
Asn Ile Gln Leu Val Gly Thr Gly Val Gly Thr Leu Asp Arg Ser Ala
            500                 505                 510
Met Ala Pro Gly Pro Ala Leu Asp Gly Leu Ser Lys Phe Val Ala Gln
        515                 520                 525
His Leu Pro Gln Leu Ala Pro Ala Pro Ala Pro Pro Gly Leu Gly Arg
    530                 535                 540
Thr Pro Ser Glu Tyr Ala Ala Ala Thr Ala Ser Asn Ala Ser Thr Ser
545                 550                 555                 560
Leu Asp Asn Ile Gly Gly Ala Val Glu Gly Trp Val Arg Lys Leu Thr
                565                 570                 575
Thr Arg Ala Lys Val Gly Leu Ser Glu Leu Gln Gln Ser Ala Gln Ala
            580                 585                 590
Tyr Gln Ser Asn Thr Gly Ala Arg Thr Ser Arg Arg Gly Met Gly Asp
        595                 600                 605
Leu Ile Glu Leu Asp Ala Gly Leu Glu Ser Arg Asp Ser Ser Gly Leu
    610                 615                 620
Leu Pro Glu Ser Ser Arg Lys Pro Asn Leu Asn Arg Ser Gly Ser Asn
```

625 630 635 640
Leu His Asp Ala Ser Leu Arg Glu Arg Phe Pro Ser Pro Ser Ser Ser
645 650 655
Gly Thr Ser Arg Thr Arg Thr Gly Gly Ser Asn Leu Gly Tyr Gly Asn
660 665 670
Arg Val Lys Asp Asp
675

<210> 34943
<211> 164
<212> PRT
<213> A.fumigatus

<400> 34943
Gln Ala Asp Phe His Gly Asp Gly Trp Phe Leu Ser Asp Arg Glu Lys
1 5 10 15
Ser Asn Met Ala Arg Arg Ile Ser Ser Leu Ala Trp Leu Ser Leu Leu
20 25 30
Leu Gly Ala Leu Ser Arg Ala Leu Pro Ser Ser Gln Thr Gln Gly Ala
35 40 45
Ile Ala Asp Tyr Pro Thr Ala Thr Leu Arg Thr Ser Tyr Gln Ser Gly
50 55 60
Ser Lys Thr Val Phe Val Gly Arg Ser Leu Pro Glu Phe Asp Gln Glu
65 70 75 80
Leu Phe Leu Gly Ile Lys Tyr Ala Asp Gln Pro Ile Arg Phe Thr Pro
85 90 95
Ser Ser Leu Lys Thr Ser Tyr Ala Ala Asn Asp Ser Asn Ser Gly Pro
100 105 110
Tyr Asp Ala Ser Gly Thr Gly Leu Ala Leu Ser Lys Gly Thr Val Leu
115 120 125
Tyr Asn Ala Thr Gln Tyr Gly His Glu Cys Pro Gly Tyr Gly Ser Asp
130 135 140
Glu Thr Lys Leu Val Asp Met Gly Val Leu His Ala Glu Ala Ala Arg
145 150 155 160
Tyr Cys Ala Gln

<210> 34944
<211> 628
<212> PRT
<213> A.fumigatus

<400> 34944
Glu Met Gln Ile Cys Ala Cys Leu Arg Ser Ala Leu Ser Ile Glu Glu
1 5 10 15
Leu Ser Asp His Ala Phe Ser Ala Trp Ser Val Leu Val Ser Ser Leu
20 25 30
His Glu Glu Glu Leu Glu Pro Leu Ile Asp Gln Thr Phe Ser Ile Val
35 40 45
Ile Arg Tyr Trp Asp Ala Phe Asn Tyr Gln Ser Lys Lys Thr Ala Glu
50 55 60
Glu Leu Ile Gly Tyr Ile Leu Arg Ser His Ser Gly Leu Val His Thr
65 70 75 80
Asn Phe Ser Thr Ile Pro Ser Leu Ala Ser Ile Pro Ala Leu Ser Ala
85 90 95
Leu Glu Ser Glu Ile Ser Lys Met Lys Glu Lys Met Asp Val Arg Ser

```
                100                 105                 110
Gln Leu Ser Ala Phe Gly Arg Arg Cys Gln Ser Glu Asn Ala Ala Val
        115                 120                 125
Val Glu Gln Ala Leu Arg Glu Leu Leu Pro Cys Leu Ser Arg His Glu
    130                 135                 140
Glu Phe Leu His Glu Ser Val Leu Ser Glu Gln Pro Asp Pro Val Val
145                 150                 155                 160
Ala Gln Leu Thr Arg Ser Leu Leu Asp Cys Cys Val Lys Phe Asn Ala
                165                 170                 175
Gly Ser Asp Ser Ile Thr Leu Leu Ser Ala Gln Cys Leu Gly Leu Val
            180                 185                 190
Gly Cys Leu Asp Pro Asn Arg Val Asp Pro Val Lys Asp Lys Lys Asp
        195                 200                 205
Ile Leu Val Leu Ser Asn Phe Asp Arg Met Glu Glu Thr Phe Asp Phe
    210                 215                 220
Val Leu Phe Phe Leu Gln His Val Leu Val Gln Ala Phe Leu Ser Ala
225                 230                 235                 240
Ser Asn Thr Arg Ala Gln Gly Phe Leu Ala Tyr Ala Met Gln Asn Leu
                245                 250                 255
Leu Arg Leu Cys Asn Leu Asp Ser Ala Val Thr Gln Arg Ser Arg Asp
            260                 265                 270
Val Gln Ala Asp Glu Lys Tyr Arg Arg Trp Ser Glu Leu Pro Glu Thr
        275                 280                 285
Val Arg Asn Thr Leu Thr Pro Phe Leu Thr Ser Lys Tyr Thr Val Thr
    290                 295                 300
Val Gly Ala Ile Arg Ser Arg Cys Lys Phe Pro Ile Phe Ser Thr Glu
305                 310                 315                 320
Leu Thr His Gly Asp Trp Leu Arg Ser Phe Val Gln Asp Leu Leu Gln
                325                 330                 335
Arg Gly Ser Gly Asp Asn Ala Gln Leu Ile Phe Ser Val Cys Ser Arg
            340                 345                 350
Ile Val Lys Gly Gln Asp Ile Ser Ile Ala Ser Phe Leu Leu Pro Phe
        355                 360                 365
Ala Val Leu Asn Arg Ile Val Gly Gly Thr Gln Glu Glu Arg Leu Asp
    370                 375                 380
Leu Gln Ser Glu Leu Thr Thr Ile Leu Ser His Pro Leu Pro Glu Ala
385                 390                 395                 400
Ser Asn Arg Val His Glu Ala Ile Ile Leu Cys Ser Gln Val Ser Val
                405                 410                 415
Pro Phe Val Ser Ile Arg Ser Val His Thr Ala Phe Pro Leu Leu Thr
            420                 425                 430
Ile Gly Gln Ser Val Phe Glu Ile Leu Asp Tyr Leu Ser Arg Trp Leu
        435                 440                 445
Gln Gly Lys Lys Lys Leu Leu His Gly Leu Lys Asn His Ala Ser His
    450                 455                 460
Thr Gly Arg Ser His Lys Asp Ser His Gln Asp Ser Leu Ser Glu Thr
465                 470                 475                 480
Tyr Ser Ser Gln Val Lys Ala Val Glu Thr Phe Leu Gly Ser Ile Pro
                485                 490                 495
Pro Glu Val Ile Ser Lys Arg Ala Val Glu Cys Lys Ser Phe Ser Arg
            500                 505                 510
Ala Leu Phe His Trp Glu Gln Tyr Ile Arg Arg Phe Lys Ser Gln Ser
        515                 520                 525
Asp Lys Asn Asp His Thr Ser Thr Glu Leu Leu Tyr Gln His Leu Gln
    530                 535                 540
Val Ile Tyr Ser Gln Ile Asp Glu Pro Asp Gly Ile Glu Gly Ile Ser
```

545 550 555 560
Ser His Leu His Val Leu Asn Ile Asp Gln Gln Val Leu Gln His Arg
565 570 575
Lys Ala Gly Arg Trp Val Thr Ala Gln Ser Trp Tyr Glu Leu Gln Val
580 585 590
Glu Lys Glu Pro Asp Asn Ile Asp Ala Gln Trp Asn Leu Leu Thr Cys
595 600 605
Leu Arg Glu Ser Gly Gln Gln Gly Asn Leu Gln Met Lys Ser Cys His
610 615 620
Gln Cys Trp Arg
625

<210> 34945
<211> 175
<212> PRT
<213> A.fumigatus

<400> 34945
Leu Ser Lys Leu Ala Gln Arg Leu Ser Val Thr Pro Ala Gly Leu Phe
1 5 10 15
Arg Pro Phe Trp Arg Thr Leu Ser Ile Thr Val Val Lys Asn Phe Gln
20 25 30
Ser Arg Pro His Met Ala Glu Gln Leu Cys Asp Leu Leu Gly Met Asn
35 40 45
Val Asp Asp Phe Leu Arg Leu Thr Glu Val His Ile Leu Pro Tyr Leu
50 55 60
Val Leu Thr Arg Lys Arg Asp Val Ile Thr Arg Val Gly Ala Ala Tyr
65 70 75 80
Lys His Ile Lys Thr Pro Phe Asp Ile Cys Ser Glu Lys Asn Asn Leu
85 90 95
Ala Ala Ile Leu Ala Phe Leu Met Ser Gln Pro Trp Ser Asp Pro Glu
100 105 110
Gly Met Ile Met Ser Val Leu Ser Asp Ile Asp Ser Ala Phe Gly Gly
115 120 125
Arg Thr Leu Ala Glu Leu Val Arg Thr Glu Pro Ile Leu Ile Ala Cys
130 135 140
Asp Leu Leu Lys Gly Leu Gly Asp Ser Gly Ser Glu Lys Gly Ala Arg
145 150 155 160
Ala Cys Glu Asn Gln Phe Leu Phe Thr Leu Ser Cys Val Leu Ile
165 170 175

<210> 34946
<211> 109
<212> PRT
<213> A.fumigatus

<400> 34946
Phe His Arg Ala Leu His Leu Leu Ala Ala Leu Val Pro Arg Lys Ser
1 5 10 15
Thr Ala Thr Ser Lys Lys Ala Asn Leu Leu Cys His Phe Ile Glu Glu
20 25 30
His Val Leu Gly Ile Ile Thr Gln Phe Ala His Ala Ile Asn Asp Phe
35 40 45
Gln Ile Arg Gln Pro Leu Ile Glu Lys Arg Arg Asn Ile Leu Ala Ile
50 55 60
Gly Glu Met Ile Lys Val Ala Arg Gly His Ile Ser Ser Ala Leu Pro

65 70 75 80
Gln Val Ser Arg Cys Ser Ile Pro Phe Ile Leu Ser Arg Tyr Phe Asp
85 90 95
Leu Arg Asn Ala Asp Met Cys Val Pro Ala Phe Arg Thr
100 105

<210> 34947
<211> 291
<212> PRT
<213> A.fumigatus

<400> 34947
Ala Glu Asp Ala Phe Glu Arg Arg Asn Glu Asp Trp Arg Ala Ile Val
1 5 10 15
Glu Arg Leu Val Phe Ser Thr Thr Thr Thr Thr Thr Ser Gln Glu Glu
20 25 30
Asp Glu Glu Glu Glu Glu Glu Glu Glu Arg Ala Ala Leu Leu Gly Ser
35 40 45
Ser Arg Ala Thr Gly Glu Ser Asp Gly Glu Gly Val Phe Thr Gly Gly
50 55 60
Tyr Leu Phe Leu Ala Gly Asp Leu Asn Tyr Arg Thr Ser Asn Thr Leu
65 70 75 80
Pro Gln Pro Ala Asp Ile Ala Arg Phe Pro Gly Leu Glu Ala Asp Glu
85 90 95
Ser Asp Pro Leu His Tyr Ser Arg Leu Leu Arg Glu Asp Gln Leu Thr
100 105 110
Arg Glu Arg Glu Lys Arg Arg Cys Phe His Gly Leu Ser Glu Ala Pro
115 120 125
Ile Gly Phe Pro Pro Ser Tyr Lys Tyr Glu Leu Gly Ala Arg Asp Pro
130 135 140
Arg Asp Trp Lys Phe Val His Ser Arg Trp Pro Ser Trp Cys Asp Arg
145 150 155 160
Ile Leu Tyr Leu Glu Ser Ser Thr Ala Thr Val Thr Pro Tyr Arg Tyr
165 170 175
Asp Ala Leu Pro Leu Phe Pro Thr Ser Asp His Arg Ala Val Ala Leu
180 185 190
Ala Ala Ala Val Val Leu Arg Ser Ile Gln Ala Gly Pro Ser Asp Ser
195 200 205
Glu Ser Ala Pro Ala Thr Asp Met Gln Gln Gln Gln Pro Gln Pro Gln
210 215 220
Pro Gln Pro Ala Pro Ala Pro Ala Ala Pro Phe Pro Ile Asp Arg Asp
225 230 235 240
Trp Lys Arg Lys Arg Asp Glu Ala Arg Arg Lys Glu Leu Val Val Gly
245 250 255
Gly Leu Ala Tyr Leu Gly Leu Thr Trp Glu Gly Arg Arg Tyr Leu Val
260 265 270
Gly Met Val Ile Gly Gly Leu Gly Ala Trp Phe Ile Leu Arg Ser Met
275 280 285
Leu Asn Val
290

<210> 34948
<211> 163
<212> PRT
<213> A.fumigatus

<400> 34948
Pro Cys Pro Pro Gly Thr Asp Gly Pro Pro Arg Ser Thr Pro Asp Thr
1 5 10 15
Pro Ile Leu Pro Pro Pro Thr Pro Cys Val Gly Pro His Leu Val Cys
20 25 30
Val Ser Ser Pro Gly Arg Ser Gly Met Gly Leu Pro Ala Pro Ala Pro
35 40 45
Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Cys Leu Ser Gln Gly
50 55 60
Gln Ile Leu Asn Pro Met Asp Arg Pro Gly Ser Thr Ala Ala Pro Pro
65 70 75 80
Pro Pro Pro Ala Gln Arg Leu Asp Gly Gln Thr Ser Glu Ile Glu Ala
85 90 95
Val His His Ile Gly Arg Ala Leu Pro Ser Pro Ser Lys Thr Pro Asp
100 105 110
Thr Gly Ser Gly Arg Thr Ser Trp Ala Asn Gly Cys Gly Gln Thr Ser
115 120 125
Ser Arg Ala Asp Pro Ala Pro Pro Val His Thr Cys Thr Thr Ala Gly
130 135 140
Asn Arg Ser Ala Leu Gln Thr Gly Arg Gly Asn Thr Gly Ala Ser Leu
145 150 155 160
Val Arg Gly

<210> 34949
<211> 86
<212> PRT
<213> A.fumigatus

<400> 34949
Cys Asp Trp Ser His Tyr Lys Leu Tyr Tyr Leu Val Met Glu Ile Arg
1 5 10 15
Arg Pro Ser Arg His Gly Asn His Pro Asp Arg Thr Tyr Gln Arg Thr
20 25 30
Tyr Lys Ala Cys Ile Ser Cys Arg Gln Arg Lys Ala Lys Cys Asp Leu
35 40 45
Gly Thr Gly Pro Asp Gly Leu Pro Leu Gly Pro Pro Cys Ala Lys Cys
50 55 60
Arg Arg Glu Gln Lys Pro Cys Leu Phe Asp Glu Lys Arg Ala Trp Glu
65 70 75 80
Arg Val Lys Lys Arg Gly
85

<210> 34950
<211> 264
<212> PRT
<213> A.fumigatus

<400> 34950
Arg Arg Ala Ser Ser Val Val Thr Ser Gly Thr Pro Ile Arg Arg Pro
1 5 10 15
Asn Gly Gln Ile Leu Ala Asn Pro Ala Ala Asn Pro Lys Val Pro Thr
20 25 30
Phe Ser Pro Cys Lys Arg Leu Asp Ile Glu Leu Glu Leu Ala Ala Phe
35 40 45
Val Ser Lys Ser Asn Glu Leu Gly Lys Pro Val Ser Ile Asp Glu Ala

```
    50                  55                  60
Glu Asp Tyr Ile Phe Gly Val Val Leu Met Asn Asp Trp Ser Ala Arg
65                  70                  75                  80
Asp Ile Gln Ala Trp Glu Tyr Val Pro Leu Gly Pro Phe Asn Ala Lys
                85                  90                  95
Asn Phe Ala Thr Thr Ile Thr Pro Trp Val Val Leu Leu Asp Ala Leu
            100                 105                 110
Glu Pro Phe Arg Thr Ala Gly Leu Glu Pro Gly Asn Arg Glu Ser Leu
        115                 120                 125
Leu Pro Tyr Leu Arg Glu Lys Arg Glu Leu Asn Ala Tyr Asp Ile Pro
    130                 135                 140
Leu Glu Val Glu Ile Thr Asn Ala Gly Gly Lys Pro Thr Leu Ile Ser
145                 150                 155                 160
Arg Thr Asn Ala Lys Asn Leu Leu Tyr Ser Phe Pro Gln Met Leu Ala
                165                 170                 175
His His Thr Ile Thr Gly Cys Asn Met Asn Thr Gly Asp Leu Leu Gly
            180                 185                 190
Ser Gly Thr Ile Ser Gly Lys Glu Asn Gln Thr Gln Gly Ser Leu Leu
        195                 200                 205
Glu Gln Thr Asn Gly Lys Asn Pro Leu Lys Leu Ala Asp Gly Ser Gln
    210                 215                 220
Arg Leu Phe Leu Glu Asp Gly Asp Thr Val Val Leu Arg Gly Met Ala
225                 230                 235                 240
Gly Thr Glu Gly Asn Tyr Val Gly Phe Gly Asp Cys Val Gly Thr Ile
                245                 250                 255
Leu Pro Ala Leu Lys Leu Glu Phe
            260
```

<210> 34951
<211> 69
<212> PRT
<213> A.fumigatus

<400> 34951

```
Arg Arg Cys Thr Ala Gly Tyr Phe Ile Gly Leu Gly Ala Glu Ile Asp
1               5                   10                  15
Gly Tyr Phe Lys Ile Pro Ala Phe Cys Ser Ser Ser His Leu Asp Ser
            20                  25                  30
Met Ser His Leu Gln Leu Thr Gln Ser Glu Gly Pro Val Leu Lys Ala
        35                  40                  45
Pro Tyr Arg Ala Leu Leu Glu Val Leu Ser Ile Thr Leu Gln Ile Asp
    50                  55                  60
Leu Ile Thr Met Met
65
```

<210> 34952
<211> 243
<212> PRT
<213> A.fumigatus

<400> 34952

```
Ser Asn Leu Thr Ser Ser Leu His Pro Thr Ile Thr Met Glu Asp Ser
1               5                   10                  15
Thr Ser Pro Lys Val Thr Leu Tyr Thr Tyr Phe Arg Ser Ser Cys Ser
            20                  25                  30
Ala Arg Leu Arg Ile Ala Leu Asn Leu Lys Ser Ile Pro Tyr Thr Pro
```

```
        35                  40                  45
Ile Ala Val Asn Leu Leu Lys Gly Glu Gln Ser Ser Pro Glu Asn Ile
    50                  55                  60
Ala Leu Asn Pro Ser Gly Thr Val Pro Thr Leu Ile Val Glu His Asp
65                  70                  75                  80
Ser Lys Glu Pro Val Thr Ile Thr Gln Ser Leu Ala Ala Leu Glu Tyr
                85                  90                  95
Leu Glu Glu Ile Thr Leu Ala Ser Ser His Ala Leu Leu Pro Pro Ala
            100                 105                 110
Ser Asn Pro Glu Ala Arg Ala Val Val Arg Thr Leu Val Asp Ile Met
        115                 120                 125
Ser Cys Asp Val Gln Pro Val Thr Asn Leu Arg Ile Leu Lys Arg Val
    130                 135                 140
Ala Pro Phe Gly Val Asp Arg Ala Ala Trp Ser Lys Asp Leu Ile Glu
145                 150                 155                 160
Asp Gly Phe Arg Ala Tyr Glu Ala Ile Ala Ala Lys Ser Ala Gly Leu
                165                 170                 175
Phe Ser Val Gly Asp Ser Ile Thr Met Ala Asp Val Cys Leu Leu Pro
            180                 185                 190
Ala Val Trp Gly Ala Glu Arg Ala Gly Val Lys Val Glu Lys Phe Pro
        195                 200                 205
Thr Ile Tyr Arg Val Ala Gln Arg Leu Glu Glu Glu Asp Ala Val Lys
    210                 215                 220
Arg Ala His Trp Arg Thr Gln Pro Asp Thr Pro Glu Glu Phe Arg Val
225                 230                 235                 240
Ser Ser Ser
```

<210> 34953
<211> 124
<212> PRT
<213> A.fumigatus

<400> 34953

```
Arg His Pro Pro Tyr Gln Leu Arg Asn Gly Pro Thr His Pro Ile Arg
1               5                   10                  15
Pro Gly Asn Leu Met Pro Ala Pro Met Ile Lys His Pro Pro Leu Ser
            20                  25                  30
Arg Leu Thr Asn Pro Arg Lys Leu His Pro Ser Arg Ile Pro Arg Ile
        35                  40                  45
Leu Arg Pro Ile Asn Met His Arg Arg Asn Pro His Arg Lys Arg Ala
    50                  55                  60
Pro Asp Arg Pro Pro Lys Leu Leu Leu Ile His Arg Pro Thr Pro Arg
65                  70                  75                  80
Arg Ile Thr His Pro Thr Arg Arg Pro Pro Arg Gln Tyr Arg Arg Arg
                85                  90                  95
Met Ser Leu Arg Arg Gln Arg Leu Pro Pro Gly Pro Ile Ala Leu Leu
            100                 105                 110
Tyr Cys Val Arg Asn Leu Lys Pro Tyr Ala Leu Lys
        115                 120
```

<210> 34954
<211> 145
<212> PRT
<213> A.fumigatus

<400> 34954
Ile Leu Ser Lys Ser Arg Leu Pro Ser Ser Thr Ala Phe Thr Ile Asp
1 5 10 15
Glu Lys Leu Ser Ser Ala Ser Thr Met Ser Ala Ala Ser Phe Ala Thr
20 25 30
Ser Leu Pro Phe Leu Pro Ile Ala Met Pro Thr Ser Ala Arg Phe Arg
35 40 45
Ala Gly Glu Ser Leu Thr Pro Ser Pro Val Ile Thr Gln Lys Ala Pro
50 55 60
Arg Arg Cys Ile Ala Ser Thr Ile Arg Thr Phe Val Ala Gly Leu His
65 70 75 80
Leu Ala Ile Thr Arg Gly Ser Cys Ser Met Ala Ser Met Ser Ala Ser
85 90 95
Asp Ser Ser Ser Asn Ser Ala Ala Ala Met Thr Thr Arg His Asp Leu
100 105 110
Leu Ser Asn Ile Gly Pro Arg Ile Pro Thr Ser Asp Ala Ile Ala Val
115 120 125
Ala Val Leu Met Trp Ser Pro Val Ser Ile Cys Thr Val Ile Pro Ala
130 135 140
Ile
145

<210> 34955
<211> 281
<212> PRT
<213> A.fumigatus

<400> 34955
His Leu Gln Phe Leu Met His Leu Leu Ile Ser Asn Ile Ala Gln Val
1 5 10 15
Ile Leu Leu Leu Ile Ala Leu Ala Phe Lys Asp Glu Gln Gly Asp Ser
20 25 30
Ile Phe Pro Leu Ser Pro Leu Glu Ile Leu Trp Ala Asn Leu Val Thr
35 40 45
Ser Ser Phe Leu Ala Leu Gly Leu Gly Leu Glu Glu Gly Gln Pro Asp
50 55 60
Leu Met Tyr Arg Pro Pro His Asp Leu Lys Val Gly Val Phe Thr Lys
65 70 75 80
Glu Leu Ile Thr Asp Lys Met Ile Tyr Gly Thr Phe Met Gly Ser Leu
85 90 95
Cys Leu Val Ala Phe Val Cys Val Ile Tyr Gly Ala Gly Ala Gly Ile
100 105 110
Ser Asp Leu Gly Glu Asp Cys Asn Asn Gly Trp Asn Glu Thr Cys Asn
115 120 125
Val Val Phe Arg Ala Arg Ala Thr Thr Tyr Ala Ser Leu Thr Phe Leu
130 135 140
Leu Leu Ile Thr Ala Trp Glu Val Lys His Phe Ser Arg Ser Leu Phe
145 150 155 160
Asn Leu Asp Pro Asp Lys Tyr Pro Gly Lys Leu Ser Val Val Gln Ser
165 170 175
Ile Trp Arg Asn Arg Phe Leu Phe Trp Ala Val Ile Ala Gly Phe Val
180 185 190
Val Ala Phe Pro Val Ile Tyr Leu Pro Ala Val Asn Arg Leu Val Phe
195 200 205
Lys His Gln Gly Ile Gly Trp Glu Trp Gly Ile Val Phe Gly Cys Val
210 215 220

```
Ala Val Tyr Leu Ala Leu Val Glu Ser Trp Lys Ala Ile Lys Arg Ala
225                 230                 235                 240
Tyr Gly Ile Gly Ser Gly Lys Asn Ala Thr Leu Thr Met Gly Asp Ala
                245                 250                 255
Glu Met Arg Ala Gly Leu Thr Leu Thr Pro Cys Thr Leu Leu Ser Met
            260                 265                 270
Ser Ala Asn Ala Ser Val Glu Met Lys
        275                 280
```

<210> 34956
<211> 171
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34956

```
Arg Ser Pro Phe Xaa Lys Arg Ile Tyr Phe Leu Ala Pro Ala Val Tyr
1               5                   10                  15
Asp Arg Thr Ala Trp Ile Arg Gly Ala Gly Val Leu Thr Val Gln Asp
            20                  25                  30
Thr Thr Asp Pro Tyr Asp Pro Thr Ser Gly Leu Val Gln Leu Asn Gly
        35                  40                  45
Ser Gly Trp Ala Pro Glu Lys His Cys Asp Asn Pro Ala Leu Ser Thr
    50                  55                  60
Phe Leu Thr Thr Ile Ser Leu Cys Asn Met Ser Val Val Gln Asn Glu
65                  70                  75                  80
Glu Pro Ser Gly Pro Ser Ser Gly Arg Trp Thr Ala Val Gly Glu Pro
                85                  90                  95
Thr Glu Val Ala Leu Asn Val Leu Ala Leu Arg Val Gly Tyr Glu Lys
            100                 105                 110
Ser Thr Ile Leu Gln Arg Ala Gly Met Gln Leu His Thr Glu Tyr Pro
        115                 120                 125
Phe Asp Ser Ser Ile Lys Arg Met Thr Ile Val Tyr Lys Asn Ser Gly
    130                 135                 140
Glu Ser Met Asn Asp Val Tyr Thr Asn Gly Ala Pro Glu Ala Val Leu
145                 150                 155                 160
Pro Gly Leu Ala Ile Ser Glu Lys Glu Asn Glu
                165                 170
```

<210> 34957
<211> 222
<212> PRT
<213> A.fumigatus

<400> 34957

```
Ile Gln Tyr Glu Ser Asp Met Met Ala Gly Glu Gly Leu Arg Val Leu
1               5                   10                  15
Cys Ile Ala His Lys Arg Ala Pro Leu Glu Asp Glu Ser Gln Val Ser
            20                  25                  30
Ser Arg Ala Met Ala Glu Val Asn Leu Glu Phe Cys Gly Leu Val Gly
        35                  40                  45
Leu Tyr Asp Pro Pro Arg Ala Glu Thr Ala Ala Ala Val Arg Lys Cys
```

```
    50                  55                  60
Gln Met Ala Gly Ile Thr Val His Met Leu Thr Gly Asp His Ile Lys
65                  70                  75                  80
Thr Ala Thr Ala Ile Ala Ser Glu Val Gly Ile Leu Gly Pro Met Leu
                85                  90                  95
Asp Ser Arg Ser Cys Arg Val Val Met Ala Ala Ala Glu Phe Asp Glu
            100                 105                 110
Leu Ser Asp Ala Asp Ile Asp Ala Ile Glu Gln Leu Pro Leu Val Ile
        115                 120                 125
Ala Arg Cys Ser Pro Ala Thr Lys Val Arg Met Val Glu Ala Met His
    130                 135                 140
Arg Arg Gly Ala Phe Cys Val Met Thr Gly Asp Gly Val Asn Asp Ser
145                 150                 155                 160
Pro Ala Leu Lys Arg Ala Asp Val Gly Ile Ala Met Gly Lys Asn Gly
                165                 170                 175
Ser Asp Val Ala Lys Glu Ala Ala Asp Met Val Leu Ala Asp Asp Asn
            180                 185                 190
Phe Ser Ser Ile Val Lys Ala Val Glu Glu Gly Arg Arg Leu Phe Asp
        195                 200                 205
Asn Ile Gln Lys Val Ile Ser Thr Cys Gly Phe Val Trp Ala
    210                 215                 220
```

<210> 34958
<211> 70
<212> PRT
<213> A.fumigatus

<400> 34958

```
Arg Arg Leu Pro Ala Met Ala Ser Val Gln Arg Arg Lys Trp Tyr Gln
1               5                   10                  15
Ile Lys Trp Phe Ala Asp Asp Asp Thr Lys Glu Glu Arg His Leu Ile
            20                  25                  30
Met Lys Leu Asp Leu Leu Ile Val Pro Tyr Ala Phe Leu Ala Tyr Trp
        35                  40                  45
Thr Lys Tyr Met Asp Gln Ser Asn Ile Ser Arg Ser Ser Asn Glu Met
    50                  55                  60
Ser His Thr Glu Leu Asp
65                  70
```

<210> 34959
<211> 92
<212> PRT
<213> A.fumigatus

<400> 34959

```
Thr Arg Leu Ile Val Leu Ala Asp Asn Ala Tyr Val Ser Gly Leu Ser
1               5                   10                  15
Asp Asp Leu Asn Leu Arg Gly Asn Glu Leu Val His Leu Gln Thr Ile
            20                  25                  30
Tyr Thr Val Gly Ala Val Leu Gly Gln Ile Pro Phe Ala Tyr Leu Phe
        35                  40                  45
Thr Lys Phe Pro Met Ser Trp Val Ile Pro Ala Leu Asp Ile Ser Trp
    50                  55                  60
Gly Val Phe Thr Leu Leu Gln Tyr Arg Val Thr Ser Tyr Gly Glu Leu
65                  70                  75                  80
Met Ala Tyr Arg Phe Leu Val Gly Trp Phe Glu Val
```

85 90

<210> 34960
<211> 390
<212> PRT
<213> A.fumigatus

<400> 34960
Thr Thr Glu Pro Thr His Ile Cys His Thr Gly Ser Trp Tyr Arg Gly
1 5 10 15
Asp Glu Ile Gly Arg Arg Gly Gly Cys Phe Tyr Val Gly Leu Thr Leu
20 25 30
Gly Thr Leu Thr Ser Ser Leu Ile Gln Ala Gly Thr Ser Ala Arg Leu
35 40 45
Asp Gly Val His Gly Leu Ala Gly Trp Arg Trp Met Tyr Ile Ile Cys
50 55 60
Ala Ile Ile Thr Ile Pro Ile Gly Leu Leu Gly Tyr Val Ile Leu Pro
65 70 75 80
Gly Thr Pro Asp Lys Pro Asn Arg Leu Val Leu Lys Gln Ala Asp Ile
85 90 95
Glu Leu Ala Lys Arg Arg Leu Gln Arg Ala Gly His Gly Val Gln Glu
100 105 110
His Phe Arg Trp Lys Ala Leu Val Ser Ile Ala Gly Asn Trp Lys Phe
115 120 125
Trp Ala Leu Leu Leu Leu Asp Ile Phe Phe Trp Asn Gly Ser Ile Asn
130 135 140
Thr Thr Thr Gly Gly Tyr Leu Leu Trp Leu Lys Ser Leu Lys Arg Phe
145 150 155 160
Ser Thr Ser Arg Ile Asn Glu Leu Asn Ala Ile Ala Pro Ala Leu Gly
165 170 175
Ile Phe Tyr Thr Leu Phe Ile Cys Phe Ser Ser Asp Leu Leu Phe Gly
180 185 190
Pro Ala Trp Ala Ile Thr Ile Ala His Thr Trp Asn Ile Ile Gly Leu
195 200 205
Val Ile Leu Val Val Trp Asp Val Pro Gln Ser Ala Leu Trp Phe Ala
210 215 220
Phe Ala Thr Thr Tyr Ser Ala Val Ala Met Ser Ser Val Leu Tyr Gly
225 230 235 240
Trp Val Asn Ser Gln Leu Arg Tyr Ser Pro Val Glu Arg Ala Val Ala
245 250 255
Leu Ile Ile Leu Asn Ala Val Ser Gln Ser Thr Thr Ala Trp Thr Pro
260 265 270
Leu Leu Val Phe Lys Thr Val Glu Ala Pro Arg Phe Thr Lys Gly Tyr
275 280 285
Ser Phe Val Leu Gly Asn Ala Ile Cys Leu Val Ile Leu Ala His Val
290 295 300
Ile Gln Phe Phe Ala Lys Arg Glu Glu Tyr Ala Leu Cys His Ile Phe
305 310 315 320
Ile Asp Thr Ser Asn Arg Pro Thr Gly Glu Phe Gln Lys Glu Gln Glu
325 330 335
Ala Thr Pro Thr Ser Ala Thr Gln Met Lys Arg Gly Ile Leu Asn Leu
340 345 350
Val Ile Glu Gln Ser Cys Arg Cys Ile Gln Arg Ser Ser His Pro Arg
355 360 365
Arg Arg Met Ile Asp Leu Ala Asp Met Gln Pro Glu Ser Met Tyr Ala
370 375 380

```
Gly Pro Cys Val Asp Glu
385                 390

<210> 34961
<211> 219
<212> PRT
<213> A.fumigatus

<400> 34961
Arg Pro Ser Glu Glu Met Leu Asp Leu Arg Lys Glu Tyr Lys Ser His
1               5                  10                  15
Val Lys Leu Gln Gly Lys Gly Ile Asn Met Ala Lys His Ile Arg Leu
            20                  25                  30
Lys Leu Gly Asn Ser Ala Phe Gly Lys Val Cys Tyr Ala Thr Ala Leu
        35                  40                  45
Gly Arg Trp Glu Ser Glu Ala Tyr Trp Ala Asn Cys Tyr Tyr Gln Ser
    50                  55                  60
Ser Thr Ser Arg Arg Glu Leu Leu Ile Glu Ser Leu Met Gly Arg Ser
65                  70                  75                  80
Asn Ser Asp Ile Arg Glu Ile Lys Gln Cys Phe Arg Asp Ser Arg Tyr
                85                  90                  95
Leu Asp Ser Leu Glu Lys Cys Met Lys Ala Glu Leu Lys Ala Asp Lys
            100                 105                 110
Phe Arg Val Ala Val Leu Leu Ala Leu Glu Glu Thr Arg Gln Ser Glu
        115                 120                 125
Arg Glu Pro Ile Asp Pro Asn Leu Val Gln Arg Asp Val Arg Asp Leu
    130                 135                 140
Tyr Gly Ala Leu Met Ser Arg His Gly Gly Glu Thr Ala Met Ile Tyr
145                 150                 155                 160
Ile Ile Val Arg Arg Ser Asp Ala His Leu Arg Glu Val Leu Arg Ala
                165                 170                 175
Tyr Glu Lys Ile Tyr Asn Gln Asn Phe Ala Arg Ala Met Ile Ala Lys
            180                 185                 190
Ser Gln Asn Leu Val Val Arg Ile Ser Thr Phe Ser Ser Pro Ser Ile
        195                 200                 205
Pro Gln Asp Leu Leu Thr Trp Leu Met Thr Gly
    210                 215

<210> 34962
<211> 105
<212> PRT
<213> A.fumigatus

<400> 34962
Lys Lys Tyr Arg Gly Gln Ile Asn Gly Trp Ala Gly Leu Ile Arg Val
1               5                  10                  15
Asp Gly Ala Val Tyr Thr Trp Met Gly Met Pro Gly Ser Thr Thr Ala
            20                  25                  30
Asn Gln Thr Ala Tyr Glu Tyr Thr Ser Thr Lys Ser Ile Phe Thr Phe
        35                  40                  45
His Val Gly Asp Ala Val Glu Met Lys Val Thr Phe Leu Ser Pro Ile
    50                  55                  60
Thr Pro Asn Asp Leu Arg Arg Gln Ser Leu Thr Phe Ser Tyr Val His
65                  70                  75                  80
Val Ala Val Ser Ser Ile Asp Gly Asn Ser His Asp Val Gln Leu Tyr
                85                  90                  95
```

Ser Asp Ile Ser Ala Gly Glu Ser Glu
100 105

<210> 34963
<211> 833
<212> PRT
<213> A.fumigatus

<400> 34963
Thr Gly Ser Phe Ser Gly Ser Trp Gln His Gln Thr Met Ala Cys Leu
1 5 10 15
His Arg Ile Gln Thr Ala Glu Trp Asp Thr Leu Arg Ala Gly Leu Cys
20 25 30
Arg Ile Pro Leu His Phe Leu Arg Asp Cys Met Leu Ile Asp Arg Phe
35 40 45
Arg Leu Trp Ser Val Pro Val Asn Ser Phe Pro Asp His Thr Ser Phe
50 55 60
Gly Lys Trp Tyr Val Asn Thr Val Phe Ser Leu Ala Arg Phe Pro Tyr
65 70 75 80
Met Ser Ser Glu Asn Ile Ala Met Asn Asp Phe Thr Asp Gly Ser Glu
85 90 95
Tyr Leu Glu Phe Arg Ile Asn His Leu Arg Gly Arg Asn Ala Thr Lys
100 105 110
Tyr Arg Ala Glu Tyr Gln Lys Val Asn Ala Leu Phe Glu Arg Ala Leu
115 120 125
Ile Leu Leu Asn Lys Met Pro Lys Ile Trp Glu Met Tyr Leu Ser Phe
130 135 140
Leu Leu Gln Gln Pro Leu Val Thr Gln Thr Arg Arg Thr Phe Asp Arg
145 150 155 160
Ala Leu Arg Ala Leu Pro Ile Thr Gln His Asn Arg Ile Trp Lys Leu
165 170 175
Tyr Lys Ala Phe Ala Arg Ser Ala Ser Gly Gln Thr Ala Val Lys Ile
180 185 190
Trp Ala Arg Tyr Met Gln Ile His Pro Glu Asn Ala Glu Asp Tyr Ile
195 200 205
Glu Leu Leu Val Glu Leu Gly Gln Tyr Thr Glu Ala Val Lys Arg Tyr
210 215 220
Met Glu Ile Leu Asp Asp Pro Arg Phe Gln Ser Lys Lys Gly Lys Ser
225 230 235 240
Asn Phe Gln Leu Trp Thr Glu Met Val Asp Leu Leu Val Ser Lys Ala
245 250 255
Lys Gln Ile Arg Thr Gly Pro Gln Val Gly Ile Asp Val Asp Ala Ile
260 265 270
Leu Arg Ser Gly Ile Asp Arg Phe Ala Asp Gln Arg Gly Lys Leu Trp
275 280 285
Ala Gly Leu Ala Thr Tyr Trp Ile Thr Lys Gly Asn Phe Glu Lys Ala
290 295 300
Arg Asp Val Phe Glu Gly Gly Ile Thr Thr Val Leu Thr Val Arg Asp
305 310 315 320
Phe Thr Leu Ile Phe Asp Ala Tyr Val Glu Phe Glu Glu Ser Ile Ile
325 330 335
Gly Ser Leu Met Glu Ala Ala Ala Val Arg Ala Asp Lys Gly Asn Val
340 345 350
Asp Glu Asp Ala Asp Phe Asp Leu Asp Leu Arg Met Leu Arg Phe Glu
355 360 365
Gln Leu Met Asp Arg Arg Pro Phe Leu Val Asn Asp Val Leu Leu Arg

```
    370                 375                 380
Gln Asn Pro Asn Asn Val Ile Glu Trp Glu Lys Arg Val Ala Leu Trp
385                 390                 395                 400
Gly Asp Asn Lys Glu Glu Ile Val Asn Thr Tyr Thr Ala Ala Ile Ala
                405                 410                 415
Ala Ile Asn Pro Lys Lys Ala His Gly Lys Phe Ser Glu Leu Trp Val
            420                 425                 430
Asn Tyr Ala Lys Phe Tyr Glu Ser Gly Gly Asp Leu Asp Thr Ala Arg
        435                 440                 445
Val Ile Phe Asp Lys Ala Val Lys Val Pro Phe Lys Ser Val Ala Glu
    450                 455                 460
Leu Ala Asp Thr Trp Cys Glu Trp Ala Glu Met Glu Leu Arg Ser Glu
465                 470                 475                 480
Asn Phe Asp Lys Ala Val Asp Ile Met Ala Lys Ala Thr Gln Ala Pro
                485                 490                 495
Lys Lys Ser Thr Val Asp Tyr Phe Asp Glu Thr Leu Ser Pro Gln Gln
            500                 505                 510
Arg Val His Lys Ser Trp Lys Leu Trp Ser Phe Tyr Val Asp Leu Val
        515                 520                 525
Glu Ser Val Ala Thr Leu Glu Glu Thr Arg Lys Val Tyr Glu Arg Ile
    530                 535                 540
Phe Glu Leu Arg Ile Ala Thr Pro Gln Thr Val Val Asn Tyr Ala Asn
545                 550                 555                 560
Leu Leu Glu Glu His Lys Tyr Phe Glu Asp Ser Phe Lys Val Tyr Glu
                565                 570                 575
Arg Gly Leu Asp Leu Phe Ser Tyr Pro Val Ala Phe Glu Leu Trp Asn
            580                 585                 590
Leu Tyr Leu Thr Lys Ala Val Asp Arg Lys Ile Gly Ile Glu Arg Leu
        595                 600                 605
Arg Asp Leu Phe Glu Gln Ala Leu Asp Gly Cys Pro Pro Lys Phe Ala
    610                 615                 620
Lys Pro Leu Tyr Leu Met Tyr Gly Asn Leu Glu Glu Glu Arg Gly Leu
625                 630                 635                 640
Ala Arg His Ala Met Arg Ile Tyr Glu Arg Ala Thr Arg Ala Val Ser
                645                 650                 655
Asp Glu Asp Arg Phe Glu Met Phe Glu Phe Tyr Ile Thr Lys Ser Ala
            660                 665                 670
Ser Asn Phe Gly Leu Thr Ser Thr Arg Pro Ile Tyr Glu Arg Ala Ile
        675                 680                 685
Ala Ala Leu Pro Asp Gln Glu Ala Lys Glu Met Cys Leu Lys Phe Ala
    690                 695                 700
Asp Met Glu Arg Arg Leu Gly Glu Ile Asp Arg Ala Arg Ala Ile Tyr
705                 710                 715                 720
Gly His Ala Ser Gln Phe Cys Asp Pro Arg Thr Asn Ala Gly Phe Trp
                725                 730                 735
Gln Lys Trp Glu Ala Phe Glu Val Gln His Gly Asn Glu Asp Thr Phe
            740                 745                 750
Lys Glu Met Leu Arg Ile Lys Arg Ser Val Gln Ala Gln Tyr Lys Tyr
        755                 760                 765
Val Asn Pro Asp Gln His Met Lys Ser Lys Asn Met Leu Ile Ser Ile
    770                 775                 780
Glu Thr Ala Pro Met Ser Thr Ser Leu Leu Pro Lys Gln Ser Pro Ala
785                 790                 795                 800
Ala Ser Asn Ala Pro Arg Lys Ala Pro Gly Arg Gly Lys Ala Arg Lys
                805                 810                 815
Gln Ala Arg Met Pro Leu Arg Ser Ala Gln Thr Pro Trp Gln Arg Trp
```

820 825 830

Asn

<210> 34964
<211> 85
<212> PRT
<213> A.fumigatus

<400> 34964
Leu Leu Gly Asn Glu Trp Thr Thr Gln Leu Val Pro Ser Glu Leu Pro
1 5 10 15
Thr Arg Thr Pro Thr Trp Leu Pro Val Glu Phe Leu Thr Asp Cys His
20 25 30
Arg Cys Glu Arg Cys Arg Ala Arg Lys Val Lys Cys Ser Gly Thr Gln
35 40 45
Pro Cys Asp Lys Cys Arg Asn Arg Gln Gln Asp Cys Val Phe Glu Glu
50 55 60
Asp Arg Lys Ile Val Val Ser Glu Glu Tyr Val Glu Glu Asp Leu His
65 70 75 80
Lys Lys Leu Leu Phe
85

<210> 34965
<211> 101
<212> PRT
<213> A.fumigatus

<400> 34965
Arg Ala Gln Ile Gly His Ala Met Arg Met Ala Leu Val Glu Gly Leu
1 5 10 15
His Arg Ala Leu Pro Val Glu Gln Leu Gly Glu Lys Arg Val Glu Arg
20 25 30
Cys Thr Lys Ile Trp Trp Thr Val Tyr Ile Leu Asp Arg Lys Phe Ser
35 40 45
Ser Leu Ile Gly Ser Pro Thr Ser Val Asn Asp Glu Asp Val Thr Thr
50 55 60
Ile Leu Trp Asp Leu Lys Thr Cys Ser Gln Glu Ala Ala Ala Leu Ser
65 70 75 80
Leu His Val Lys Ile Thr Gln Val Ile Thr Arg Val Leu His Ser Lys
85 90 95
Trp Pro Ala Asp Trp
100

<210> 34966
<211> 130
<212> PRT
<213> A.fumigatus

<400> 34966
Asp Thr Ala Tyr Leu Val Cys His Asn Val Phe Leu Trp Ser Arg Leu
1 5 10 15
Tyr Leu Cys Leu Leu Leu Pro Asp Arg Leu Tyr Pro Asp Leu Ser Tyr
20 25 30
Arg Asp Arg Gly Pro Gly Pro Gly His Ala Asp Arg Glu Thr Cys Ser
35 40 45

```
Phe Leu Tyr Ala Phe Gln Leu Asp Leu Leu Thr Gly Asn Asp Ile Phe
    50                  55                  60
Tyr His His Gly Ala Pro His Ala Ala Asp Arg Pro Ser Glu Val Arg
65                  70                  75                  80
His Ala Glu Gly Phe Gly Gln Tyr Leu Ser Pro Ala Gln Glu Asn Ala
                85                  90                  95
Phe Phe Val Arg Leu Ser Pro Thr Leu Ser Ser Tyr Arg Pro Val Leu
            100                 105                 110
Leu Phe Ser Arg Gly Ala Leu Pro Phe Phe Asp Ser Thr Leu Met Arg
        115                 120                 125
Arg Ser
    130
```

<210> 34967
<211> 257
<212> PRT
<213> A.fumigatus

<400> 34967

```
Asn Gln Lys Met Ala Glu Pro Pro Ala Lys Arg Ala Lys Arg Val Asp
1               5                   10                  15
Ser Ser Thr Met Trp Asp Leu Asp Glu Arg Lys Thr Arg Ser Pro Glu
            20                  25                  30
Pro Asp Ser Asp Ile Gly Arg Ser Pro Arg Arg Asp Ala Pro Gln Lys
        35                  40                  45
Asp Asp Arg Arg Arg Glu Gly Pro Arg Asp Asp Arg Arg Tyr Arg Ser
    50                  55                  60
Arg Ser Arg Asp Arg Ala Glu Arg Arg Arg Glu Arg Ser Arg Ser Arg
65                  70                  75                  80
Asp Arg Arg Asp Arg Asp Arg Asp Arg Asp Arg Asp Arg Thr Asp Arg
                85                  90                  95
Asp Arg Asp Gly Arg Gly Ala Arg Asp Arg Asp Thr Ser Ala Thr Arg
            100                 105                 110
Glu Arg His Tyr Asp Arg Arg Gly Met Pro Tyr Pro Thr Asp Glu Ile
        115                 120                 125
Asp Leu Leu Ile Pro Asn Ala Leu Gln Gly Tyr Arg Asp Arg Tyr Arg
    130                 135                 140
Ser Arg Ser Arg Ser Pro Ile Arg Asn Gly Asn Arg Asn Arg Thr Arg
145                 150                 155                 160
Thr Pro Pro Pro Arg Gly Pro Lys Gly Asp Arg Arg Asp Asp Arg Lys
                165                 170                 175
Asp Asn Arg Pro Tyr Ala Asn Gly Val Pro His Ser Ser Leu Arg Arg
            180                 185                 190
Asp Lys Asp Glu Met Glu Leu Asp Pro Ala Val Pro Ile Glu Glu Asp
        195                 200                 205
Glu Met Glu Ala Leu Met Arg Lys Thr Val Gly Phe Thr Arg Phe Gln
    210                 215                 220
Glu His Lys Glu Tyr Gln Ser Ala Trp Lys Gln His Leu Arg Cys Ala
225                 230                 235                 240
Glu Arg Glu Glu Asp Cys Val Gln Thr Val His Glu Pro Cys Arg Arg
                245                 250                 255
Ile
```

<210> 34968
<211> 179

<212> PRT
<213> A.fumigatus

<400> 34968
Arg His His Arg Gln Ile Tyr Leu Leu Gly Asn Pro Phe Ile Trp Trp
1 5 10 15
Ser Ser Thr Ala Ala Ile Val Val Tyr Ile Val Phe Lys Gly Ile Ala
20 25 30
Gly Ile Arg Trp Gln Arg Ser Trp Gly Asp Tyr Arg Asn Val Asn Phe
35 40 45
Lys Arg Phe Asp Tyr Glu Val Gly Thr Ser Val Leu Gly Trp Ala Phe
50 55 60
His Tyr Phe Pro Phe Tyr Leu Met Ala Arg Gln Leu Phe Leu His His
65 70 75 80
Tyr Phe Pro Ala Leu Tyr Phe Ala Leu Met Ala Leu Cys Gln Glu Phe
85 90 95
Asp Phe Ile Ala Asn Arg Phe Lys Ser Phe Gly Leu Ser Ser Arg Pro
100 105 110
Ile Ile Gly Lys Gly Leu Val Ala Val Phe Leu Ala Leu Ser Ile Phe
115 120 125
Thr Phe Thr Leu Tyr Ser Pro Leu Val Tyr Gly Asn Pro Trp Thr Gln
130 135 140
Asp Ala Cys Lys Lys Val Lys Leu Val Ser Thr Trp Asp Phe Asp Cys
145 150 155 160
Asn Thr Phe Tyr Thr Asp Val Ser Val Pro Glu Trp Gln Pro Pro Arg
165 170 175
Arg Gly His

<210> 34969
<211> 180
<212> PRT
<213> A.fumigatus

<400> 34969
Leu Gly Gln Tyr Val Thr Gln Phe Leu Asn Ala Asn Pro Ile Ala Ser
1 5 10 15
Ser Thr Pro Ser Ala Gln Val Asn Pro Val Pro Glu Leu Pro Val Gln
20 25 30
Asn Ser Pro Val Lys Glu Pro Pro Val Ala Pro Pro Gln Gln His His
35 40 45
Gln Glu Val His Lys Glu Ala Gln Glu Ala Ser Val Thr Ser Gln Ala
50 55 60
Gln Gln Pro Arg Gly Thr Met Ala Arg Val Glu Tyr Arg Asp Gln His
65 70 75 80
Gly Asn Val Leu Asp Glu Ala Leu Val Ala Ser Leu Ala Arg Glu Gly
85 90 95
Lys Val Ser Phe Glu Thr Arg His Glu Thr Arg Thr Arg Leu Glu His
100 105 110
Ala His Glu Val Glu Met Ile Asp Gly Arg Ile Ala Pro Pro His Pro
115 120 125
Asp Val Glu Gly Gln Asn Pro Glu Thr Val Lys Asp Gln Glu His Gln
130 135 140
Ala Ala Gly Asp Ser Pro Ala Ser Ala Ala Val Gly Glu Arg Ser Val
145 150 155 160
Lys Glu Pro Ser Ser Pro Glu Pro Lys Pro Ala Ser Glu Ala Lys Glu

```
                165                 170                 175
Ala Thr Gln Asn
            180

<210> 34970
<211> 63
<212> PRT
<213> A.fumigatus

<400> 34970
Asn Leu Gln Ile Phe Asn Met Ser Ser Ile Ala Ala Met Ala Ser Arg
1               5                  10                  15
Arg Ala Phe Ala Arg Gln Ser Leu Phe Arg Ala Ala Pro Arg Arg Asn
            20                  25                  30
Tyr Ser Ser Lys Leu Glu Glu Ala Thr Leu Asp Lys Ala Pro Lys Arg
        35                  40                  45
Asp Pro Glu Leu Tyr Val Trp Ile Ser Tyr Gln Ala Pro Leu Asp
    50                  55                  60

<210> 34971
<211> 139
<212> PRT
<213> A.fumigatus

<400> 34971
Leu Asp Ser Ser Leu Lys Asp Val Ala Gly Ser Thr Arg Cys Tyr Val
1               5                  10                  15
Arg Ser Phe Ser Asp Cys Trp Met Val Asn Asn Pro Pro Pro Tyr Arg
            20                  25                  30
Pro His Ser Thr Arg Lys Ser Asp Cys Arg Thr Arg Leu Ser Leu Ile
        35                  40                  45
Ala Arg Trp Ile Asp Ala Asp Ala Ala Tyr Gln Leu Phe Val Asn Arg
    50                  55                  60
Tyr Phe Gly Arg Lys Pro Thr Ser Val Thr Ser Glu Ser Asn Val Arg
65                  70                  75                  80
Ile Gly Glu Ser Ala Met Pro Trp Glu Arg Asp Asp Asp Gly Lys Ile
                85                  90                  95
Tyr Lys Tyr Gln Tyr His Pro His Gly Asp Lys Ser Gln Pro Leu Arg
            100                 105                 110
Asn Ala Pro Ser Ala Leu Asn Thr Val Ile Val Pro Asn Val Thr Leu
        115                 120                 125
Pro Val Val Met Ile Pro Arg Leu Ser Ser Pro
    130                 135

<210> 34972
<211> 245
<212> PRT
<213> A.fumigatus

<400> 34972
Arg Ser Pro Phe Phe Leu Val Ser Leu Thr Asp Gly Pro Leu Phe Cys
1               5                  10                  15
Gln Thr Ser Gln Ser Gly Ile Ile Asp Ala Ser Thr Ser Pro Ala Asp
            20                  25                  30
Ser Lys Ala Pro Phe Val Arg Gly His Arg Arg Arg Ser Thr His Val
        35                  40                  45
```

```
Ser Arg Arg Asp Leu Glu Lys Phe Arg Thr Glu Val Leu Gly Ile Val
    50                  55                  60
Ser Asp Pro Ser Leu Trp Cys Glu Glu Ala Gly Gly Ser Pro Ala Ser
65                  70                  75                  80
Ile Asn Pro Ser Thr Leu Asp Glu Leu Asn Thr Ala Phe Ala Phe Ala
                85                  90                  95
Ser Met Ser Leu Asn Asn Ser Ser Gly Ile Pro Ser Asn Asn Pro Gly
            100                 105                 110
Ser Gly Met Phe Pro Asn Tyr Val Asp Asn Thr Ala Asn Ser Ala Asn
        115                 120                 125
Leu Pro Asn Ala Ser Arg Gln Ser Met Ser Pro Ala Met Pro Ser Pro
    130                 135                 140
Ser Thr Gln Val Asn Gly Ala Gly Met Pro Gly Met Asn Ala Gly Ile
145                 150                 155                 160
Pro Met Asn Ala Gly His Gln Met Asp Leu His His Leu Tyr Glu Met
                165                 170                 175
Val Leu Glu Leu Ser Glu Val Leu Lys Asn Asn Arg Glu Thr Thr Lys
            180                 185                 190
Ser Ile Val Ser Thr Ala Glu Glu Ile Met Val Arg Leu Ser Asp Arg
        195                 200                 205
Glu Gly Tyr Thr Val Ala Pro Arg Ile Cys Cys Leu Ala Val Ser Leu
    210                 215                 220
Thr Glu Ile Thr Glu Ala Cys Leu Phe Arg Gly Asp Tyr Ser Gln Leu
225                 230                 235                 240
Ala Ala Gly Gln Trp
                245
```

<210> 34973
<211> 160
<212> PRT
<213> A.fumigatus

```
<400> 34973
Lys Pro Leu Thr Val Ser Thr Leu Ala Ala Arg Ile Ala Glu Leu Glu
1               5                   10                  15
Arg Ala Leu Ala Lys Glu Lys Arg Leu Val Glu Ile Leu Lys Gln Glu
            20                  25                  30
Gln Val Glu Asn Thr Lys Leu Ile Gly Glu Tyr Glu Ala Ala Val Gly
        35                  40                  45
Thr Met Val Glu Gln Ile Arg Asn Tyr Cys Gln Asn Asn Asn Met Asn
    50                  55                  60
Tyr Leu Ala Gln Lys Arg His Tyr Asn Asn Leu Leu Gln Ala Glu Arg
65                  70                  75                  80
Asp Ala His Leu Glu Ser Arg Leu Asp Arg Asp His Trp His Ala Gln
                85                  90                  95
Thr Met Lys Cys Ala Glu Met Ile Arg Thr Ala Tyr Arg Leu Arg Cys
            100                 105                 110
Glu Glu Glu Glu Leu Pro Ile Arg Ile Val Ser Gly Leu Gln Asn Glu
        115                 120                 125
Val Arg Ala Tyr Arg Asn Ala Leu Gly Met Glu Pro Glu Lys Pro Glu
    130                 135                 140
Glu Glu Tyr Gly Trp Glu Ile Leu Lys Asp Val Pro Pro Ser Val Asp
145                 150                 155                 160
```

<210> 34974
<211> 553

<212> PRT
<213> A.fumigatus

<400> 34974

```
Thr Leu Ala Lys Ile Ser Ile Asp Phe Pro Ala Ser Ile Val Arg Glu
1               5                  10                  15
Gly Gly Leu Thr Ala Cys Leu Thr Tyr Leu Asp Phe Phe Pro Thr Ser
            20                  25                  30
Thr Gln Arg Thr Ala Val Thr Thr Ala Ala Asn Cys Cys Arg Asn Leu
        35                  40                  45
Pro His Asp Ala Phe Pro Val Val Arg Asp Val Met Pro Thr Leu Leu
    50                  55                  60
Asn Val Leu Ser Ser Ser Asp Gln Lys Val Val Glu Gln Gly Cys Leu
65                  70                  75                  80
Cys Val Ser Arg Ile Val Glu Ser Phe Lys Tyr Lys Pro Glu Lys Leu
                85                  90                  95
Glu Glu Leu Ile Glu Pro Glu Met Leu Arg Ala Val Leu Arg Leu Leu
            100                 105                 110
Leu Pro Gly Thr Thr Asn Leu Ile Gly Pro His Ile His Thr Gln Phe
        115                 120                 125
Leu Arg Val Leu Ala Ile Thr Ser Lys Ala Ser Pro Arg Leu Ser Val
    130                 135                 140
Glu Leu Leu Lys Met His Val Val Asp Thr Ile Tyr Gln Ile Leu Thr
145                 150                 155                 160
Gly Val Ser Pro Tyr Glu Asn Ile Glu Ala Thr Gly Val Arg Met Asp
                165                 170                 175
Ser Val Leu Val Met Gln Gly Leu Ile His Arg Pro Arg Glu Gln Val
            180                 185                 190
Phe Glu Thr Leu Asn Val Ile Cys Glu Leu Leu Pro Glu Val Pro Ser
        195                 200                 205
Gly Arg His Gly Tyr Ser Ala Asp Arg Val Leu Thr Ser Ser Ile Glu
    210                 215                 220
Asp Ser Ala Thr Phe Asp Asp Lys His Ile Gln Gly Gln Glu Ser Ala
225                 230                 235                 240
Glu Lys Arg Arg Ser Leu Leu Met Glu Cys Lys Ala Glu Leu Lys Arg
                245                 250                 255
Phe Ala Met Ile Leu Leu Pro Thr Leu Thr Asp Ala Tyr Ser Ser Thr
            260                 265                 270
Val Asn Leu Gly Val Arg Gln Lys Val Leu Ile Ala Gln Leu Lys Met
        275                 280                 285
Leu His Asn Leu Asp Ala Ala Leu Ile Glu Glu Ala Leu His Ser Val
    290                 295                 300
Pro Tyr Ala Ser Tyr Leu Ala Ala Ile Leu Ser Gln Lys Asp His Pro
305                 310                 315                 320
Ser Leu Val Ser Leu Ala Leu Arg Cys Ala Glu Leu Leu Phe Lys Arg
                325                 330                 335
Leu Glu His Val Tyr Arg Tyr Gln Phe His Arg Glu Gly Val Ile Ser
            340                 345                 350
Glu Ile Phe Lys Leu Ala Glu Ala Pro Leu Ser Thr Asp Lys His Ser
        355                 360                 365
Arg Asp Ser Leu Asp Thr Pro Ala Thr Val Pro Met Asp Leu Ser Ser
    370                 375                 380
Asp Ser Pro Arg Glu Pro Lys Ser Val Ala Ser Glu Asp Asp Gly Tyr
385                 390                 395                 400
Asp Asp Ser Gly Arg His Gln Ala Asp Asp Glu Asp Asn Asp Gln Asp
                405                 410                 415
```

```
Asp Asp Arg Asp Glu Glu Asn Asp Asp Ile Ser Asp Ser Glu Ser Ser
            420                 425                 430
Ser Ser Phe Ser Gly His Tyr Asn Thr Thr Arg Met Glu Asp Ala Thr
        435                 440                 445
Gln Asp Leu Val Ile Arg Asp Ala Arg Ala Phe Val Glu Leu Tyr Glu
    450                 455                 460
Ala Ser Glu Gly Lys Ala Met Arg Glu Arg Ala Gln Gln Ile Leu Asp
465                 470                 475                 480
Glu Leu Gln Gly Leu Ala Ala Asp Ile Arg Asn Cys Tyr Leu Gly Asp
                485                 490                 495
Gly Asp Gly Glu Gly Leu Pro Leu Phe Lys Lys Leu Ala Ser Tyr Phe
            500                 505                 510
Asp Gly Asp Ala Leu Glu Ser Ile Thr Ser Ala Glu Leu Leu Asn Ser
        515                 520                 525
Gly Ile Thr Lys Val Leu Leu Asp Val Phe Gly Asp Leu Gln Cys Lys
    530                 535                 540
Leu Leu Leu Asn Ile Ser Cys Gly Tyr
545                 550
```

<210> 34975
<211> 217
<212> PRT
<213> A.fumigatus

<400> 34975

```
His Asp Thr Arg Cys Ser His Ser Ser Leu Leu Arg Leu Leu Ser Gln
1               5                   10                  15
Asp Leu Ala Thr Lys Pro Arg Thr Pro Asp Gly Arg Ala Leu Leu Ser
            20                  25                  30
Thr Pro Leu Asn Pro Leu Leu Ser Pro Ile Ser Ser Leu Pro Ser Leu
        35                  40                  45
Pro Glu His Pro Leu Pro Glu Lys Ala Gln Phe Leu Met Ser Pro Arg
    50                  55                  60
Ile Thr Arg Ser Ala Ala Arg Leu Ala Ala Asp Ser Pro Ser Ser Ala
65                  70                  75                  80
Gly Ser Gly Pro Ser Ser Ile Pro Ala Ala Gly Ser Ala Pro Thr Arg
                85                  90                  95
Lys Arg Lys Ala His Ala Arg Arg Asp Pro Pro Leu Asp Val Pro Glu
            100                 105                 110
Glu Thr Asn Pro Gln Ser Pro Thr Arg Arg Thr Lys Arg Gln Arg Leu
        115                 120                 125
Ala Ser Pro Pro His Pro Ala Ser Thr Val Ser Thr Ser Arg Arg Gly
    130                 135                 140
Thr Arg Asn Arg Pro Ala Met Ser Gln Gln Gly Tyr Val Met Gly Val
145                 150                 155                 160
Pro Arg Val Val Ile Gly Ser Asp Ile Lys Leu Ile Phe Cys Leu Ala
                165                 170                 175
Leu Val Arg Gln Gln Ala Pro Arg Arg Lys Pro Arg Arg Ser Ser Pro
            180                 185                 190
His Leu Arg His Arg Gly Glu Ser Pro Ala Asp Ile Glu Glu Lys Tyr
        195                 200                 205
His Lys Val Arg His Phe Ile Asp Asn
    210                 215
```

<210> 34976
<211> 248

<212> PRT
<213> A.fumigatus

<400> 34976
Lys Leu Met His Leu Gly Ala Asp Arg Pro Ser Ala Thr Gln Ser Pro
1 5 10 15
Leu Pro Arg Arg Gln Lys Lys Arg Ser Ser Arg Thr Asn Ser Asp Val
20 25 30
Met Met Lys Glu Ala Glu Glu Glu Leu Asp Ser His Glu Arg Thr Ala
35 40 45
Asn Arg Glu Ser Ser Pro Ser Asn Asp Ser Asn Asp Gly Thr Thr Pro
50 55 60
Ser Gly Ile Asp Asp Asp Asp Asp Ala Asp Leu Phe His Asn Ser Leu
65 70 75 80
Phe Gly Ser Arg Ser Pro Leu Gly Leu Gln Ser Thr Leu Arg Ala Leu
85 90 95
Ser Gly Met Met Ser Gly Met Ser Ser Arg Leu Arg Glu Ile Leu Cys
100 105 110
Asn Leu Arg Met Lys Glu Asp Pro Ser Ile Gln Leu Ile Ala Leu Gln
115 120 125
Glu Leu Ser Asp Leu Leu Leu Val Ser Asn Glu Asp Asn Leu Ser Gly
130 135 140
Gln Phe Ser Pro Asp Pro Tyr Val Lys Glu Leu Val Thr Leu Met Gln
145 150 155 160
Pro Asp Gln Val Gly Glu Glu Asn Pro Glu Ile Met Leu Leu Ala Cys
165 170 175
Arg Cys Leu Ala Asn Leu Met Glu Ala Leu Arg Gly Ser Val Ala Asn
180 185 190
Val Val Tyr Gly Gly Ala Val Pro Ile Leu Cys Gln Lys Leu Leu Asp
195 200 205
Ile Gln Phe Ile Asp Leu Ala Glu Gln Ala Leu Ser Val Ser Ile Ser
210 215 220
Pro Pro Ile Leu Val Asp Arg Tyr His Trp Val Tyr Val Asp Phe Tyr
225 230 235 240
Ile Asp Phe Gly Gln Asn Leu Asp
245

<210> 34977
<211> 167
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (126),(131),(165)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34977
Lys Trp Cys Tyr Val Gly Tyr Arg Arg Leu Ser Arg Ala Ile Thr Ala
1 5 10 15
His Lys Ala Ile Tyr Pro Ser Asp Thr Phe Thr Leu Thr Trp His Ala
20 25 30
Phe Tyr Leu Asn Pro Ala Ser Pro Gly Tyr Pro Gly Val Asp Lys Arg
35 40 45
Glu Tyr Tyr Ala Ser Lys Phe Gly Glu Gly Arg Ala Ala Ala Ile Phe
50 55 60

```
Ser Arg Leu Ala Ala Ala Glu Glu Pro Asp Gly Ile Ala Phe Lys Phe
65                  70                  75                  80
Gly Gly Arg Thr Gly Asn Thr Arg Asp Ser His Arg Val Leu Trp Tyr
                85                  90                  95
Ala Gly Leu Lys Glu Lys Glu Ala Gly Ala Arg Gly Gly Ala Ala Ala
            100                 105                 110
Thr Asn Gly Asp Ala Ser Glu Glu Lys Val Gly Gly Leu Xaa Thr Lys
        115                 120                 125
Val Ala Xaa Gln Phe Phe Arg Ala Tyr Phe Glu Glu Glu Lys Asn Ile
    130                 135                 140
Thr Asp Arg Lys Met Leu Val Asp Ser Ala Ala Ala Ala Gly Leu Asp
145                 150                 155                 160
Arg Gly Glu Val Xaa Asn Phe
                165
```

<210> 34978
<211> 167
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34978

```
Asn Thr Val Gln Leu Tyr Lys Gln Gly Leu Gly Gly Arg Gly Xaa Glu
1               5                   10                  15
Gly Gly Gly Gly Arg Arg Arg Lys Lys Glu Arg Lys Glu Gly Glu Glu
            20                  25                  30
Glu Gly Gly Arg Glu Arg Lys Gly Glu Glu Glu Glu Lys Lys Arg Gly
        35                  40                  45
Gly Lys Arg Gly Glu Gly Glu Arg Arg Glu Glu Gly Gly Gly Arg Arg
    50                  55                  60
Glu Gly Gly Arg Glu Gly Gly Glu Gly Gly Glu Arg Glu Lys Arg Arg
65                  70                  75                  80
Lys Gly Arg Glu Arg Lys Glu Arg Glu Arg Arg Arg Arg Lys Lys Arg
                85                  90                  95
Gly Glu Arg Glu Gly Glu Arg Gly Gly Gly Lys Arg Lys Glu Lys Lys
            100                 105                 110
Glu Glu Glu Gly Arg Arg Lys Arg Arg Gly Gly Gly Gly Glu Glu Arg
        115                 120                 125
Glu Arg Lys Gly Arg Glu Glu Arg Glu Lys Lys Arg Glu Glu Arg Glu
    130                 135                 140
Gly Glu Arg Glu Gly Arg Arg Arg Glu Lys Lys Gly Arg Gly Arg Arg
145                 150                 155                 160
Glu Glu Arg Arg Glu Glu Asn
                165
```

<210> 34979
<211> 170
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE

<222> (18)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34979
Ala Asn Glu Thr Gln Phe Ser Tyr Thr Ser Lys Ala Ser Glu Gly Gly
1 5 10 15
Gly Xaa Arg Glu Gly Gly Gly Gly Gly Gly Arg Arg Arg Gly Arg Arg
20 25 30
Gly Lys Arg Lys Glu Glu Gly Lys Gly Arg Gly Arg Arg Arg Arg Arg
35 40 45
Arg Gly Gly Gly Arg Glu Gly Lys Gly Arg Gly Glu Arg Arg Gly Glu
50 55 60
Gly Gly Gly Lys Glu Gly Glu Lys Glu Gly Arg Gly Glu Arg Gly Arg
65 70 75 80
Lys Glu Gly Arg Gly Glu Arg Gly Arg Arg Glu Arg Gly Gly Gly Glu
85 90 95
Arg Lys Glu Glu Arg Glu Arg Glu Arg Glu Glu Glu Gly Arg Gly Arg
100 105 110
Arg Lys Arg Arg Arg Arg Gly Gly Gly Arg Glu Gly Glu Glu Gly Gly
115 120 125
Lys Lys Glu Arg Gly Lys Gly Glu Lys Arg Glu Arg Arg Arg Glu Lys
130 135 140
Arg Glu Arg Glu Lys Glu Lys Gly Gly Glu Glu Arg Arg Lys Gly Glu
145 150 155 160
Glu Glu Gly Lys Lys Gly Glu Lys Lys Ile
165 170

<210> 34980
<211> 171
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (19)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34980
His Glu Gln Met Lys His Ser Ser Ala Ile Gln Ala Arg Pro Arg Arg
1 5 10 15
Glu Gly Xaa Arg Gly Arg Gly Gly Glu Glu Glu Glu Glu Gly Glu Glu
20 25 30
Gly Gly Gly Arg Gly Arg Arg Lys Gly Lys Glu Gly Gly Gly Gly Gly
35 40 45
Glu Glu Glu Gly Gly Glu Glu Arg Gly Arg Gly Glu Glu Arg Gly Gly
50 55 60
Gly Arg Glu Glu Gly Arg Arg Glu Arg Arg Arg Gly Gly Gly Arg Glu
65 70 75 80
Gly Glu Lys Lys Glu Gly Glu Arg Glu Glu Gly Glu Arg Glu Glu Glu
85 90 95
Glu Lys Glu Lys Arg Arg Glu Arg Gly Arg Glu Arg Arg Arg Glu Glu
100 105 110
Glu Gly Glu Lys Gly Gly Gly Gly Glu Glu Glu Glu Lys Gly Arg Arg
115 120 125
Gly Gly Arg Lys Arg Glu Glu Arg Glu Arg Arg Glu Arg Glu Glu Glu
130 135 140

```
Arg Arg Glu Arg Gly Arg Lys Arg Arg Glu Glu Lys Arg Glu Glu Arg
145                 150                 155                 160
Glu Arg Lys Lys Gly Arg Lys Glu Arg Arg Lys
                165                 170
```

<210> 34981
<211> 162
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (153)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34981

```
Ile Phe Phe Ser Pro Phe Phe Pro Ser Ser Ser Pro Phe Leu Leu Ser
1               5                   10                  15
Ser Pro Pro Phe Ser Phe Ser Leu Ser Leu Phe Ser Leu Leu Leu Ser
            20                  25                  30
Leu Phe Ser Pro Phe Pro Leu Ser Phe Phe Pro Pro Ser Ser Pro Ser
        35                  40                  45
Leu Pro Pro Pro Leu Leu Leu Leu Phe Leu Leu Pro Leu Pro Ser Ser
    50                  55                  60
Ser Leu Ser Leu Ser Leu Ser Ser Phe Leu Ser Pro Pro Pro Leu Ser
65                  70                  75                  80
Leu Leu Pro Leu Ser Pro Leu Pro Ser Phe Leu Pro Leu Ser Pro Leu
                85                  90                  95
Pro Ser Phe Ser Pro Ser Phe Pro Pro Pro Ser Pro Leu Leu Ser Pro
            100                 105                 110
Leu Pro Phe Pro Ser Leu Pro Pro Pro Leu Leu Leu Leu Leu Leu Pro
        115                 120                 125
Leu Pro Phe Pro Ser Ser Phe Leu Phe Pro Leu Leu Pro Leu Leu Leu
    130                 135                 140
Pro Pro Pro Pro Pro Pro Ser Leu Xaa Pro Pro Pro Ser Glu Ala Leu
145                 150                 155                 160
Leu Val
```

<210> 34982
<211> 163
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (153)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34982

```
Phe Ser Ser Leu Leu Ser Ser Leu Leu Pro Leu Pro Phe Phe Ser Leu
1               5                   10                  15
Leu Leu Pro Ser Leu Ser Pro Ser Leu Ser Ser Leu Phe Phe Ser Leu
            20                  25                  30
Ser Ser Leu Pro Phe Leu Ser Leu Ser Ser Pro Pro Pro Pro Leu Leu
        35                  40                  45
```

```
Phe Leu Leu Pro Ser Ser Ser Phe Phe Ser Phe Leu Phe Pro Pro Pro
    50                  55                  60
Leu Ser Pro Ser Leu Ser Pro Leu Phe Phe Leu Leu Leu Leu Ser Leu
65                  70                  75                  80
Ser Phe Leu Ser Leu Pro Phe Leu Leu Phe Ser Leu Ser Pro Pro Ser
                85                  90                  95
Pro Pro Ser Leu Pro Pro Ser Leu Leu Pro Pro Pro Ser Ser Leu Leu
            100                 105                 110
Ser Pro Ser Pro Leu Phe Pro Pro Leu Phe Phe Ser Ser Ser Ser Pro
        115                 120                 125
Phe Leu Ser Leu Pro Pro Ser Ser Ser Pro Ser Phe Leu Ser Phe Phe
    130                 135                 140
Leu Leu Leu Pro Pro Pro Pro Ser Xaa Pro Leu Pro Pro Arg Pro Cys
145                 150                 155                 160
Leu Tyr Ser
```

<210> 34983
<211> 177
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (153)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34983

```
Asp Phe Leu Leu Ser Phe Leu Pro Phe Phe Leu Ser Leu Ser Ser Leu
1               5                   10                  15
Phe Ser Ser Leu Leu Phe Leu Pro Leu Ser Leu Leu Ser Ser Ser Leu
            20                  25                  30
Ser Leu Leu Ser Leu Ser Ser Leu Phe Leu Pro Pro Leu Leu Pro Phe
        35                  40                  45
Ser Ser Ser Ser Pro Pro Pro Pro Phe Ser Pro Ser Ser Ser Leu Leu
    50                  55                  60
Leu Ser Leu Pro Leu Ser Leu Leu Phe Ser Phe Ser Ser Ser Ser Leu
65                  70                  75                  80
Ser Pro Ser Ser Leu Ser Pro Ser Phe Phe Ser Pro Ser Leu Pro Pro
                85                  90                  95
Pro Leu Leu Leu Ser Leu Leu Pro Ser Ser Leu Pro Pro Pro Leu Ser
            100                 105                 110
Ser Pro Leu Pro Leu Ser Ser Pro Pro Ser Ser Ser Pro Pro Pro Pro
        115                 120                 125
Pro Ser Phe Pro Phe Leu Leu Pro Leu Pro Pro Pro Ser Ser Pro Ser
    130                 135                 140
Ser Ser Ser Ser Pro Pro Leu Pro Xaa Pro Pro Ser Leu Arg Gly Leu
145                 150                 155                 160
Ala Cys Ile Ala Glu Leu Cys Phe Ile Cys Ser Cys His Ser Lys Ala
                165                 170                 175
Phe
```

<210> 34984
<211> 651
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (404),(415)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34984

```
Val Ile Ile Cys Phe Ser Phe Val Ser Lys Asn Ile Phe Thr Val Ser
1               5                  10                  15
Thr Trp Phe Leu Arg Pro Asp Arg Phe Gly Glu Asn Val Leu Pro Thr
            20                  25                  30
Asn Asn Asn Ala Ala Tyr Ser Asn Gly Ile Ser Gln Val Ser Thr Pro
        35                  40                  45
Ser Arg Val Arg Ala Thr Thr Leu Asp Ile Pro Gly Leu Thr Lys Ser
    50                  55                  60
Lys Val Ser Pro Asp Gly Arg Ile Ala Gln Arg Asp Leu Gly Ser Lys
65                  70                  75                  80
Leu Val Ile Val Met Val Gly Leu Pro Ala Arg Gly Lys Ser Tyr Val
                85                  90                  95
Thr Lys Lys Leu Ala Arg Tyr Leu Asn Trp Leu Gln His Asp Thr Glu
            100                 105                 110
Ile Phe Asn Val Gly Glu Arg Arg Arg Val Ala Ala Gly Lys Ser Pro
        115                 120                 125
Ser Pro Ala Lys Ala Met Gly Pro Arg Asp Lys Arg Ala Ser Val His
    130                 135                 140
Lys Asp Leu Val Asp Ser Val Arg Arg Leu Ser Val Ser Val Gly Thr
145                 150                 155                 160
Met Asn Thr Gln Pro Ser Gln Thr Glu Ile Ser Pro Pro Glu Ser Ala
                165                 170                 175
Thr Ser Pro Pro Glu Ile Asn Ser Leu Pro Pro Pro Val Val Thr Ala
            180                 185                 190
Lys Ile Leu Val Asn Gly Gln Glu Glu Asp Pro Ser Met Gln Gln Glu
        195                 200                 205
Gly Ser Thr Ile Ile Thr Ser Ile Asp Ala Gly Pro Asp Asn Gln Gln
    210                 215                 220
Thr Val Thr Glu Ala Ser Pro Glu Pro Met Asp Gln Ser Ala Ser Phe
225                 230                 235                 240
Phe Asp Pro Gln Asn Glu Arg Ala Val Lys Leu Arg Glu Gln Val Ala
                245                 250                 255
Leu Asp Thr Leu Asp Glu Leu Leu Asp Tyr Ile Leu Val Gln Gly Gly
            260                 265                 270
Ser Val Gly Ile Leu Asp Ala Thr Asn Ser Thr Leu Glu Arg Arg Lys
        275                 280                 285
Leu Ile Val Asp His Ile Arg Gln Val Ala Gly Pro Glu Leu Gly Val
    290                 295                 300
Leu Phe Leu Glu Ser Ser Cys Val Asp Pro Glu Leu Leu Glu Ala Asn
305                 310                 315                 320
Met Arg Leu Lys Leu Ser Gly Pro Asp Tyr Lys Gly Gln Asp Pro Val
                325                 330                 335
Lys Ser Leu Glu Asp Phe Lys Lys Arg Val Ala Leu Tyr Glu Lys Ser
            340                 345                 350
Tyr Val Pro Leu Gly Glu Tyr Glu Glu Lys His Gly Met Ala Tyr Ile
        355                 360                 365
Arg Met Ile Asp Val Gly Arg Lys Ile Val Ser His Gln Thr His Gly
    370                 375                 380
```

```
Phe Leu Ser Ser Gln Val Val Tyr Tyr Leu Leu Asn Phe Asn Leu Ser
385                 390                 395                 400
Pro Arg Gln Xaa Trp Ile Thr Arg His Gly Glu Ser Arg Thr Xaa Gln
                405                 410                 415
Leu Gly Arg Ile Glu Gly Asp Phe Glu Ile Ser Glu Asn Gly Arg Arg
            420                 425                 430
Tyr Ala Lys Ala Leu Thr Arg Phe Ile Asp Tyr Gln Arg His Gln Trp
        435                 440                 445
Glu Gln Leu Gln Gln Gln Lys Asn Met Leu Arg His Phe Pro Pro Arg
    450                 455                 460
Pro Gly Asp Ser Thr Pro Pro Asn Pro Ser Tyr Ile Pro Arg Asp Arg
465                 470                 475                 480
Pro Arg Asn Phe Cys Val Trp Ser Ser Met Met Arg Arg Ser Val Gln
                485                 490                 495
Thr Val Glu Gly Phe Asn Glu Asp Glu Tyr Asp Val Lys Gln Met Lys
            500                 505                 510
Met Leu Asp Glu Leu Tyr Ala Gly Glu Met Glu Gly Met Thr Tyr Ser
        515                 520                 525
Glu Ile Arg Glu Lys Tyr Pro Glu Glu Tyr Ala Ile Arg Lys Lys Asn
    530                 535                 540
Lys Leu Phe Tyr Arg Tyr Pro Gly Pro Gly Gly Glu Gly Tyr Leu Asp
545                 550                 555                 560
Val Ile Asn Arg Leu Arg Ala Val Ile Ile Glu Val Glu Arg Met Thr
                565                 570                 575
Asp His Val Leu Ile Val Thr His Arg Ser Val Ala Arg Val Leu Leu
            580                 585                 590
Ala Tyr Phe Arg Gly Leu Lys Arg Asp Glu Val Ala Asp Leu Asp Val
        595                 600                 605
Pro Leu Gly Met Leu Tyr Met Leu Glu Pro Lys Pro Tyr Gly Val Asp
    610                 615                 620
Phe Lys Ala Tyr Arg Tyr Asn Pro Asp Thr Asp Trp Phe Asp His Ile
625                 630                 635                 640
Pro Asp Phe Glu Leu Ser Gln Ala Pro Thr Tyr
                645                 650
```

<210> 34985
<211> 250
<212> PRT
<213> A.fumigatus

<400> 34985

```
Phe Thr Ala Leu Leu Ala Asp Trp Leu Arg Tyr Ser Leu Val Leu Leu
1                   5                   10                  15
Leu Thr Gly Ala Ile Ile Pro Ile Ala Ser Ser Leu Leu Arg Phe Val
            20                  25                  30
Pro Phe Pro Ala Ala Trp Arg Val Trp Phe Arg Ala Val Phe Ile Asp
        35                  40                  45
Pro Pro Phe Val Gly Arg Arg His Ser Ser Pro Ile Leu Asp Thr Phe
    50                  55                  60
Phe Met Pro Thr Arg Gly Gln Ala Leu Phe Ile Ala Tyr Leu Leu Ile
65                  70                  75                  80
Ile Asn Ile Val Leu Cys Ser Ile Gly Phe His Ser Ala Asn Pro Ser
                85                  90                  95
Ile Trp Phe Ala Ser Lys His Asp Glu Ile Leu Ala Tyr Val Ala Asn
            100                 105                 110
Arg Ile Gly Val Leu Ser Phe Ala Asn Ile Pro Leu Leu Val Leu Tyr
```

```
        115                 120                 125
Thr Gly Arg Asn Asn Phe Leu Leu Trp Leu Thr Asp Trp Ser His Ser
    130                 135                 140
Thr Phe Leu Leu Leu His Arg Trp Leu Ala Phe Ile Cys Thr Leu Gln
145                 150                 155                 160
Ala Cys Leu His Ser Ala Ile Tyr Leu Gln Ile Ala Val Ala Asn Asn
                165                 170                 175
Glu His Ser Thr Glu Ser Lys Glu Ser Phe Trp Ile Trp Gly Val Val
            180                 185                 190
Ala Thr Leu Ala Leu Ala Ile Thr Ile Pro Ser Ser Ala Trp Pro Ile
        195                 200                 205
Arg Lys Arg Cys Tyr Glu Leu Phe Leu Ala Trp His Val Val Leu Ser
    210                 215                 220
Phe Leu Ala Leu Leu Ala Cys Tyr Trp His Ile Trp Tyr Arg Tyr Gly
225                 230                 235                 240
His Gln Trp Gly Tyr Glu Thr Trp Ile Tyr
                245                 250
```

<210> 34986
<211> 130
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (118)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34986

```
Pro Glu Arg Ser Arg Leu His Arg Glu Gln Val Ile Gly Gly Gly Ile
1               5                   10                  15
Met Thr Ala Tyr Pro Phe Ser Ala Val Cys Glu His Leu Asp Trp Phe
            20                  25                  30
Ile Val Gly Val Ser Val Ser Met Ile Pro Pro Val Asp Pro His Glu
        35                  40                  45
Ser Trp Lys Arg Thr Glu Ala Gly Leu Glu Ala Ser Cys Ala Leu Val
    50                  55                  60
Glu Gly Lys Thr Ser Glu Gly Phe Lys Ser Ala Arg Phe Asn Asp Leu
65                  70                  75                  80
Val Leu Lys Tyr Ile Ser Asp Gly Asp Gln Val Ser Val Pro Pro Ser
                85                  90                  95
Lys Glu Glu Lys His Asp Glu Cys Lys Asp Val His Arg Asp Gly Val
            100                 105                 110
Ser Ala Leu Val Val Xaa Arg Gln Ile Glu Ala Ser Ser Thr Val Lys
        115                 120                 125
Gly Ser
    130
```

<210> 34987
<211> 234
<212> PRT
<213> A.fumigatus

<400> 34987

```
Met Glu Ala Lys Tyr Thr Arg Leu Ala Glu Thr Ile Cys Gln Lys Ala
1               5                   10                  15
```

```
Asn Ala His Ser Lys Arg Arg Phe Leu Val Ala Ile Ala Gly Ile Pro
            20                  25                  30
Gly Ser Gly Lys Thr Thr Thr Ala Val Ala Val Ala Arg Leu Leu Asn
        35                  40                  45
Thr Gln Pro Ser Pro Lys Arg Thr Thr Leu Leu Ser Met Asp Gly Phe
    50                  55                  60
His Leu Ser Arg Ala Thr Leu Asp Leu Leu Pro Asn Arg Glu Glu Ala
65                  70                  75                  80
Tyr Ile Arg Arg Gly Ala Pro Trp Thr Phe Asp Ala Ala Arg Phe Val
                85                  90                  95
Gln Phe Ile Arg Arg Leu Arg Asn Trp Ala Asp Ser Thr Pro Cys Ala
            100                 105                 110
Ser Ala Glu Thr Ile Tyr Ala Pro Ser Phe Asp His Glu Ala Lys Asp
        115                 120                 125
Pro Val Glu Asn Gly Ile Ala Ile Thr Asp Asp Thr Glu Ile Val Ile
    130                 135                 140
Ile Glu Gly Asn Tyr Leu Leu Leu Asp Glu Pro Glu Trp Arg Glu Val
145                 150                 155                 160
Ala Ala Leu Val Asp Tyr Arg Val Phe Val Glu Ser Asp Leu Gln Glu
                165                 170                 175
Ala Arg Glu Arg Val Ala Arg Arg His Val Leu Ala Gly Ile Glu Lys
            180                 185                 190
Thr Leu Glu Asp Gly Phe Arg Arg Val Asp Arg Asn Asp Tyr Leu Asn
        195                 200                 205
Ala Ile Thr Ile Gln Glu Lys Leu Ile Thr Pro Asp Leu Val Ile His
    210                 215                 220
Ser Val Thr Glu Pro Thr Ala Gly Tyr Ser
225                 230

<210> 34988
<211> 103
<212> PRT
<213> A.fumigatus

<400> 34988
Arg Asp Ser His Leu Tyr Asp Cys Arg Ser Leu Val Asn Met Ser Phe
1               5                   10                  15
Gln Asn Phe Asp Ser Phe Gln Asn Gln His Pro Ser Ala Asp Ala Ala
            20                  25                  30
Ala Ala Ala Ala Pro Gly Ala Pro Ala Thr Ala Asp Thr Thr Met Thr
        35                  40                  45
Gly Gln Thr Asp Pro Thr Thr Gly Ser Phe Gln Gly Pro Ala Pro Gly
    50                  55                  60
Glu Pro Ser Ala Ala Pro Val Ala Gln Gln Gly Asn Glu Gly Lys Thr
65                  70                  75                  80
Thr Leu Trp Tyr Ala Trp Pro Arg Ser Ser Arg Ser Cys Thr Tyr Ser
                85                  90                  95
Glu Ile Arg Val Leu Phe Cys
            100

<210> 34989
<211> 70
<212> PRT
<213> A.fumigatus

<220>
```

<221> UNSURE
<222> (29)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 34989
Cys Gln Asp Asp Pro Arg Gln Val Phe Trp Val Ser Leu Trp Glu Ser
1 5 10 15
Ser Cys Ser Phe Glu Gly Asp Pro Asn Val Gly Ser Xaa Ser Asn Ala
20 25 30
Gly Tyr Cys Phe Val Asp Phe Ser Ser Pro Ala Ala Ala Ala Lys Ala
35 40 45
Leu Ser Leu Asn Gly Thr Pro Met Pro Asn Thr Asn Arg Val Phe Lys
50 55 60
Leu Asn Trp Ala Thr Gly
65 70

<210> 34990
<211> 64
<212> PRT
<213> A.fumigatus

<400> 34990
Asn Ala Asn Ser Ser Pro Arg Gly Thr Arg Phe Thr Leu Ser Arg Asp
1 5 10 15
Glu Leu Leu Thr Leu Pro Glu Phe Val Leu Leu Ser Leu Phe Pro Asn
20 25 30
Gly Leu Leu Pro Asp Gly His Met Gly Ser Phe Gln Glu Gly Asp Ile
35 40 45
Tyr Pro Val Asp Val Arg Gln Val Phe Pro Pro Phe Pro Leu Ser Lys
50 55 60

<210> 34991
<211> 117
<212> PRT
<213> A.fumigatus

<400> 34991
Tyr Asp Pro Thr Ser Leu Gln Tyr Met Leu Asp Phe Phe Arg Ser Val
1 5 10 15
Ala Gln Ser Ile Pro Ser Ser Ser Pro Ser Ala Ser Thr Thr Pro Glu
20 25 30
Leu Glu Met Ser Glu Thr Val Leu Gly Ser Pro Arg Asp Ile Leu Gln
35 40 45
Asp Arg Ala Gly Ile Ile Val Leu Arg Glu Asp Leu Asp Phe Tyr Ala
50 55 60
Ile Pro Pro Arg Pro Asp Ile Asp His Thr Glu Met Met Glu Val Lys
65 70 75 80
Arg Ala Val Gly Lys Ala Leu Leu Lys Gln Asp Gly Ile Phe Ser Gly
85 90 95
Leu Lys Lys Ser Asp Glu Pro Gly Ser Thr Glu Gln His Leu Ile Glu
100 105 110
Met Leu Thr Ala Gly
115

<210> 34992
<211> 107

<212> PRT
<213> A.fumigatus

<400> 34992
Leu Arg Thr Ser Asn Ser Ile Lys Ser Ala Arg Ile Leu Thr Lys Cys
1 5 10 15
Ser Gly Phe Glu Arg Asp Asp Arg Trp Gly His Arg Ala Pro Glu Pro
20 25 30
Asn Lys Ala Val Ile Cys Ser Leu Ala Leu Ala Lys Leu Arg Thr Asp
35 40 45
Val Arg Gly Asp Leu Ser Asn Asn Asn Ala Val Gly Met Ala Gln Lys
50 55 60
Leu Leu Leu Phe Trp Arg Lys Pro Ala Arg Arg Cys Trp Trp Glu Gly
65 70 75 80
Val Glu Leu Glu Ser Val Glu Gly Val Glu Gly Lys Val Lys Val Trp
85 90 95
Ile Arg Arg Val Trp Thr Leu Glu Met Val Ser
100 105

<210> 34993
<211> 85
<212> PRT
<213> A.fumigatus

<400> 34993
Thr Val Leu Gln Asp Pro Ser Val Ala Ser Ser Pro Ile Glu Lys Arg
1 5 10 15
Val Ala Phe Leu Gln Ser Lys Asn Leu Thr Gln Glu Glu Ile Asp Leu
20 25 30
Ala Leu Ser Arg Ala Gly Glu Asp Thr Ser Ala Ala Ala Ser Ala Val
35 40 45
Ala Ser Thr Gln Gly Tyr Gln Arg Pro Thr Gln Asn Ser Val Tyr Arg
50 55 60
Pro Pro Pro Pro Pro Pro Gly Tyr Gly Tyr Pro Pro Tyr Gly Gln Trp
65 70 75 80
Gln Ala Pro Pro Glu
85

<210> 34994
<211> 225
<212> PRT
<213> A.fumigatus

<400> 34994
Ser Glu Val Trp Val Met Gly Tyr Thr Pro Ser Gln Arg Leu Val Ile
1 5 10 15
Cys Ala Ala Val Arg Leu Ala Ser Leu Ala Met Val Val Thr Asn Ala
20 25 30
Phe Lys Arg Tyr Ile Ala Pro Leu Ile Ala Pro Pro Thr Pro Pro Gln
35 40 45
Leu Glu Gln Asp Lys Gln Ser Ile Asp Glu Gln Phe Ser Arg Ala Phe
50 55 60
Ala Leu Ile Glu Gln Leu Ser Thr Asp Thr Ala Ala Leu Lys Ser Ala
65 70 75 80
Glu Glu Ala Arg Thr Glu Arg Leu Asp Thr Ala Leu Arg Glu Val Glu
85 90 95

```
Thr Leu Val Ala Asp Leu Lys Thr Ala Ser Arg Arg Arg Asp Asp Glu
            100                 105                 110
Thr Arg Arg Ile Ser Asp Glu Val Lys Ser Leu Lys Asp Ala Ile Pro
        115                 120                 125
Lys Ala Leu Glu Gly Ala Arg Glu Gly Asn Glu Thr Arg Leu Lys Glu
    130                 135                 140
Leu Gly Thr Glu Leu Lys Ser Leu Lys Thr Leu Leu Gly Asn Arg Leu
145                 150                 155                 160
Ser Gly Ser Gly Ala Ser Ser Thr Pro Val Ala Gly Arg Thr Met Ser
                165                 170                 175
Ala Ser Thr Leu Pro Ser Val Ala Arg Ser Ala Glu Glu Ala Ser Pro
            180                 185                 190
Ala Ala Thr Ser Ala Thr Thr Asn Gly Val Thr Ala Thr Pro Thr Thr
        195                 200                 205
Gln Glu Ser Gln Leu Ser Pro Ala Gln Pro Gly Ala Gly Ser Thr Thr
    210                 215                 220
Gly
225
```

<210> 34995
<211> 218
<212> PRT
<213> A.fumigatus

<400> 34995

```
Ala Pro Val Val Glu Pro Ala Pro Gly Cys Ala Gly Glu Ser Cys Asp
1               5                   10                  15
Ser Cys Val Val Gly Val Ala Val Thr Pro Leu Val Val Ala Asp Val
            20                  25                  30
Ala Ala Gly Asp Ala Ser Ser Ala Asp Arg Ala Thr Leu Gly Arg Val
        35                  40                  45
Asp Ala Leu Ile Val Leu Pro Ala Thr Gly Val Leu Asp Ala Pro Leu
    50                  55                  60
Pro Leu Ser Leu Leu Pro Ser Lys Val Phe Lys Leu Phe Asn Ser Val
65                  70                  75                  80
Pro Ser Ser Phe Lys Arg Val Ser Leu Pro Ser Arg Ala Pro Ser Arg
                85                  90                  95
Ala Leu Gly Met Ala Ser Phe Asn Asp Phe Thr Ser Ser Leu Met Arg
            100                 105                 110
Arg Val Ser Ser Ser Arg Arg Arg Glu Ala Val Phe Arg Ser Ala Thr
        115                 120                 125
Arg Val Ser Thr Ser Arg Arg Ala Val Ser Asn Arg Ser Val Arg Ala
    130                 135                 140
Ser Ser Ala Asp Phe Asn Ala Ala Val Ser Val Asp Ser Cys Ser Ile
145                 150                 155                 160
Lys Ala Lys Ala Arg Glu Asn Cys Ser Ser Met Leu Cys Leu Ser Cys
                165                 170                 175
Ser Asn Trp Gly Gly Val Gly Gly Ala Ile Asn Gly Ala Met Tyr Arg
            180                 185                 190
Leu Lys Ala Phe Val Thr Thr Ile Ala Arg Glu Ala Lys Arg Thr Ala
        195                 200                 205
Ala Gln Ile Thr Asn Leu Cys Asp Gly Val
    210                 215
```

<210> 34996
<211> 323

<212> PRT
<213> A.fumigatus

<400> 34996
Met Ser Val Pro Phe Thr Cys Pro Pro Met Tyr Leu Asn Asn Ala Ala
1 5 10 15
Arg Val Leu Thr Ala Ala Phe Arg Gly Ala Thr Ser Phe Val Asp Arg
20 25 30
Ile Ala Glu His Trp Lys Ser Trp Pro Lys Lys Arg Gln Lys His Thr
35 40 45
Ser Val Val Ile Leu Thr Val Phe Ile Phe Cys Leu Gly Leu Lys Leu
50 55 60
Gly Ser Gly Leu Phe Tyr Ala His Tyr Trp Gly Arg Ala Thr Ile Ser
65 70 75 80
Ser Phe Pro Val Thr Pro Tyr Val Asp Tyr Trp Glu Trp Glu Thr Thr
85 90 95
Ser Arg Phe Ser Asn Ala His Ser Ala Asn Glu Thr Gln Glu Asn Ser
100 105 110
Asp Gly Asp Asp Phe Cys Asp Ser Phe Pro Ser Tyr His Leu Ser His
115 120 125
Val Gln Val Val Leu Lys Ile Gly Ser Thr Glu Pro Arg Ser Arg Val
130 135 140
Asp Thr His Leu Ala Thr Val Thr Arg Cys Ile Thr Asn Pro Ile Ile
145 150 155 160
Val Ser Asp His Glu Ser Glu Ile Asn Gly His His Val His Asn Ile
165 170 175
Leu Ala Thr Leu Pro Gly Ser Phe Trp Gly Asp Ser Arg Asp Phe Gln
180 185 190
Ala Tyr Ser Ala Leu Gln Arg Gly Glu Leu Glu Thr Val Ala Gly Ser
195 200 205
Gln Gly Trp Thr Leu Asp Lys Tyr Lys Phe Leu Pro Met Val Glu Arg
210 215 220
Ala Tyr Glu Met Asn Pro Thr Ala Gln Trp Phe Val Phe Ile Glu Ser
225 230 235 240
Asp Thr Tyr Met Val Trp Asp Asn Met Phe Arg Leu Leu Asp Gln Phe
245 250 255
Asp Pro Ser Val Pro Leu Tyr Phe Gly Ser Pro Thr Pro Gly Lys Arg
260 265 270
Pro Ser Phe Phe Ala Tyr Gly Gly Ala Gly Phe Val Leu Ser Thr Pro
275 280 285
Ala Val Gln Arg Leu Val Thr His Lys Ala Gly Ala Asn Gly Val Tyr
290 295 300
Ser Gln Leu Ser Leu Ser His Arg Tyr Lys Glu Leu Val His Gln Asp
305 310 315 320
Cys Cys Gly

<210> 34997
<211> 149
<212> PRT
<213> A.fumigatus

<400> 34997
Asp Arg Leu Asn Pro Gly Lys Lys Met Tyr Cys Asn Asp Ser His Gly
1 5 10 15
Ile Ser Val Gly Ser Leu Gly His His Ile Gly Gln Val Asp Ile Val

```
            20                  25                  30
Glu Asn Ile Leu Val Cys Asn Thr Ser Leu Lys Leu Arg Tyr Val Ile
        35                  40                  45
Cys His His Val Pro Arg Ala Gly Gly Arg Ser Trp Leu Val Arg Leu
    50                  55                  60
Glu Ser Lys Ser Gly Leu Glu Gln Leu Ala Thr Pro Thr Ser Thr Gly
65                  70                  75                  80
Gly Ser Ser Gly Trp Asp Arg Asn Val Thr Tyr Glu Gly Met His Asn
                85                  90                  95
Tyr His Asn Asp Trp Ala Ile Lys Met Thr Gln Phe Tyr Val Ala Pro
            100                 105                 110
Asn Gln Thr Ala Cys Asn Glu His Pro Val Trp Phe Ala Ser Trp Thr
        115                 120                 125
Tyr Arg Leu Gly Trp Ser Val Leu Gly Phe Ala Tyr Cys Arg Val Tyr
    130                 135                 140
Tyr Val His Glu Phe
145

<210> 34998
<211> 478
<212> PRT
<213> A.fumigatus

<400> 34998
Thr Val Arg Phe Tyr Val Asp His Pro Leu Ser Arg Arg Gln Asp Gln
1               5                   10                  15
Arg Ala Ile Met Val Leu Ser Ser Leu Leu Met Thr Ile Ile Leu Ile
            20                  25                  30
Phe Leu Thr Leu Ala Val Gly Gly Asn Gly Ser Arg Ile Asn Arg Arg
        35                  40                  45
Gln Val Val Arg Arg Phe Asn Pro Val Arg Thr Asn Leu Ser Ser Thr
    50                  55                  60
Thr Pro Ile Gln Val Gly Asn Gly Asn Phe Ala Phe Gly Ala Asp Ile
65                  70                  75                  80
Thr Gly Leu Gln Thr Ile Leu Pro Tyr Asn Ile Leu Ser Ser Trp Cys
                85                  90                  95
Trp Ala Asn Asp Ser Leu Pro Thr Glu Pro Gly Gln Asp Asp Pro Ser
            100                 105                 110
Asp Phe Thr Gly Leu Asp Trp Trp Thr His Gly Arg Leu Val Asn Tyr
        115                 120                 125
Asp Met Pro Asn Thr Ala Glu Ala Ala Ile Ser Thr Trp Leu Arg Ala
    130                 135                 140
Asn Pro His Arg Val Asn Leu Gly Arg Ile Gly Leu Leu Tyr Asn Gly
145                 150                 155                 160
Lys Asn Ile Ser Leu Ala Asp Leu Ser Asn Met Ser Gln Thr Leu Asp
                165                 170                 175
Leu Tyr Thr Gly Leu Leu Thr Ser Glu Phe Val Leu Gly Gly Lys Gln
            180                 185                 190
Val Val Val Gln Thr Ala Gly Ser Pro Ser Ser Asp Glu Val Ala Val
        195                 200                 205
Arg Ile Asp Ser Gln Leu Ile Gln Asn Gly Ser Leu Ser Val Phe Phe
    210                 215                 220
Asp Tyr Pro Leu Thr Thr Gly Ala Ala Ser Phe Gln Ala Pro Phe Val
225                 230                 235                 240
Gly Asp Trp Asn Ala Val Ser Asn His Thr Thr Glu Leu Phe Val Asn
                245                 250                 255
```

```
Gly His Gln Lys Ala Val Ile Gln His Thr Leu Gly Gly Thr Thr Tyr
            260                 265                 270
Tyr Asn Ser Ile Ser Trp Leu Pro Lys Gly Asn Ile Ser Gly Pro Ile
        275                 280                 285
Asn Arg Thr His Arg Tyr Asp Leu Asn Pro Ser Gly Lys Thr Thr Phe
    290                 295                 300
Ser Phe Thr Ser Ala Tyr Thr Pro Glu Asn Asn Ala Lys Val Arg Ala
305                 310                 315                 320
Phe Tyr Lys Val Lys Ala Glu Ser Ala Thr Trp Trp Ala Lys Tyr Trp
                325                 330                 335
Glu Ser Gly Ser Phe Val Asp Leu Thr Ala Thr Arg Ser Ser Asp Ala
            340                 345                 350
Glu Glu Leu Gln Arg Arg Ile Ile Leu Ser Gln Tyr Leu Leu Ala Val
        355                 360                 365
Asn Cys Ala Gly Arg Asp Pro Pro Gln Glu Ala Gly Leu Gln Asn Asn
    370                 375                 380
Gly Trp Tyr Gly Lys Phe His Leu Glu Met Val Phe Trp His Leu Gly
385                 390                 395                 400
His Trp Ala Arg Trp Gly Lys Trp Glu Leu Leu Asp Arg Ser Leu Gly
                405                 410                 415
Val Tyr Thr Arg Phe Leu Pro Ser Ser Leu Glu Arg Ala Gln Lys Gln
            420                 425                 430
Gly Tyr Arg Gly Ala Arg Leu Gly Lys Met Ser Asp Pro Ser Gly Arg
        435                 440                 445
Ser Ala Pro Gly Glu Ile Asn Ala Leu Leu Ile Trp Gln Gln Pro His
    450                 455                 460
Ala Met Tyr Phe Ala Glu Leu Glu Tyr Arg Ala Phe Pro Thr
465                 470                 475
```

<210> 34999
<211> 404
<212> PRT
<213> A.fumigatus

<400> 34999

```
Val Thr Asp Cys Gly Pro Arg Leu Phe Tyr His His His Leu Thr Pro
1                   5                   10                  15
Pro Leu Ser Arg Lys Asn Val Asp Asp His Arg Lys Met Thr Ser Asn
            20                  25                  30
Tyr Ser Ile Ser Leu Val Ala Gly Ala Ile Ala Val Phe Val Tyr Thr
        35                  40                  45
Leu Ser Val Leu Arg Arg Lys Trp Thr Gln Tyr Arg Phe Ala Arg Ala
    50                  55                  60
His Asn Cys Gln Ala Pro Pro Arg Leu Ala Ser Lys Asp Pro Leu Phe
65                  70                  75                  80
Gly Leu Asp Thr Ile Tyr Ala Thr Ile Gln Asn Val Lys Glu His Lys
                85                  90                  95
Phe Leu Glu Arg Ala Gln Ala Arg Phe Asp Ala Val Gly His Thr Ile
            100                 105                 110
Gln Thr Arg Arg Leu Leu Gln Thr Ile Ile Phe Thr Arg Asp Pro Gln
        115                 120                 125
Asn Ile Lys Thr Ile Leu Ser Leu Arg Phe Lys Asp Tyr Ala Leu Gly
    130                 135                 140
His Arg Tyr Lys Thr Phe Gly Pro Leu Leu Gly His Gly Ile Phe Thr
145                 150                 155                 160
Thr Asp Gly Glu His Trp Ala Gln Ser Arg Ala Met Ile Arg Pro Asn
```

```
                165                 170                 175
Phe Val Arg Glu Gln Val Ala Asp Leu Ala Ile Phe Glu Ala Gln Met
            180                 185                 190
Ala Asp Leu Leu Glu Leu Ile Pro Asn Asp Gly Arg Thr Val Asp Leu
        195                 200                 205
Gln Asp Leu Phe Phe Ser Tyr Thr Ile Asp Ser Ala Thr Glu Phe Leu
    210                 215                 220
Phe Gly Gln Ser Val Gln Ser Leu Lys Lys Arg Arg Ser Gly Gly Arg
225                 230                 235                 240
Asp Ala His Ala Glu Asp Asp Phe Ala Ser Ala Phe Asn Tyr Ala Gln
                245                 250                 255
His Ala Ile Ala Thr Arg Ile Arg Leu Gly Pro Leu Ala Ala Phe Tyr
            260                 265                 270
Arg Asp Arg Lys Val Glu Arg Cys Asn Arg Val Cys His Ala Leu Val
        275                 280                 285
Glu Gln Phe Val Asp Lys Ala Leu Glu Val Arg Ala Gln Gly Gly Arg
    290                 295                 300
Val Asp Glu Lys Thr Leu Glu Asp Gly Asp Gly Glu Lys Lys Pro Arg
305                 310                 315                 320
Tyr Val Phe Leu His Gly Leu Ala Gln Gln Thr Gly Asp Arg Arg Arg
                325                 330                 335
Ile Arg Asp Glu Val Met Asn Val Leu Leu Ala Gly Arg Asp Thr Thr
            340                 345                 350
Ala Ser Leu Leu Ser Asn Leu Phe Phe Met Leu Ala Lys His Pro Arg
        355                 360                 365
Ile Trp Ala Arg Leu Arg Asp Glu Val Ala Pro Leu Asn Gly Arg Pro
    370                 375                 380
Pro Thr Tyr Glu Gln Leu Arg Asn Leu Thr Tyr Val Lys Tyr Cys Leu
385                 390                 395                 400
Asn Glu Cys Thr
```

Sequence Listing

<210> 35000
<211> 142
<212> PRT
<213> A.fumigatus

<400> 35000

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Leu Pro Ile Thr Pro Ser Leu Ser Ser Pro Gly Arg Ser Pro Ser Ser
1               5                   10                  15
Phe Thr Arg Leu Ala Ser Ser Ala Ala Asn Gly Arg Ser Ile Ala Leu
            20                  25                  30
Pro Val Arg Thr Ile Ala Lys His Pro Pro Gly Ser Pro Pro Arg Thr
        35                  40                  45
Pro Tyr Ser Gly Trp Thr Pro Ser Met Pro Arg Ser Arg Thr Ser Arg
    50                  55                  60
Asn Thr Ser Ser Leu Ser Ala Arg Arg Pro Val Ser Met Gln Ser Ala
65                  70                  75                  80
Thr Pro Ser Lys Arg Ala Ala Ser Cys Arg Gln Ser Ser Ser Pro Ala
                85                  90                  95
Thr Pro Arg Thr Ser Arg Pro Phe Cys His Ser Gly Ser Arg Thr Thr
            100                 105                 110
Arg Trp Ala Thr Gly Thr Arg Pro Ser Ala Pro Ser Ser Ala Met Ala
        115                 120                 125
Ser Ser Pro Pro Thr Ala Ser Thr Gly Arg Asn Arg Ala Pro
    130                 135                 140
```

<210> 35001
<211> 228
<212> PRT
<213> A.fumigatus

<400> 35001
Arg Gly Ser Glu Gly Pro Pro Ser Glu Ser Pro Glu Asn Thr Thr Glu
1 5 10 15
Asp Ala Lys Leu Pro Pro Val Thr Thr Ile Gln Arg Gly Asp Leu Pro
20 25 30
Lys Gly Lys Ala Asn Gly Thr Lys Lys Ser Pro Ala Ser Ala Pro Val
35 40 45
Asp Val Ser Ser Thr Thr Ser Ser Ser Ser Asp Glu Ser Ser Glu Tyr
50 55 60
Ser Glu Ser Glu Asn Glu Asp Asp Asp Glu Thr Asp Ala Glu Ala Glu
65 70 75 80
Thr Gln Thr Gly Thr Asp Gln Pro Ala Gln Ser Lys Ala Asp Leu Leu
85 90 95
Arg Arg Ser Ser Val Thr Pro Ser Ser Gln Ser Asn Ala Arg Ser Pro
100 105 110
Ala Pro Ser Gln Ser Ala Ser Gln Ser Trp Gly Gln Pro Ile Asn Gly
115 120 125
Ser Arg Ser Arg Ala Thr Leu Lys Thr Leu Leu Val Asp Lys Lys Lys
130 135 140
Glu Ser Ala Glu Lys Ala Gln Leu Ala Lys Lys Lys Ile Ser Ala Ala
145 150 155 160
Pro Lys Arg Pro Arg Asn Ile Phe Ser Pro Pro Ser Asp Asp Asp Ser
165 170 175
Asp Glu Ser Glu Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Glu Ser
180 185 190
Glu Ser Asp Lys Asp Ser Asp Ser Glu Asn Glu Ser His Ser Ser Ala
195 200 205
Asp His Gly Asp Ile Met Ser Ser Gly Thr Val Gly Lys Leu Arg Ala
210 215 220
Ala Arg Lys Lys
225

<210> 35002
<211> 240
<212> PRT
<213> A.fumigatus

<400> 35002
Ala Arg Ala Gly Pro Phe Arg Cys Ser Arg Pro His His Pro Asn Ala
1 5 10 15
Pro Pro Pro Ala Asp Asn His Leu His Pro Arg Pro Pro Glu His Gln
20 25 30
Asp His Ser Val Thr Pro Val Gln Gly Leu Arg Ala Gly Pro Pro Val
35 40 45
Gln Asp Leu Arg Pro Pro Pro Arg Pro Trp His Leu His His Arg Arg
50 55 60
Arg Ala Leu Gly Ala Ile Ala Arg His Asp Pro Pro Gln Leu Arg Pro
65 70 75 80
Arg Ala Gly Gly Arg Pro Arg His Leu Arg Gly Ala Asp Gly Arg Ser
85 90 95

```
Ala Gly Val Asp Pro Gln Arg Arg Pro His Arg Arg Pro Pro Gly Pro
            100                 105                 110
Leu Leu Gln Leu His His Arg Leu Gly His Arg Val Pro Leu Arg Pro
        115                 120                 125
Glu Arg Ala Glu Pro Glu Glu Ala Pro Leu Arg Arg Pro Arg Arg Ala
    130                 135                 140
Arg Arg Gly Arg Leu Arg Gln Arg Ile Gln Leu Arg Ala Ala Cys Asp
145                 150                 155                 160
Arg His Ala His Pro Ala Gly Pro Ser Gly Cys Phe Leu Pro Arg Pro
                165                 170                 175
Gln Gly Gly Ala Val Gln Ser Arg Leu Pro Arg Ala Gly Gly Ala Val
            180                 185                 190
Arg Arg Gln Gly Ala Arg Gly Ala Gly Ala Gly Arg Ala Arg Arg Arg
        195                 200                 205
Glu Asp Pro Arg Arg Trp Gly Arg Arg Glu Glu Thr Ala Ile Arg Val
    210                 215                 220
Pro Ala Trp Pro Gly Ala Ala Asp Gly Arg Pro Pro Pro Asp Pro Arg
225                 230                 235                 240

<210> 35003
<211> 179
<212> PRT
<213> A.fumigatus

<400> 35003
Val Tyr Ser Arg Trp Leu Ser Ser His Ser Leu Asp Ile Ser Ala His
1               5                   10                  15
Leu Ile Ala Asp Ile Arg Arg Tyr Ile Arg Pro Phe Phe Leu Thr Pro
            20                  25                  30
Asp Gly Ala Lys Pro Leu Pro Thr Lys Arg Tyr Tyr Asp Ile Leu Ser
        35                  40                  45
Trp Leu Val Thr Gln Leu Thr Met Ser Phe Val Val Met Pro Phe Ile
    50                  55                  60
Phe Leu Ser Phe Ser Ser Ser Ile Gln Val Trp Arg Ser Val Tyr Phe
65                  70                  75                  80
Tyr Gly Ile Ile Gly Asn Ile Met Ser Ile Ile Phe Phe Ala Ser Pro
                85                  90                  95
Ala Lys Gly Tyr Leu Val Arg Ser Leu Ser Lys Arg Asn Lys Pro His
            100                 105                 110
Ile Pro Arg Thr Ala Ser Met Glu Ser Leu Gln Gln Pro Thr Leu Gly
        115                 120                 125
Leu Pro Asn Asp Pro Ala Arg Glu Phe Asp Asp Ala Val Gln Glu Ile
    130                 135                 140
Lys Ala Glu Phe Glu Ala Arg Arg Arg Arg Gly Ser Val Val Gly Val
145                 150                 155                 160
Pro Thr Gly Glu Glu Leu Lys Ala Ala Val Glu Ala Lys Leu Gly Arg
                165                 170                 175
Lys Ile Ser

<210> 35004
<211> 427
<212> PRT
<213> A.fumigatus

<400> 35004
```

```
Val Gly Gly Ser Ala Leu Pro Phe Ile Pro Ala Val Lys Asn Leu Asp
1               5                  10                  15
Asn Ser Gly Leu Asn Phe Val Arg Ile Gly Pro Ser Ser Asn Pro Asp
            20                  25                  30
Ser Ala Thr Arg Ser Asn Ser Leu Thr Ser Leu Asn Ser Met Gly Thr
        35                  40                  45
Val Ile Arg His Ile Gly Ala Ala Pro Trp Thr His Gly Ser Ser Glu
    50                  55                  60
Glu Gln Ser Ser Arg Ser Gln Ser Phe Arg Ser Thr Pro Pro Tyr His
65                  70                  75                  80
Pro Ser Val Arg Ser Asn Ser Asn Ser Thr Arg Pro Arg Gly Arg Ser
                85                  90                  95
His Ser Arg Ser Leu Thr Ser Ser Ser Arg Ser Gly Pro Pro Ser Val
            100                 105                 110
Ile Gln Ala Ile Val Asp Ser Gly Val Phe Ile Gln Tyr Pro Thr Ile
        115                 120                 125
Leu Ala Pro Ser Ser Ser Gly Ser Trp Val Asp Thr Ser Gln Ser Ala
    130                 135                 140
Asn Ala Ser Asp Arg Thr Val Gln Glu Phe Thr Pro Asp Gln Ser Ser
145                 150                 155                 160
Asp Arg Phe Lys Ser His Leu Ser Thr Val Thr Ser Arg Trp Ser Ala
                165                 170                 175
Glu Leu Asp Ser Ser Phe Ala Ser Gly Ala Asp Glu Pro Ser Glu Leu
            180                 185                 190
Ser Ala Ala Glu Pro Ser Arg Pro Ser Ala Ala Leu Val Arg Gln Arg
        195                 200                 205
Pro Gly Ser Ser Ser Leu Trp Leu Val Ser Asp Ser Asp Arg Asp Glu
    210                 215                 220
His Leu Asp His Leu Ser Ser Leu Pro Ala Arg Pro Thr Asn Pro Ala
225                 230                 235                 240
Val Pro Ser Ser Leu Ser Ser Glu Ser Arg Lys Ser Ser Leu Arg Ser
                245                 250                 255
Asn Ser Ile Lys Arg Pro Gly Thr Ser Ser Ser Phe Val Tyr Asn Ile
            260                 265                 270
Leu Pro Ala Trp Ala Lys Met Tyr Tyr Gly Leu Asp Gly Gln Thr Val
        275                 280                 285
Asn Ser Ala Leu Ser Val Ile Asp Gly Thr Arg Pro Pro Thr Ala Arg
    290                 295                 300
Pro Ala Thr Ser Asn Ser Gln Ala Leu Arg His Ile Pro Thr Ala Ser
305                 310                 315                 320
Gly Arg Ser Arg Ala Pro Thr Asn Glu Thr Ile Gly Ser Val Arg Trp
                325                 330                 335
Met Ala Pro Pro Asp Pro Arg Asp Pro Arg Asn His Trp Val Lys Gly
            340                 345                 350
Ser Glu Thr Asp Gln Leu Ser Asp Ala Asn Asn Arg Leu Arg His Ser
        355                 360                 365
Trp Ser Pro His Leu Tyr Pro Asp Lys Arg Ala Val Gly Gln Glu Gly
    370                 375                 380
Lys Pro Trp Thr Ala Pro Ser Met Asp Ser Arg Thr Glu Pro Leu Leu
385                 390                 395                 400
Gly Arg Arg Asn Met Gln Val Trp Ser Phe Ser Met Gly Phe Val Phe
                405                 410                 415
Pro Leu Gly Lys Phe Thr Cys Cys Arg Glu His
            420                 425
```

<210> 35005

<211> 387
<212> PRT
<213> A.fumigatus

<400> 35005

```
Leu Ile Ser Val Asp Asp Val Tyr Lys Lys Asp Leu Asn Pro Ser Asn
1               5                  10                  15
Pro Leu Ala His Asn Gly Asp Ile Ala Lys Ala Tyr Ala Asn Leu Leu
            20                  25                  30
Arg Met Leu Tyr Asp Glu Ala Gly Gln Ser Ser Phe Ala Pro Arg Gln
        35                  40                  45
Phe Lys His Thr Ile Gly Arg Tyr Gly Pro Ala Phe Ser Gly Tyr Gly
    50                  55                  60
Gln Gln Asp Ser Gln Glu Phe Leu Leu Phe Leu Leu Asp Gly Leu Gln
65                  70                  75                  80
Glu Asp Leu Asn Arg Ile Gln Lys Lys Pro Tyr Ile Glu Lys Pro Asp
                85                  90                  95
Ser Thr Asp Asp Met Val His Asp Lys Val Ala Leu Lys Glu Phe Ala
            100                 105                 110
Ser Lys Cys Trp Asp Ile Tyr Lys Ala Arg Asn Asp Ser Val Ile Thr
        115                 120                 125
Asp Leu Phe Ala Gly Met Tyr Lys Ser Thr Leu Val Cys Pro Val Cys
    130                 135                 140
Glu Lys Val Ser Ile Ile Phe Asp Pro Phe Asn Asn Leu Thr Leu Gln
145                 150                 155                 160
Leu Pro Ile Glu Asn Leu Trp Ser Lys Glu Ile Phe Phe Phe Pro Leu
                165                 170                 175
His Arg Lys Pro Val Ile Val Asp Val Glu Ile Asp Lys Asn Ala Ser
            180                 185                 190
Ile Lys Ala Leu Lys Glu Leu Val Ala Lys Lys Met Gly Ser Asp Pro
        195                 200                 205
Gln Arg Leu Val Met Ala Glu Ile Tyr Lys Cys Lys Phe Tyr Lys Met
    210                 215                 220
Phe Asp Asn Ser Ala Ser Ile Ala Asp Cys Gln Ile Gly Gln Gly Asp
225                 230                 235                 240
Asp Ile Ala Ile Phe Glu Val Glu Ser Val Pro Thr Asn Tyr Asn Pro
                245                 250                 255
Asp Lys Arg Gln Lys Ser Tyr Phe Ser Tyr Gly Arg Ser Asp Tyr Glu
            260                 265                 270
Glu Ile Pro Ser Phe Asp Ser Pro Lys Ala Asp Arg Met Leu Val Pro
        275                 280                 285
Ile Phe Asn Arg His Tyr Arg Pro Lys Ser Asn Asn Ser Gly Asn Met
    290                 295                 300
Gln Arg Ser Leu Phe Gly Ala Pro Leu Tyr Val Ile Ile Ser Arg Glu
305                 310                 315                 320
Glu Ala Leu Ser Tyr Asp Ala Ile Leu Arg Lys Val Leu Glu Ala Val
                325                 330                 335
Ala Thr Leu Thr Thr Arg Asp Ile Leu Asn Glu Ala Asn Ile Lys Asn
            340                 345                 350
Ala Asp Glu Gln Gly Gly Thr Gln Glu Asp Ser Asp Thr Val Val Met
        355                 360                 365
Asn Glu Asp Asp Ala His Ser Ala Asp Ser Lys Ile Lys Thr Ser Ser
    370                 375                 380
Val Glu Pro
385
```

<210> 35006
<211> 268
<212> PRT
<213> A.fumigatus

<400> 35006
Pro Phe Ser Pro Val Val Arg Leu Ala Asn Pro Ala Ala Gly Thr Thr
1 5 10 15
Pro Gln Ser Leu Arg Glu Lys Asn Met Pro Pro Ala Lys Val Leu Ser
20 25 30
Ser Arg His Thr Asn Phe Gln Lys Trp Leu Lys Gln Val Lys Gly Leu
35 40 45
Ala Asn Val Asp Met Ser Thr Lys Val Arg Val Trp Arg Ile Leu Gly
50 55 60
Gly Leu Gly Ser Ala Thr Ala Ser Ala Ala Ile Thr Pro Ala Ala Ser
65 70 75 80
Arg Ser Ala Ser Pro Ala Pro Thr Ala Ser Leu Val Ala Asn Ala Gly
85 90 95
Asn Asn Leu Val Leu Asp Leu Asn Thr Phe Leu Ser Leu Ser Asp Gly
100 105 110
Ala Gln Arg Glu Leu Val Asp Asn Val Lys Asp Gln Thr Asn Asn Pro
115 120 125
Asn Phe Asn Gly Arg Ser Thr Leu Asp Arg Val Gly Leu Ser Thr Ser
130 135 140
Asp Val Val Val Leu Glu Glu Arg Val Gly Gly Glu Trp Ala Ser Glu
145 150 155 160
Val Ser Lys Lys Thr Leu Asp Arg Leu Gly Val Pro Ser Gly Ser Val
165 170 175
Lys Asn Gly Ala Pro Ala Lys Leu Lys Asn Lys Ser Pro Asn Asn Ser
180 185 190
Gly Arg Ser Ser Pro Ala Pro Glu Pro Ile Arg Gly Arg Arg Lys Asp
195 200 205
Gly Lys Pro Arg Gly Cys Thr Gly Leu Ser Asn Leu Gly Asn Thr Cys
210 215 220
Tyr Met Asn Ser Ala Leu Gln Cys Val Arg Ser Val Glu Glu Leu Thr
225 230 235 240
Tyr Tyr Phe Leu Ser Thr Asp Ser His Leu Ser Pro Leu Ala Leu Gly
245 250 255
Tyr Tyr Pro Leu Thr Asn Leu Gly Arg Arg Cys Val
260 265

<210> 35007
<211> 106
<212> PRT
<213> A.fumigatus

<400> 35007
Arg Asn Tyr Ala Asp Leu Ser Gly Pro Cys Val Ser Thr Tyr Pro Ser
1 5 10 15
Arg Ile Tyr Gly Trp Phe Ala Phe Cys Thr Ala Asn Ile Val Cys Glu
20 25 30
Ile Pro Met Ala Ile Val Ser Ser Leu Ile Tyr Trp Leu Leu Trp Tyr
35 40 45
Tyr Pro Val Gly Phe Pro Thr Asp Ser Ser Thr Ala Gly Tyr Val Phe
50 55 60
Leu Met Ser Met Leu Phe Phe Leu Phe Met Ser Asn Trp Gly Gln Trp

```
65                  70                  75                  80
Ile Cys Ala Phe Ala Pro Ser Phe Thr Val Ile Ser Asn Val Cys Pro
                85                  90                  95
Pro Val Ser Phe His His Ser Leu Gln Arg
            100                 105

<210> 35008
<211> 182
<212> PRT
<213> A.fumigatus

<400> 35008
His Pro Gln Gln Val Leu Pro Phe Phe Phe Val Met Cys Asn Leu Phe
1               5                   10                  15
Asn Gly Ile Val Arg Pro Tyr Arg Asp Tyr Pro Val Phe Trp Lys Tyr
            20                  25                  30
Trp Met Tyr Tyr Val Asn Pro Val Thr Trp Trp Leu Arg Gly Val Ile
        35                  40                  45
Ser Ser Ile Phe Pro Thr Gly Gln Ile Asp Gly Ser Pro Pro Lys Thr
    50                  55                  60
Thr His Phe Asn Pro Pro Pro Gly Gln Thr Cys Ala Asn Tyr Ala Gly
65                  70                  75                  80
Asn Ser Ile Thr Asn Ile Ala Lys Asn Gly Tyr Val Leu Asn Pro Asp
                85                  90                  95
Ala Ser Ala Asp Cys Gln Tyr Cys Pro Tyr Ser Asn Gly Ala Glu Tyr
            100                 105                 110
Met Ala Thr Leu Tyr Val His Asp Gly Asp Lys Trp Arg Cys Phe Gly
        115                 120                 125
Ile Phe Leu Ala Phe Val Ile Ile Asn Trp Leu Leu Val Tyr Phe Phe
    130                 135                 140
Ile Tyr Thr Val Arg Val Arg Gly Trp Ser Phe Gly Met Gly Tyr Leu
145                 150                 155                 160
Phe Gly Gly Met Gly Leu Val Ile Asp Lys Val Lys Gly Val Phe Lys
                165                 170                 175
Arg Lys Ser Glu Lys Ala
            180

<210> 35009
<211> 152
<212> PRT
<213> A.fumigatus

<400> 35009
Ala Arg Ile Pro Ala Val Ser Thr Val Gly Leu Pro Ser Ala Pro Pro
1               5                   10                  15
Thr Ser Cys Ala Arg Ser Pro Trp Pro Ser Ser Arg Ala Ser Ser Thr
            20                  25                  30
Gly Tyr Tyr Gly Thr Thr Pro Ser Ala Ser Pro Arg Thr Pro Ala Pro
        35                  40                  45
Gln Ala Thr Ser Ser Ser Cys Arg Cys Tyr Ser Ser Ser Ser Cys Leu
    50                  55                  60
Thr Gly Ala Asn Gly Ser Ala Pro Leu Arg Arg Arg Ser Pro Ser Ser
65                  70                  75                  80
Pro Thr Tyr Val His Pro Ser Pro Phe Thr Thr Arg Phe Asn Ala Asn
                85                  90                  95
Thr Leu Asn Arg Ser Ser Leu Ser Ser Ser Ser Cys Ala Thr Ser Ser
```

```
            100                 105                 110
Thr Val Ser Ser Val Pro Thr Ala Thr Thr Arg Ser Ser Gly Asn Thr
        115                 120                 125
Gly Cys Thr Met Ser Thr Arg Ser Pro Gly Gly Ser Ala Gly Ser Ser
    130                 135                 140
Pro Pro Ser Ser Pro Pro Gly Arg
145                 150
```

<210> 35010
<211> 130
<212> PRT
<213> A.fumigatus

<400> 35010

```
Asp Gln Tyr Thr Ser Leu Leu Lys Val Ser Thr Arg Thr Val Pro Ser
1               5                   10                  15
Ser His Lys Ser Lys Ile Leu Pro Gly Asp Gly Gly Thr Thr Asp Phe
            20                  25                  30
Thr Leu Arg Thr Ser Lys Thr Phe Ser Ala Arg Asn Pro Asn Asp Lys
        35                  40                  45
Asp Gln Leu Ile His Lys Asn Thr Ala Glu Glu Trp Lys Asp Arg Phe
    50                  55                  60
Arg Val Tyr Phe Pro Ser Gln Thr Thr Ile Glu Gln Ser Arg Gly Gly
65                  70                  75                  80
Pro Asp Cys Ala Gly Thr Ile Cys Phe Gln Ser Lys Trp Tyr Glu Gly
                85                  90                  95
Pro Lys Phe Pro Arg His Val Leu Arg Asp Cys Lys Ser Arg Arg Pro
            100                 105                 110
Gly Leu Leu Met His Asn Lys Val Ala Leu Pro Pro Ser Ala Glu Val
        115                 120                 125
Ile Ser
    130
```

<210> 35011
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35011

```
Ser Ala Phe Leu Ile Asp Leu Pro Arg Lys Val Ala Thr Thr Ser Val
1               5                   10                  15
Gly Ser Lys Thr Val Phe Glu Glu Glu Leu Val Tyr Phe Leu Arg Ala
            20                  25                  30
Ser Thr Leu Gln Glu Asn Ile Ile Ser Arg Leu Asp Glu Phe Asp Phe
        35                  40                  45
Ser Pro Thr Ser His Ile Met Leu Val His Thr Met
    50                  55                  60
```

<210> 35012
<211> 63
<212> PRT
<213> A.fumigatus

<400> 35012

```
Glu Gly Ser Arg Gln Gly Trp Glu Thr His Phe Thr Ala Leu Trp Asn
1               5                   10                  15
```

```
Ile Ala Ser Ser Lys Pro Lys Lys Asp Asn Thr Cys Ser Tyr Arg Gln
            20                  25                  30
Asp Ile Gln Gly Ile Ser Gly Pro Asp Pro Glu Leu Asp Cys Leu Asp
        35                  40                  45
Cys Glu His Gly Ala Ala Glu Arg Thr Glu Pro Ala Glu Ala Leu
    50                  55                  60
```

<210> 35013
<211> 579
<212> PRT
<213> A.fumigatus

<400> 35013

```
Thr Ser His Ser Phe Ala Met Gly Val Pro Lys Phe Phe Arg Trp Leu
1               5                   10                  15
Ser Glu Arg Tyr Pro Thr Ile Ser Met Leu Ile Ala Glu Asn Arg Ile
            20                  25                  30
Pro Glu Phe Asp Ala Leu Tyr Leu Asp Met Asn Gly Ile Ile His Asn
        35                  40                  45
Cys Thr His Lys Asp Ser Asp Ser Pro Thr Phe Arg Met Thr Glu Asp
    50                  55                  60
Lys Met Phe Ile Ala Ile Phe Asn Tyr Ile Glu His Leu Tyr Gly Lys
65                  70                  75                  80
Ile Lys Pro Arg Lys Leu Phe Phe Met Ala Val Asp Gly Val Ala Pro
                85                  90                  95
Arg Ala Lys Met Asn Gln Gln Arg Ala Arg Arg Phe Arg Thr Ala Leu
            100                 105                 110
Asp Ala Glu Val Ala Lys Glu Lys Ala Ile Ala Gln Gly Ile Glu Met
        115                 120                 125
Pro Lys Glu Asp Pro Phe Asp Ser Asn Cys Ile Thr Pro Gly Thr Glu
    130                 135                 140
Phe Met Ala Lys Leu Thr Gln Gln Leu Lys Tyr Phe Ile Asn Lys Lys
145                 150                 155                 160
Ile Ser Glu Asp Lys Asp Trp Gln Gly Val Asp Ile Val Leu Ser Gly
                165                 170                 175
His Glu Val Pro Gly Glu Gly Glu His Lys Ile Met Glu Tyr Ile Arg
            180                 185                 190
His Ala Lys Ala Gln Pro Gly Tyr Asp Pro Asn Ile Arg His Cys Leu
        195                 200                 205
Tyr Gly Leu Asp Ala Asp Leu Ile Met Leu Gly Leu Leu Ser His Asp
    210                 215                 220
Pro His Phe Cys Leu Leu Arg Glu Glu Val Thr Phe Gly Arg Gln Val
225                 230                 235                 240
Gln Lys Lys Pro Lys Glu Leu Glu His Gln Asn Phe Tyr Leu Leu His
                245                 250                 255
Leu Cys Met Val Arg Glu Tyr Leu Glu Leu Glu Phe Gln Glu Leu Glu
            260                 265                 270
Gln Glu Gly Val Leu Asp Phe Pro Phe Asp Met Glu Arg Val Ile Asp
        275                 280                 285
Asp Phe Ile Leu Met Ala Phe Phe Val Gly Asn Asp Phe Leu Pro Asn
    290                 295                 300
Leu Pro Asn Leu His Ile Asn Glu Gly Ala Leu Ser Leu Met Phe Lys
305                 310                 315                 320
Ile Tyr Lys Asp Val Leu Pro Lys Met Gly Gly Tyr Val Asn Glu Gly
                325                 330                 335
Gly Val Ile Asn Leu Lys Arg Leu Gly Met Leu Ile Glu Ala Leu Ser
```

```
            340                 345                 350
Asp Val Glu Phe Arg Phe Phe Glu Ala Glu Tyr Ser Asp Ala Arg Trp
        355                 360                 365
Ile Asn Ala Lys Arg Asn Gly Val Ala Asn Gly Ser Glu Phe Gln Glu
    370                 375                 380
Lys Pro Lys Gly Leu Thr Leu Thr Pro Ala Gln Lys Glu Leu Phe Lys
385                 390                 395                 400
Glu Ile Lys Lys Tyr Val Leu Asn Arg Pro Glu Lys Ala Ser Asp Ser
                405                 410                 415
Lys Pro Leu Asp Leu Ser Pro Thr Leu Pro Ala Arg Asp Arg Lys Phe
            420                 425                 430
Val Glu Gln Leu Ala Asp Asp Leu Arg Leu Pro Trp Thr Thr Val Ala
        435                 440                 445
Asp Glu His Gly Asp Arg Phe Ile Arg Leu Gln Leu Pro Val Asn Glu
    450                 455                 460
Asp Asp Asp Ser Glu Glu Glu Glu Asp Glu Glu Ala Ser Met Ala Val
465                 470                 475                 480
Gln Arg Val Ile Arg Arg Tyr Asp Asn Ala Lys Val Gln Glu Ile Ser
                485                 490                 495
Pro Glu Glu Ala Gln Lys Ala Ala Glu Lys Lys Tyr Glu Glu Lys Phe
            500                 505                 510
Gln Asp Trp Lys Asp Lys Tyr Tyr Met Ser Lys Phe Gly Trp Gly Leu
        515                 520                 525
Asp Asn His Glu Glu Leu Arg Lys Leu Thr Glu Asn Tyr Val Gln Gly
    530                 535                 540
Leu Gln Trp Val Leu Tyr Tyr Tyr Tyr Arg Gly Ile Ala Ser Trp Pro
545                 550                 555                 560
Trp Phe Phe Lys Tyr His Tyr Ala Pro Met Ile Ser Gly Thr Cys Trp
                565                 570                 575
Leu Leu Ile
```

<210> 35014
<211> 466
<212> PRT
<213> A.fumigatus

<400> 35014

```
Leu Asp Val Ile Lys Gly Leu Asn Ala Asp Met Asn Phe Lys Leu Gly
1               5                   10                  15
Gln Pro Phe Lys Pro Tyr Glu Gln Leu Met Gly Val Leu Pro Asp Arg
            20                  25                  30
Ser Lys Gln Ile Val Pro Ala Ala Phe Arg Asp Leu Met Thr Ser Pro
        35                  40                  45
Glu Ser Pro Ile Ile Asp Phe Tyr Pro Arg Glu Phe Glu Leu Asp Met
    50                  55                  60
Asn Gly Lys Lys Met Glu Trp Glu Ala Val Val Lys Ile Pro Phe Ile
65                  70                  75                  80
Asp Glu Arg Arg Leu Leu Glu Ala Leu Ala Thr Arg Glu His Leu Leu
                85                  90                  95
Thr Pro Glu Glu Lys Ala Arg Asn Gly Phe Gly Val Ser Leu Lys Phe
            100                 105                 110
Thr Tyr Ser Pro Glu Val Asn Phe Thr Tyr Pro Ser Ser Phe Pro Gly
        115                 120                 125
Val Phe Pro Asp Ile Pro Ser Cys His Cys Ile Glu Asn Ile Phe Asp
    130                 135                 140
```

```
Leu Pro Thr Met Asp Gly Leu Glu Pro Tyr Ile Gly Leu Val Glu Gly
145                 150                 155                 160
Val Gln Leu Gly Ala Ala Ala Leu Ala Gly Phe Pro Ser Leu Lys Thr
                165                 170                 175
Leu Pro His Val Gly Gln Leu Gly Phe His Gly Val Cys Val Phe Gln
            180                 185                 190
Gln Glu Ser Arg Asn Glu Ser Met Val Ile Thr Val Leu Asp Pro Gly
        195                 200                 205
Ser Arg Ser Asn Ile Glu Leu Ala Lys Gln Lys Leu Gly Lys Arg Val
    210                 215                 220
Phe Val Gly Tyr Pro Phe Leu Gln Glu Ala Leu Val Ile Arg Val Ser
225                 230                 235                 240
Asp Glu Leu Phe Asp Tyr Leu Leu Pro Glu Gly Glu Asn His Val Val
                245                 250                 255
Ser Ile Pro His Thr Glu Ala Gln Ile Asp Gln Trp Lys Lys Lys Ala
            260                 265                 270
Asp Lys Ile Glu Gly Ile Tyr Ser Arg Arg Leu Gly Thr Ile Ile Gly
        275                 280                 285
Pro Val Glu Ser Met Val His Val Gln Leu Leu Lys Gly Leu Ile Lys
    290                 295                 300
Thr Asp Glu Gly Ala Thr Ile Lys Glu Phe Ala Asp Ile Pro Gly Gln
305                 310                 315                 320
Glu Thr Asp Tyr Ala Leu Gln Leu Val Val Asp Glu Val Ile Asn Pro
                325                 330                 335
Asp Glu Arg Phe Ile Glu Arg Asp Ala Leu Pro Ile Glu Lys Glu Phe
            340                 345                 350
Pro Glu Gly Ser Arg Ala Phe Phe Leu Gly Asp Phe Asn Tyr Gly Arg
        355                 360                 365
Pro Val His Ile Thr Gly His Glu Asp Gly Lys Val Asn Gly Leu Ile
    370                 375                 380
Ala Ala Ile Lys Gly Arg Glu Pro Glu Phe Gly Arg Asp Arg Ala Arg
385                 390                 395                 400
Glu Ala Glu Arg Leu Cys Pro Tyr Met Pro Ser Phe Ala Ile Ala Arg
                405                 410                 415
Ser Leu Arg Leu Asn Pro Leu Val Leu Ala Lys Ile Thr Ser Ser Phe
            420                 425                 430
Ser Val Asp Ile Glu Gly Gln Arg Val Asn Leu Gly Leu Asn Leu Lys
        435                 440                 445
Phe Glu Ala Val Phe Thr Thr Gly Leu Glu Gly Ser Asp Gly Gly Arg
    450                 455                 460
Ser Ser
465
```

<210> 35015
<211> 519
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (516)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35015

```
Tyr Asp Leu Leu Arg Gln Ser Asn His Ser Ser His Ser Ile Pro Leu
1               5                   10                  15
```

```
Ser Thr Leu Pro Gly Pro Val Leu Leu Cys Tyr Phe Phe Gly Tyr Gly
            20                  25                  30
Val Leu Cys Thr Ser Glu Leu Leu Arg Tyr Gln Arg Gln Ser Pro Ser
        35                  40                  45
Ile Gln Glu Arg Pro Arg Cys Asp Thr Ser Val Pro Pro His Phe Ser
    50                  55                  60
Ala Ile Val His His Gly Ser Pro Glu Glu Ile Phe Gln Ala Glu Lys
65                  70                  75                  80
Gly Ser Ser Ala Asn Thr Ala Asp Ser Asp Glu Thr Arg Ser Pro Pro
                85                  90                  95
Thr Glu Ala Val Asn Pro Leu Gln Arg Ser Leu Ser Leu Asn Pro Ser
            100                 105                 110
Arg Arg Leu Asp Ala Asp Glu Gln Phe Lys Ser Ile Asp Lys Gln Phe
        115                 120                 125
Glu Glu Leu His Asp Gln Met Gln Thr Arg Pro Leu Ser Ser Arg Ser
    130                 135                 140
His Ala Pro Thr Ser Arg Ala Ser Ser Arg Phe Thr Gln Arg Asn Pro
145                 150                 155                 160
Arg His Val Asp Leu Leu Glu Ala Leu Phe Ser Ser His Arg Tyr Gln
                165                 170                 175
Val Gln Ile Ala Asn Ala Leu Ser Pro Thr Thr Pro Phe Asn Glu Asp
            180                 185                 190
Ile Ala Glu Arg Asn Met Val Arg Phe Leu Gln Gly Gln Pro Arg Thr
        195                 200                 205
Lys Asn Val Tyr Ser Arg Ile Ile Ser Ala Leu Tyr Gln Glu Asp Val
    210                 215                 220
Ala Asp Arg Asn Ile Ala Lys Asn Arg Met Asn Lys Arg Thr Ile Ser
225                 230                 235                 240
Arg Ser Ala Ser Ser Arg Ser Gln Pro Ala Ala Ala Ala Pro Gly Glu
                245                 250                 255
Val Thr Gln Arg Glu Ile Gly Ser Gln Ser Leu Thr Leu Ala Asn Glu
            260                 265                 270
Gly Lys Ile Thr Pro Ala Cys Ser Arg Pro Gly Ser Ser Ser Ser Ser
        275                 280                 285
Gln Pro Arg Ser Leu Arg Ala His Lys Ser Ala Pro Thr Ile Met Ala
    290                 295                 300
Glu Cys Thr Asn Ala Ser Gly Glu Gln Ser Val Pro Asn Ala Gly Gly
305                 310                 315                 320
Tyr Leu Asp Val Pro Pro Ala His Lys Gln Gly Asp Gln Trp Ser Asn
                325                 330                 335
Thr Pro Leu Pro Asp Ser Pro Thr Leu Pro Val Pro Met Thr Gln Ala
            340                 345                 350
Arg Lys Met Gly Pro Ser Gly Gly Arg Gly Thr Pro Glu Val Thr Arg
        355                 360                 365
Ser Ser Pro Ser Thr Cys Ser Asn Ala Ser Ser Thr Ser Pro Arg Leu
    370                 375                 380
Asn Ser Lys Lys Asn Val Arg Asp Leu Ser Ile Asn Thr Glu Leu Ala
385                 390                 395                 400
Ala Arg Gly Lys Pro Lys Ser Arg Ile Ser His Cys Ala Ile Gln Pro
                405                 410                 415
Pro Thr Pro Ser Asn His Asp Val Lys Gln Asn Pro Ser Ile Ala Glu
            420                 425                 430
Val Ile Asn Ser Pro Leu Pro Leu Arg Thr Pro Thr Leu Met Phe Pro
        435                 440                 445
Leu Pro Pro Ser Asn Gln Lys Ala Glu Val Val Gly Met Phe Lys Gln
    450                 455                 460
```

```
Ala Leu Asn Ser Ser Ala Val Thr Ile Ser Pro His Pro Thr Phe Glu
465                 470                 475                 480
Thr Leu Gln Asp Ala Ile Val Arg Glu Ile Asn Ser His Glu Ala Phe
                485                 490                 495
Arg Arg Val Pro Val Pro Ala Val Gln Ala Gly Ser Leu Phe Thr Pro
            500                 505                 510
Val Pro Ser Xaa Gly Val Phe
        515
```

<210> 35016
<211> 186
<212> PRT
<213> A.fumigatus

<400> 35016

```
Ser Thr Thr Glu Pro Pro Ile Pro Pro Asn Arg Arg Phe Ala Ala Asn
1               5                   10                  15
Ile Ile Glu Phe Leu Glu Pro Ser Asn Gln His Ile Ile Ser Leu Pro
            20                  25                  30
Leu Leu Leu Lys Met Pro Leu Ser Lys Glu Asn Arg Met Gln Met Ala
        35                  40                  45
Ile Ser Ala Tyr Lys Lys Gly Gln Phe Lys Ser Lys Ala Ala Ala Ala
    50                  55                  60
Lys Val Phe Gly Val Ser Arg Glu Thr Leu Arg Asp Arg Leu Arg Gly
65                  70                  75                  80
Ile Lys Pro Arg Ala Glu Thr Arg Ala Asn Ser His Lys Leu Thr Ala
                85                  90                  95
Leu Glu Glu Glu Ala Leu Ala Lys Arg Leu Leu Asp Ala Asp Arg Arg
            100                 105                 110
Gly Phe Ser Ile Arg Pro Gln Phe Leu Arg Gly Met Ala His Ile Leu
        115                 120                 125
Leu Cys Ala Arg Thr Asn Asp Pro Thr Ser Val Ile Gly Val Asn Trp
    130                 135                 140
Ala Tyr Lys Phe Ile Lys Arg His Pro Ala Leu Arg Thr Arg Tyr Asn
145                 150                 155                 160
Arg Arg Ile Ser Tyr Gln Arg Ala Thr Gln Ala Asp Arg Phe His Thr
                165                 170                 175
Arg Gln Leu Ala Arg Ile Gln Arg Cys Arg
            180                 185
```

<210> 35017
<211> 63
<212> PRT
<213> A.fumigatus

<400> 35017

```
Leu Leu Gln Cys Met Tyr Leu Ser Ser Cys Gly Leu Met Asn Asp Pro
1               5                   10                  15
Thr Leu Ile His Arg Ser Val Ala Leu Val Glu Val Pro Phe Gln Val
            20                  25                  30
Asp Ala Thr Leu Leu Arg Ser Gly Met Thr Ile Ala Tyr Pro Tyr Arg
        35                  40                  45
Met Glu Asn Phe Gly Glu Met Thr Leu Ser Cys Asp Leu Leu Glu
    50                  55                  60
```

<210> 35018

<211> 91
<212> PRT
<213> A.fumigatus

<400> 35018
Pro Lys Ser Ser Val Gly Val Ile Ile Tyr Lys Val Val Gly Asn Arg
1 5 10 15
Tyr Ile Glu Lys Arg Ile Asn Val Arg Ile Glu His Val Lys His Ser
20 25 30
Arg Ser Arg Glu Asp Phe Ile Lys Arg Val Lys Glu Asn Ala Ala Lys
35 40 45
Lys Arg Gln Ala Lys Glu Gln Gly Ile His Leu His Leu Lys Arg Gln
50 55 60
Pro Ala Met Pro Arg Glu Gly His Val Val Glu Gly Val Ala Ala Glu
65 70 75 80
Thr Ile Thr Pro Ile Pro Tyr Asp Thr His Ile
85 90

<210> 35019
<211> 212
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (203)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35019
Gln Glu Ser Pro Thr Gly Thr Ala Thr Asn Pro Ile Trp Leu Val Lys
1 5 10 15
Thr Arg Leu Gln Leu Asp Lys Ser Asn Ala Glu Asn Gly Lys Gly Arg
20 25 30
Gln Tyr Lys Asn Ser Trp Asp Cys Ile Lys Gln Thr Met Arg His Glu
35 40 45
Gly Ile Arg Gly Leu Tyr Lys Gly Leu Ser Ala Ser Tyr Leu Gly Val
50 55 60
Thr Glu Ser Thr Leu Gln Trp Val Met Tyr Glu Gln Met Lys Met Tyr
65 70 75 80
Leu Ala Arg Arg Glu Ala Ala Lys Arg Ala Asp Pro Asn His Ile Tyr
85 90 95
Asn Val Trp Asp Asp Val Glu Leu Trp Gly Gly Arg Ile Cys Ser Arg
100 105 110
Gly His Gly Glu Thr Asp Cys Cys Gly Arg His Val Pro Pro Arg Ser
115 120 125
Cys Pro Asn Glu Ala Glu Ala Ser Pro His Cys Ile Cys Gly Gly Trp
130 135 140
Gln Ser Ser Asn Glu Ile His Arg Ser Cys Ala Val Leu Gln Asp Cys
145 150 155 160
Val Glu Gly Gly Gly His Gly Arg Ile Val Trp Arg Ser His Thr Ala
165 170 175
Phe Ala Thr Cys Gly Ser Ile Ser Arg His His Val Arg Asn Val Ser
180 185 190
Ile Phe Val Pro Ala Cys Thr Asp Asp Gln Xaa Pro Asp Ile Ile Gly
195 200 205
Leu Gly Thr Arg

210

<210> 35020
<211> 109
<212> PRT
<213> A.fumigatus

<400> 35020
Pro Glu Gly Lys Gln Pro Ser Val Leu Ile Pro Ile Thr Tyr Thr Met
1 5 10 15
Ser Gly Thr Met Leu Ser Cys Gly Val Val Glu Ser Ala Pro Ala Gly
20 25 30
Met Ala Lys Leu Ile Ala Ala Ala Ala Thr Tyr Pro His Glu Val Val
35 40 45
Arg Thr Arg Leu Arg Gln Ala Pro Thr Val Ser Val Gly Asp Gly Lys
50 55 60
Val Gln Met Lys Tyr Thr Gly Leu Val Gln Cys Phe Lys Thr Val Trp
65 70 75 80
Lys Glu Glu Gly Met Val Gly Leu Tyr Gly Gly Leu Thr Pro His Leu
85 90 95
Leu Arg Val Val Pro Ser Ala Ala Ile Met Phe Gly Met
100 105

<210> 35021
<211> 153
<212> PRT
<213> A.fumigatus

<400> 35021
Ile His Arg Ile Gly Gly Met Thr Ala Ala Thr Leu Thr Ser Pro Leu
1 5 10 15
Asp Val Leu Lys Thr Arg Leu Gln Ser Asp Phe Tyr Gln Ala Gln Leu
20 25 30
Lys Ser Leu Arg Ala Ala His Pro Leu Pro Pro Ser Asn Ser Leu Ala
35 40 45
Ser Leu Pro Arg Thr Ala Met Met His Phe Ser Glu Thr Phe Gln Ile
50 55 60
Leu Arg Ser Ile His Val His Glu Gly Trp Arg Ala Leu Phe Lys Gly
65 70 75 80
Leu Gly Pro Asn Leu Ile Gly Val Val Pro Ala Arg Ala Ile Asn Phe
85 90 95
Tyr Val Tyr Gly Asn Gly Lys Arg Ile Leu Ser Asp Tyr Phe Gln Tyr
100 105 110
His Asp Ser Lys Glu Thr Pro Val Gly Ile His Leu Thr Ala Ala Ala
115 120 125
Ile Ala Gly Ile Ala His Gly Asn Gly His Gln Pro Asn Leu Ala Gly
130 135 140
Glu Asp Thr Leu Thr Thr Arg Gln Val
145 150

<210> 35022
<211> 241
<212> PRT
<213> A.fumigatus

<400> 35022

```
Leu Ser Leu Pro Asn Arg Leu Ser Ser Thr Gly Tyr Ile Val Val Thr
1               5                  10                  15
Ile Asp His Pro Tyr Asp Ala Gly Ile Val Thr Phe Pro Asp Asn Thr
            20                  25                  30
Thr Ile Leu Ala Ala Asn Ile Thr Thr Asp Asp Gln Ile Val Asp Asp
        35                  40                  45
Leu Asp Val Arg Val Arg Asp Val Ser Phe Val Leu Asp Glu Leu His
    50                  55                  60
Arg Pro Ser Val Ile Ser Lys Leu Ile Pro Gly Gln Thr Cys Gly Leu
65                  70                  75                  80
Asp Thr Ser Lys Val Gly Ile Tyr Gly His Ser Leu Gly Gly Ala Thr
                85                  90                  95
Ala Ala Glu Ala Met Leu Ser Asp Ser Arg Leu Lys Gly Gly Ile Asn
            100                 105                 110
Leu Asp Gly Ser Phe Phe Gly Ser Val Ile His Arg Gly Leu Asp Arg
        115                 120                 125
Pro Phe Met Ile Met Ala His Glu Gly Lys Asn Leu Thr Thr Asp Ala
    130                 135                 140
Thr Trp Gly Ala Leu Trp Pro Lys Leu Lys Gly Thr Arg Arg Arg Phe
145                 150                 155                 160
Met Ile Lys Gly Ser Thr His Gly Thr Phe Thr Asp Leu Ala Gln Ala
                165                 170                 175
Ala Asp Ile Leu Gly Leu Arg Glu Glu Phe Pro Thr Gln Ala Ala Val
            180                 185                 190
Phe Leu Gly Ser Ile Glu Gly Gly Arg Ala Leu Gln Val Ile Ala Thr
        195                 200                 205
Tyr Thr Ser Arg Phe Phe Asp Phe Val Leu Lys Gly Lys Lys Val Glu
    210                 215                 220
Leu Leu Glu Met Ser Ser Lys Glu Phe Pro Glu Val Ile Ala Gly Glu
225                 230                 235                 240
Asp
```

<210> 35023
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35023

```
Leu Ile His Trp Val Thr Thr Trp Ser Asn Gln Tyr Ala Leu Cys Ser
1               5                  10                  15
Leu Glu Cys Ala Val Leu Leu Ala Lys Trp Leu Asp Lys Val Thr Val
            20                  25                  30
Pro Asn Pro Asp Leu Ala Leu Thr Glu Gln Glu Thr Lys Leu Leu Gln
        35                  40                  45
Phe Val Met Glu Arg Leu Met Glu Thr Pro His Gly Thr Asn Arg Glu
    50                  55                  60
Trp Phe Leu Gly Gln Gln Tyr Arg Ala Gln Leu Ala Cys Ser Pro Val
65                  70                  75                  80
Phe
```

<210> 35024
<211> 69
<212> PRT
<213> A.fumigatus

<400> 35024
Arg Leu Val Arg Arg Leu Gln Val Gly Glu Arg His Lys Ala Leu Gln
1 5 10 15
Pro His Asn Asp Ile Leu Ser Pro Arg Trp Lys Met Val Lys Ala Ala
20 25 30
Arg Thr Phe Gln Cys Gln Arg Cys Ser Arg Thr Phe Ala Arg Leu Glu
35 40 45
His Leu Gln Arg His Asp Arg Ser Arg Glu Ser His Pro Arg Ser Pro
50 55 60
Leu Leu Gln Ile Leu
65

<210> 35025
<211> 565
<212> PRT
<213> A.fumigatus

<400> 35025
Val Phe Arg Asp Leu Leu Thr Arg His Glu Arg Leu Ser His Ser Ser
1 5 10 15
Pro Ser Gly Asn His Asp Thr Glu Asn Gly Asp His Pro Thr Pro Ala
20 25 30
Pro Ser Ala Pro Asp His Val Leu Asp Gly Leu Asn Ile Leu Ala Ser
35 40 45
Ala Val Ala Asp Arg Thr Val Thr Thr Pro Thr Arg Gly Pro Pro Arg
50 55 60
Gly Pro Phe Gln His Pro Leu Ser Ala Ser Gln Gly Thr Phe Ser Ser
65 70 75 80
Gly Arg Pro Ala Thr Ala Asp Gln Thr Pro Leu Ala Gly His Pro Ile
85 90 95
Gln Ser Ala His Ser Pro Gly Thr Ala Glu Ala Thr Val Phe Gly Glu
100 105 110
Thr Leu Ser Gly Tyr Thr Thr Ser Asn Ala Tyr Asp Gly Asp Asp Phe
115 120 125
Thr Ser Phe Leu Asp Ser Ile Pro Leu Pro Ser His Pro Tyr Ser Pro
130 135 140
Thr Tyr Gln Pro Leu Pro Val Phe Pro Ala Trp Asn Phe Asp Ser Thr
145 150 155 160
Ser Asp Tyr Asp Asn Ser Val Val Arg Thr Gly Thr Ala Asp Ala Ala
165 170 175
Val Thr Pro Ser Ser Ser Val Leu Pro Arg His Gly Thr Gln Leu Pro
180 185 190
Ser Leu Gln Pro Glu Ser Pro Gln Thr Ser His Arg Ala Arg Gln Pro
195 200 205
Lys Gly Ala Ile Phe Val Thr Thr Gln Cys Arg Asp Lys Ile Ile Ala
210 215 220
Gln Leu Ala Asp Tyr Ala Asn Val Leu Pro Asp Pro Tyr Ile Pro Ser
225 230 235 240
Arg His Ala Leu Ser Arg Cys Leu Thr Gly Tyr Leu Ser Gly Tyr His
245 250 255
Asp His Tyr Pro Phe Met His Ile Pro Thr Leu Asp Ile Glu His Val
260 265 270
Ser Leu Gln Leu Phe Leu Ser Met Ala Ala Leu Gly Ala Arg Tyr Cys
275 280 285
Arg Glu Pro Asp Thr Ser Leu Ser Leu Tyr Arg Ile Ala Arg Thr Val

```
    290                 295                 300
Thr Met Glu His Ile Arg Arg Thr Tyr Gln Phe Pro Gly Thr Gly Gln
305                 310                 315                 320
Phe Ser Glu Lys Phe Lys Leu Ser Thr Thr Glu Ser Pro Glu Ser Gln
                325                 330                 335
Asp Leu Leu Glu Thr Val Gln Ala Leu Leu Leu Leu His Ser Val Ser
            340                 345                 350
Ser Trp Phe Lys Arg Asn Pro Ser His His Glu Ser Leu Phe Met Arg
        355                 360                 365
Ser Phe Met Glu Thr Met Leu Arg Glu Gly Gly Leu Asn Glu Leu Pro
    370                 375                 380
Glu Gln Asp Gly Ser Trp Lys Ser Trp Ile Arg Arg Glu Cys Val Lys
385                 390                 395                 400
Arg Thr Ser Leu Ile Ala Phe Cys Tyr Leu Asn Ile Leu Thr Ile Val
                405                 410                 415
Phe Asp Ile Thr Pro Leu Ile Leu Thr Glu Gly Asn Gln Tyr Gly Ser
            420                 425                 430
Ser Met Gln Arg Lys Gly Met Ala Cys Ser Gln Cys Arg Cys Leu Asp
        435                 440                 445
Ala Arg Thr Gln Ser Asp Ile Ala Gly Thr Lys Ala Thr Arg Arg Ala
    450                 455                 460
Leu Val Ala Phe His Ser Ser Tyr His Thr Lys Asp Lys His Gly Asp
465                 470                 475                 480
Leu Leu Leu Phe Gly Trp Ile Arg Ala Asp Pro Cys His Ser Thr Gly
                485                 490                 495
Tyr Leu Ala Ser Ser Lys Gly Ser Ser Pro Ala Ser Val Glu Lys Gln
            500                 505                 510
Leu Leu Leu Asp Gly Gly Ser Leu Ile Pro Arg Thr Ser Val Arg Thr
        515                 520                 525
Met Val Pro Met Leu Gly Ala Gln Pro Gly Ile Leu Asp Arg Ser Ile
    530                 535                 540
Gln Pro Ser Trp Ala Ala Leu Phe His Leu His Arg Pro Pro Ser Ser
545                 550                 555                 560
Arg Ile His Pro Ser
                565
```

<210> 35026
<211> 246
<212> PRT
<213> A.fumigatus

<400> 35026

```
Lys Gly Pro His Ser Leu Pro Ser Ala Ile Leu Ile Ser Ser Pro Leu
1               5                   10                  15
Ser Ser Ile Ser His Arg Ser Ser Ser Pro Arg Glu Ile Ser Met Asp
            20                  25                  30
Leu Pro Cys Ser Glu Lys Glu Trp His Ala Pro Asn Ala Val Ala Trp
        35                  40                  45
Met Gln Glu Arg Ser Gln Thr Ser Pro Glu Pro Lys Leu Gln Asp Ala
    50                  55                  60
Leu Ser Ser Leu Phe Thr His Pro Thr Thr Pro Lys Thr Asn Met Glu
65                  70                  75                  80
Thr Phe Ser Ser Leu Gly Gly Tyr Val Leu Ile His Ala Ile Leu Gln
                85                  90                  95
Asp Ile Trp Leu Leu Gln Lys Ala Arg Arg Leu Pro Leu Ser Arg Asn
            100                 105                 110
```

```
Ser Ser Phe Ser Thr Ala Glu Ala Leu Ser Leu Glu Gln Ala Leu Glu
        115                 120                 125
Gln Trp Cys Gln Cys Trp Glu Arg Asn Gln Glu Ser Ser Ile Asp Pro
    130                 135                 140
Phe Asn Pro His Gly Pro Leu Ser Phe Thr Ser Thr Ala Leu Leu Arg
145                 150                 155                 160
Leu Ala Tyr Ile Arg Leu Asn Ala Asp Phe Thr Ser Ala Arg Arg Leu
                165                 170                 175
Gln Thr Trp Asp Pro Ser Gln Ile Ala Gln Ser Leu Arg Gln Asn Leu
            180                 185                 190
Ser Val Gln Arg Gly Asp Arg Leu Thr Arg Ala Ala Leu His Cys Ala
        195                 200                 205
His Ala Leu Ser Thr Pro Ile Lys Leu Gly Ile Asn Tyr Val Ala His
    210                 215                 220
Thr Leu Gly Tyr His Leu Val Glu Pro Ile Arg Thr Val Phe Val Gly
225                 230                 235                 240
Met Arg Gly Ala Thr Gly
                245
```

<210> 35027
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35027

```
Thr Leu Ser Ile Leu Pro Ser Ser Asp Pro Leu Val Ala Gln Cys Ser
1               5                   10                  15
Thr Tyr Leu Arg Val Asn Asp Phe Gly His Phe Leu Gln Thr Tyr Gly
            20                  25                  30
Phe Ser Leu Val Ser Thr Glu Ala Val Arg Gly Phe Gly Glu Glu Gly
        35                  40                  45
Ile Gly Asp Ala Thr His Gly Thr Asp Arg Gly Ala Gly Asp Ala Pro
    50                  55                  60
Thr Glu Gln Thr Ser Glu Asn Ile Ala Gly Ile Gly Lys Ser Gly Gln
65                  70                  75                  80
Pro
```

<210> 35028
<211> 80
<212> PRT
<213> A.fumigatus

<400> 35028

```
Leu Pro Lys Arg His Leu Gly Ser Phe Gln Pro Arg Gly Lys Thr Lys
1               5                   10                  15
Ala Ala Tyr Gly Gln Gly Thr Met Val Ala Leu Ser Arg Arg Glu Met
            20                  25                  30
Glu Ile Glu Glu Tyr Tyr Lys Leu Val Ala Thr Gly Leu Gly Cys Leu
        35                  40                  45
Glu Ala Val Leu Lys Val Trp Ile Ala Ser Ser Pro Gly Tyr Asn Asn
    50                  55                  60
Cys Phe Ala Ser Leu Trp Ser Ile Gln Val Asn Phe Gly Ala Thr Leu
65                  70                  75                  80
```

<210> 35029

<211> 62
<212> PRT
<213> A.fumigatus

<400> 35029
Glu Leu Arg Tyr Met Thr Glu Leu Ile Val Glu Leu Met Ala Ser Cys
1 5 10 15
Tyr Cys Asn Arg Thr Leu Ser Leu Phe Asp Cys Ile Gly Ala Arg Ser
20 25 30
Leu Leu Gln Met Ser Lys Cys Phe Tyr His Gly Arg Asp Gly Arg Asn
35 40 45
Ser Phe Val Ala Leu Ser Val Ser His Val Gly Asp Leu Met
50 55 60

<210> 35030
<211> 66
<212> PRT
<213> A.fumigatus

<400> 35030
Ser Ala Val Glu Leu Arg Gly Tyr Gly Arg Arg Val Arg Lys Arg Ile
1 5 10 15
Val Thr Val Val Arg Gln Arg His Ile Ala Asn Ala Gln Ser Met Gln
20 25 30
His Ala Gln Arg Ala Asp Ala Val Gly Asp Leu Met Glu Ala Phe Asp
35 40 45
Ala Asp Gln Thr Arg Asp Ala Ala Arg Thr Glu Ala Ala Pro Asp Thr
50 55 60
Gly Arg
65

<210> 35031
<211> 110
<212> PRT
<213> A.fumigatus

<400> 35031
Arg Arg Arg Thr Gly Pro Ser Glu Thr Ser Ser Ser Tyr Gln Tyr Lys
1 5 10 15
Ala Leu Phe Ala Gln His Leu Ser Pro Arg His Leu Ser Tyr Ala Asp
20 25 30
Gly Met Gly Gly Asp Ala Lys Leu Leu Gln Ala Ala Ala Asp Phe Phe
35 40 45
Asn Arg Val Phe Ala Ala His Ser Arg Val Gln Pro Ala His Leu Val
50 55 60
Val Gly Ala Gly Cys Ser Ser Leu Leu Glu Asn Leu Leu Tyr Asp Ile
65 70 75 80
Cys Glu Pro Gly Glu Gly Val Leu Ile Glu Thr Pro Phe Trp Gly Ala
85 90 95
Tyr His Arg Gly Phe Arg Trp His Arg Met His Gly Leu Ser
100 105 110

<210> 35032
<211> 297
<212> PRT
<213> A.fumigatus

<400> 35032
Cys Ile Arg Ile Gly Gly Phe Glu Thr Ser Phe Val Leu Arg Ser Asn
1 5 10 15
Val Thr Ala Val His Val Arg Pro Pro Cys His Gly Asn Gly Ser Ala
20 25 30
Asp Leu Asp Arg Leu Val Ser Ala Tyr Ile Glu Ala Tyr Glu Arg Ala
35 40 45
Leu Arg Gln Ala Pro Cys Arg Ile Lys Ala Ile Leu Val Cys Asn Pro
50 55 60
His Asn Pro Cys Gly His Ile Tyr Pro Pro Arg Val Ile Gln Ala Leu
65 70 75 80
Leu Gln Phe Ala Gln Arg His Asp Leu Phe Tyr Ile Ser Asp Glu Ile
85 90 95
Tyr Ala Leu Ser Thr Leu Asp Glu Gln Thr Ala Phe Thr Ser Val Leu
100 105 110
Ser Ile Asp Val Ala Ala Leu Gly Val Asp Leu Ala Arg Val Phe Thr
115 120 125
Leu Tyr Ser Ile Ser Lys Asp Leu Gly Ser Ser Gly Leu Arg Leu Val
130 135 140
Tyr Cys Leu Ile Ser Ser Asp Ser Gln Gly Leu Arg Arg Thr Asp Thr
145 150 155 160
Val Gln Gly Phe Gly Ile Thr Gln Ala His Pro Asp Leu Arg Leu Ser
165 170 175
Leu Ala Ile Ser Asn His Ser Arg Val Ser Thr Phe Thr Ser Leu Val
180 185 190
Ile Thr Ala Leu Leu His Asp Pro Glu Ala Ala Thr Ala Ile Leu His
195 200 205
Gln Asn Arg Ala Ala Leu Gln Arg Ser Ala Lys Leu Ile Ser Asp Phe
210 215 220
Leu Ala Phe His Gln Ile Pro Phe Val Pro Pro Ala Ala Gly Val Tyr
225 230 235 240
Val Trp Ala Arg Leu Gly Trp Arg Ser Ser Ser Arg Pro Gly Asp Glu
245 250 255
Pro Ser Trp Asp Glu Glu Ala Arg Leu Asn Asp Arg Phe Glu Ala Ala
260 265 270
Gly Val Ser Val Gly Ala Gly Gln Gly Tyr Cys Ala Ser Glu Ser Ser
275 280 285
Thr Thr Gly Gln Lys Ile Arg Val Arg
290 295

<210> 35033
<211> 143
<212> PRT
<213> A.fumigatus

<400> 35033
Thr Trp Arg Ala Tyr Ser Pro Cys Thr Val Ser Ala Lys Thr Ser Ala
1 5 10 15
Val Ala Asp Cys Asp Trp Tyr Thr Val Leu Ser Pro Pro Thr Leu Lys
20 25 30
Ala Ser Ala Glu Leu Thr Leu Cys Arg Ala Ser Ala Ser Pro Lys His
35 40 45
Ile Pro Thr Cys Val Ser Pro Ser Pro Ser Arg Thr Ile Pro Ala Ser
50 55 60
Arg His Ser Pro Arg Trp Ser Ser Pro Leu Ser Cys Thr Thr Arg Lys

65 70 75 80
Pro Pro Arg Gln Ser Cys Thr Arg Ile Glu Pro Leu Cys Ser Ala Ala
85 90 95
Pro Ser Ser Ser Ala Thr Phe Ser Pro Ser Thr Arg Phe Pro Leu Cys
100 105 110
Arg Arg Pro Pro Glu Tyr Thr Ser Gly Arg Gly Ser Asp Gly Asp Arg
115 120 125
Arg Pro Gly Arg Val Met Ser Pro Ala Gly Thr Arg Arg Pro Val
130 135 140

<210> 35034
<211> 77
<212> PRT
<213> A.fumigatus

<400> 35034
His Ala Arg Met Ser Pro Ser Pro Ile Glu Glu Gln Ala Thr Arg Leu
1 5 10 15
Leu Lys Glu Val Pro Leu Ile Asp Gly His Asn Asp Phe Pro Tyr Met
20 25 30
Ile Arg Gly Trp Phe Arg Asn Asp Ile Asn Gly Gln Asp Ala His Leu
35 40 45
Tyr Asp Met Pro Ile Gly Gln Thr Asp Leu Gln Arg Leu Gln Lys Gly
50 55 60
Leu Leu Gly Gly Gln Phe Trp Ser Ala Phe Val Pro Trp
65 70 75

<210> 35035
<211> 206
<212> PRT
<213> A.fumigatus

<400> 35035
Leu Thr Ser Arg Thr Arg His Thr Arg Pro Lys His Arg His Cys Gly
1 5 10 15
Phe Leu Gly His Arg Ser Ser Thr Leu Ile Leu Pro Cys Arg Trp His
20 25 30
Thr Met Ile Leu Thr Asp Arg Ser Ser Gln Pro Asp Arg Tyr Ser Leu
35 40 45
Arg Ala His Ala Arg Asn Val Thr Asp Glu Asn Leu His Leu Leu His
50 55 60
Arg Asn Arg Gly Val Val Met Ile Cys Phe Leu Arg Glu Leu Leu Ala
65 70 75 80
Ser Glu Ala Asp Gln Ala Thr Leu Ala His Val Ile Asp His Ile Ile
85 90 95
Tyr Ala Gly Thr Arg Ile Gly Tyr Glu His Val Gly Ile Gly Ser Asp
100 105 110
Phe Asp Gly Met Leu Arg Gly Pro Asp Gly Leu His Asp Val Ser Cys
115 120 125
Tyr Pro Ala Leu Val Ala Gly Leu Leu Glu Arg Gly Val Ser Glu Glu
130 135 140
Asp Val Lys Arg Val Met Gly Leu Asn Val Ile Arg Val Leu Glu Glu
145 150 155 160
Val Glu Arg Val Ala Ala Asp Leu Gln Gly Ala Gly Glu Lys Cys Leu
165 170 175
Cys Asp Glu Leu Asp Glu Val Trp Asn Glu Asp Ile Lys Glu Gln Leu

```
            180                 185                 190
Thr Arg Glu Arg Lys Arg Val Lys Lys Leu Gly Pro Gln Lys
        195                 200                 205

<210> 35036
<211> 178
<212> PRT
<213> A.fumigatus

<400> 35036
Tyr Ala His Arg Ala Asp Gly Ser Pro Ala Ser Thr Glu Gly Thr Val
1               5                  10                  15
Gly Trp Pro Val Leu Glu Arg Ile Cys Ala Leu Val Gly Val Tyr Pro
            20                  25                  30
Asn Ile Gly Thr Ser Ile Ile Val Leu Ser Glu Phe Ser Pro Lys Asn
        35                  40                  45
Pro Asp Lys Glu Val Gly Ser Leu Glu Ala Leu Arg Gln Thr Leu Gln
    50                  55                  60
Gln Leu Asp Val Ile His Arg Leu Ile Glu Arg His Pro Thr Ile Leu
65                  70                  75                  80
Gln Phe Ala Asp Ser Ala Ala Ser Ile Trp Ser Ser Phe Arg Ala Gly
                85                  90                  95
Arg Val Ala Ser Leu Ile Gly Ile Glu Gly Leu His Gln Ile Ala Asp
            100                 105                 110
Ser Val Ser Ala Leu Arg Met Leu His Arg Leu Gly Val Arg Tyr Val
        115                 120                 125
Thr Leu Thr His Asn Cys His Asn Ala Phe Ala Asp Ala Ala Thr Val
    130                 135                 140
Ser Pro Glu Leu His Gly Gly Leu Ser Arg Lys Gly Glu Arg Leu Ile
145                 150                 155                 160
Arg Glu Leu Asn Arg Met Gly Met Tyr Val Ser Ala Arg Arg Leu Gly
                165                 170                 175
Tyr Gly


<210> 35037
<211> 84
<212> PRT
<213> A.fumigatus

<400> 35037
Lys Tyr Ile Leu Ala Ser Ala Val Ile Thr Arg Arg Val Ile Asp Ala
1               5                  10                  15
Ser Ile Leu Ala Leu Leu Ala Leu Leu Gly Leu Ala Val His His Leu
            20                  25                  30
Gly Pro Ser Tyr Asp Ile Leu Ala Leu Ala Glu Thr Gln Tyr Ile Tyr
        35                  40                  45
Ala Ile Asn Tyr Tyr Val Ala Asp Met Asn Ser Pro His His Thr Thr
    50                  55                  60
His Gly Thr Lys His Ile Arg Ile Ser His Ser Ile Pro Ile Met Tyr
65                  70                  75                  80
Gly Lys His Lys


<210> 35038
<211> 67
```

<212> PRT
<213> A.fumigatus

<400> 35038
Ser Gln Arg Ser Arg Val Cys Thr Phe Ile Ile Ile Ala His Val Ala
1 5 10 15
Tyr Thr Asn Val Pro Ser Leu Ser His Ser Asn Pro Gln Asn Glu Lys
20 25 30
Pro Pro Ser Ser Pro Cys Pro Phe Pro Ala Val Leu Ile Leu Pro Ser
35 40 45
His Ala Ile Met Val Ser Cys Asp Phe Pro Phe Phe Gly Arg Ser Lys
50 55 60
Leu Val Gln
65

<210> 35039
<211> 109
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (52),(57),(64),(104)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35039
Gly Arg Ala Gly Ile Ser Arg Gly Phe Asp Glu Glu Val Leu Thr Val
1 5 10 15
Cys Arg Met Ile Gly Ile Gly Phe Ser Ser Asn Lys Ala Ser Val Glu
20 25 30
Arg Leu Ser Arg Trp Glu Gln Glu Ser Trp Ala Tyr His Gly Asp Asp
35 40 45
Gly Lys Ser Xaa Phe Gly Glu Asn Xaa Gly Gln Gly Arg Pro Ser Xaa
50 55 60
Pro Thr Phe Gly Ala Asn Asp Thr Gly Gly Cys Gly Gly Lys Phe Gly
65 70 75 80
Asn Arg Met Arg Leu Phe Ser Pro Arg Met Ala Ala Phe Leu Val Tyr
85 90 95
Ala Gly Arg Pro Asn Ile Arg Xaa Met Val Thr Glu Asn
100 105

<210> 35040
<211> 309
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (252),(287),(294)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35040
Gly Pro Ser Asp Ala Pro Phe Val Thr Lys Ser Thr Arg Leu Ala Val
1 5 10 15
Gly Phe Cys Ser Ile Gln Arg Asn Asp Asp Ser Met Thr Asp Ala Pro
20 25 30

```
Leu Pro Pro Ser Gly Gly Ala Arg Arg Ala Pro Pro Leu Ser Thr Ser
        35                  40                  45
Tyr Ser Gly Pro Ser Ile Ser Ser Val Pro Arg Arg Ser Ser Tyr Ala
    50                  55                  60
Ser Val Leu Ser Gly Thr Ala Leu Ser Pro Pro Ser Asn Ser Ser Pro
65                  70                  75                  80
Pro Ser His Pro Leu Ile Ser Asn Ser Thr Thr Ser Tyr Pro Pro Pro
                85                  90                  95
Tyr Tyr Pro Asp Gly Arg Leu Leu Arg Pro Ser Ser Ser Ala Leu Asp
            100                 105                 110
Ala Asp Met Gln Leu Asn Ser Pro Trp Arg Thr Thr Pro Gly Asp Ser
        115                 120                 125
Leu Pro Pro Tyr Ser Arg Lys Phe Ala Asn Leu Pro Arg Tyr Asp Thr
    130                 135                 140
Leu Phe Gln Asn Pro Gly Ser Phe Ser Asp Pro Ser Leu Phe Thr Pro
145                 150                 155                 160
Ser Tyr Leu Arg Asn Ser Arg Tyr Ile Ala Arg Leu Glu Ala Ala Arg
                165                 170                 175
Arg Thr Lys Leu Ala Ser Gln Arg Asp Val Pro Pro Ser Ala Ser Thr
            180                 185                 190
Ser Asn Pro Leu Ser Ala Ser Ser Ser His Ala Ser Leu Pro Arg Ile
        195                 200                 205
Ala Pro Ser His Arg Gly Met Thr Tyr Asp Ile Ile Glu Arg Glu Pro
    210                 215                 220
Pro Ser Asp Asp Asp His Leu Pro Pro Leu Pro Ser Arg Trp Ser Asp
225                 230                 235                 240
Asn Asp Lys Tyr Ser Gly Ile Glu Leu Thr Asn Xaa Gly Leu Glu Ile
                245                 250                 255
Arg Tyr Pro Gly Pro Ala Asn Lys His Asp His Glu Ala Ala Ala Val
            260                 265                 270
Arg Ala Asp His Pro Met Pro Pro Gln Cys Gly Ile Tyr Tyr Xaa Glu
        275                 280                 285
Ile Thr Ile Leu Ser Xaa Pro Lys Glu Gly Gln Val Phe Arg Val Asp
    290                 295                 300
Leu Thr Arg Arg Cys
305
```

<210> 35041
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35041

```
Tyr Gly Pro Gly Leu Thr Phe Ser Leu Ser Asn Tyr Ser Gln Ala Lys
1               5                   10                  15
Ala Ile Ser Leu Val Ile Gly Thr Ala Ala Leu Phe Gly Gly Leu Glu
            20                  25                  30
Ala Leu Leu Ile Leu Thr Leu Arg Val Cys Leu Leu Asp Ala Pro Val
        35                  40                  45
Lys Ala Ala Ser Leu Glu Gln Ile Leu Thr Ile Val
    50                  55                  60
```

<210> 35042
<211> 71
<212> PRT
<213> A.fumigatus

<400> 35042
Trp Arg Gly Ser Phe Gln Pro Arg Gly Glu Asp Ser Thr Ala Ser Asn
1 5 10 15
Asn Lys Ser Lys Gln Glu Thr Met Leu Ala Lys Met Phe Leu Arg Met
20 25 30
Arg Ser Trp Asp Val Ser Ile Tyr Ser Ser Leu Val Lys Thr Gly Thr
35 40 45
Val Trp Ala His Leu Asp Arg Gly Pro Thr Ile Trp Gln Pro Glu Lys
50 55 60
Ser Phe His Ser Gly Thr Ser
65 70

<210> 35043
<211> 93
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (54)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35043
Lys Thr Leu Ser Val Pro Gly Gly Gln Val Val Gly Val Ala Gly Phe
1 5 10 15
Ile Val Thr Glu Thr Arg Leu Tyr Thr Ser Met Ala Asp Thr Glu His
20 25 30
Val Thr Val Ala Ser Asn Ile Leu Gly Thr Ile Gly Thr Val Leu Trp
35 40 45
Cys Ile Gln Leu Ile Xaa Gln Ile Trp Tyr Asn Trp Arg Gln Lys Lys
50 55 60
Thr Asp Gly Leu Pro Pro Ser Met Met Phe Leu Trp Ala Ser Cys Thr
65 70 75 80
Leu His Leu Lys Phe Cys Val Leu Pro Glu Leu Asp Gly
85 90

<210> 35044
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35044
Gly Asp Arg Val Val Leu Glu Val Gly Ile Tyr Ala Ser His Ile Val
1 5 10 15
Trp Arg Phe Arg Tyr Arg Lys Leu Arg Lys Glu Ala Lys Ala Ala Gly
20 25 30
Val Ser Ile Asp Glu Met Leu Asn Met Arg Gly Asn Glu Thr Asp Trp
35 40 45
Val Asn Asp Ala Glu Lys Arg Pro Gly Asp Asn Glu Ser Gln Ile Ala
50 55 60
Val Asp Gln Arg Gln Val Ser Ala Glu Val Val Glu Gln Pro Glu Leu
65 70 75 80
Asn

<210> 35045
<211> 73
<212> PRT
<213> A.fumigatus

<400> 35045
Thr Ile Arg Met Leu Gln Arg Leu Lys Thr Ser Ile Val Ser Ile Leu
1 5 10 15
Asn Gly Ala Arg Asn Arg Asn Ser Ser Asp Ile Val Phe Val Phe Ala
20 25 30
Gly Pro Glu Thr Asp Gly Lys Glu Val Leu Cys Pro Gln Pro Gly Thr
35 40 45
Ala Asn Lys Glu Ser Asn Pro Ala Arg His Ser Tyr Pro Ser Pro Pro
50 55 60
Gly Pro Ser Glu Pro Thr Ile His Lys
65 70

<210> 35046
<211> 292
<212> PRT
<213> A.fumigatus

<400> 35046
Ile Asn Arg Gly Ser Phe Gln Pro Arg Gly Glu Asp Ser Trp Trp Leu
1 5 10 15
Gly Thr Tyr Phe Ala Phe Val Tyr Ile Trp Ser Leu Gly Val Ile Ala
20 25 30
Gly Ile Gln Arg Ser Val Thr Ala Ala Thr Val Ser Gln Trp Tyr Phe
35 40 45
His Arg Leu Ala Ser Pro Lys Pro Thr Ser Arg Gln Ile Val Gln Ala
50 55 60
Ala Phe Val His Ser Val Thr Thr Leu Phe Gly Thr Val Cys Phe Ser
65 70 75 80
Lys Leu Ile Ala Leu Ser Thr Arg Leu Pro Leu Leu Leu Leu Pro Thr
85 90 95
Arg Leu Ser Arg Leu Leu Asn Leu Phe Val Tyr Ser Leu Val Pro Ser
100 105 110
Pro Leu Ala Ala Leu Thr Asp Pro Leu Thr Leu Thr Tyr Ala Ala Ile
115 120 125
His Ser Gln Pro Leu Ile Leu Ser Ala Arg Gly Leu Leu Glu Met Gln
130 135 140
Ser Val Ser Leu Ala Thr Ala Val Ser Ser Leu His Met Arg Ser Thr
145 150 155 160
Ser Trp Ser His Ala Gly Ser Ala Pro Leu Leu Ser Tyr Arg Leu Ser
165 170 175
Lys Leu Phe Leu His Ala Ala Arg Phe Met Met Ser Leu Thr Leu Gly
180 185 190
Phe Gly Gly Trp Val Ser Ala Ala Arg Asn Leu Glu Val Pro Gly Pro
195 200 205
Gly Asn Gly Val His Gly Ser Met Tyr Ala Tyr Val Val Gly Leu Ile
210 215 220
Ala Gly Ile Ile Gly Trp Ser Ile Leu Gly Ala Ala Glu Gly Val Ile
225 230 235 240
Ala Asp Ile Val Asp Ala Ser Phe Ile Cys Trp Ser Ser Glu Val Gly
245 250 255
Thr Arg Gly Gly Glu Ala Arg Tyr Cys Arg Glu Ala Gly Trp Leu Phe

```
            260                 265                 270
Gly Glu His Leu Ala Asn Asp Leu Arg His Thr Ser His Thr His His
        275                 280                 285
Gln Pro Glu Pro
    290
```

<210> 35047
<211> 68
<212> PRT
<213> A.fumigatus

<400> 35047

```
Ser Ser Ala Thr Asn Ala Arg Ile Lys Gln Arg Thr Ala Ser Ile Ala
1               5                   10                  15
Val Thr Thr Ala Ser Phe Ser Ser Ala Ala Val Thr Ala Ser Leu Leu
            20                  25                  30
Val Cys Leu Ser Ala Ala Cys Phe Asn Ser Leu Pro Lys Leu Gln Val
        35                  40                  45
Ser Gly Ile Arg Pro Ser Lys Leu Asp Ala Gln Ser Ser Gly Thr Glu
    50                  55                  60
Thr Gln Asp Tyr
65
```

<210> 35048
<211> 73
<212> PRT
<213> A.fumigatus

<400> 35048

```
Lys Lys Ala Trp Ile Gly Ala Ala Asp Trp Ile Tyr Asp Lys Thr Thr
1               5                   10                  15
Asp Tyr His Ala Met Ala Ala Phe Leu Gln Thr Val Thr Ile Val Ser
            20                  25                  30
Phe Leu Phe Leu Leu Ala Phe Ser Asp Leu Ser Val Ser Gln Phe Lys
        35                  40                  45
Pro Ala Gly Val Arg Arg Val His Phe Gln Phe Ala Leu Cys Arg Asp
    50                  55                  60
Thr Thr Val Leu Asn Ser Phe Gln Asn
65                  70
```

<210> 35049
<211> 267
<212> PRT
<213> A.fumigatus

<400> 35049

```
Arg Pro Lys Arg Ser Asp Arg Leu Pro Glu Ser Leu Gly Thr Pro Thr
1               5                   10                  15
Ile Ser Arg Ser Pro Ser Val Ser Asp Ile Tyr Gly Ser Tyr Pro Val
            20                  25                  30
Ala Ala Ala Gln Pro Leu Pro Ala Thr Gly Ser Ser Arg Tyr Gln Pro
        35                  40                  45
Val Ser Gln Tyr Ala Pro Ser Ala Ser Pro Glu Gln Leu Arg Gly Arg
    50                  55                  60
Ser Ser Met Asp Ser Gln Arg Ser Ala Ser Phe Gly Tyr Pro Leu Gly
65                  70                  75                  80
```

```
Gln Arg Arg Gly Ser Gln Glu Pro Ser Thr Pro Val Asp Thr Asn Met
                85                  90                  95
Phe His Gly Met Pro Met Tyr Gly Ser Pro Pro Val Ala Gly Tyr Gln
            100                 105                 110
Ser Thr Pro Pro Gln Ser Ser Tyr Met Pro Leu Ala Pro Val Ala Glu
        115                 120                 125
Asp Ser Ala Ser Gly Ala Gln Gln Glu Ser Phe Ser Ala His Ser Gln
    130                 135                 140
Val Ser Asp Asn Ala Pro Ser His Arg Ser Ser Thr Tyr Ala Pro Glu
145                 150                 155                 160
Pro Phe Gly His Pro Phe Asp Thr Gln Ala Val Ser Thr Thr Ser Gln
                165                 170                 175
Pro Asp Gln Gly Gly Tyr Met Pro Pro Thr Ser Ser Gly Ala Tyr Glu
            180                 185                 190
Pro Pro Ser Phe Glu Ser Asn Thr Glu Ser Ala Asp Gly Ala Gln Asp
        195                 200                 205
Glu Ser Thr Glu Glu Asp Lys Pro Lys Lys Lys Ser Ile Met Asp Glu
    210                 215                 220
Asp Asp Asp Glu Asp Leu Ala Ala Arg Ala Ala Ala Ile Gln Lys Ala
225                 230                 235                 240
Glu Arg Ala Arg Arg Asp Arg Glu Ala Asp Glu Ala Phe Arg Lys Ala
                245                 250                 255
Ala Glu Ala Asp Gly Lys Phe Gln Cys Ser Cys
            260                 265
```

<210> 35050
<211> 195
<212> PRT
<213> A.fumigatus

<400> 35050

```
Leu Ile Cys Val Ala Lys Lys Pro Pro Pro Ala Thr Gly Lys Lys Gly
1               5                   10                  15
Trp Phe Ser Gly Trp Phe Gly Gly Lys Lys Asp Asp Asn Ser Gly Gly
            20                  25                  30
Gly Pro Ile Arg Ala Lys Leu Gly Glu Glu Asn Ser Phe Tyr Tyr Asp
        35                  40                  45
Thr Glu Leu Lys Lys Trp Val Asn Lys Lys Asp Pro Gly Ser Ala Ala
    50                  55                  60
Pro Thr Arg Gly Thr Pro Pro Pro Pro Lys Gly Ser Ala Pro Pro Ser
65                  70                  75                  80
Arg Ser Met Ser Gly Ser Gly Gly Pro Pro Pro Ala Met Ala Thr Pro
                85                  90                  95
Pro Pro Thr Gly Ala Ser Gly Ser Arg Pro Ser Ser Ser Ala Gly Ala
            100                 105                 110
Pro Thr Ser Val Ser Ala Ser Pro Ala Pro Pro Ser Leu Gly Ala Pro
        115                 120                 125
Pro Pro Ala Ile Pro Arg Ser Val Ser Thr Gly Ala Val Leu Pro Thr
    130                 135                 140
Pro Pro Ser Ser Ser Ala Gly Ala Pro Pro Arg Pro Ala Thr Ser Leu
145                 150                 155                 160
Ser Asn Ala Ser Ser Ile Asp Asp Leu Leu Gly Ala Pro Gln Ala Arg
                165                 170                 175
Lys Gly Pro Ala Ala Arg Gly Lys Lys Lys Gly Arg Tyr Val Asp Val
            180                 185                 190
Met Ala Lys
```

195

<210> 35051
<211> 655
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (53)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35051
Lys Ile Lys Gly Leu Ser Gly Val Asp Val Phe Gly Glu Cys Ala Ser
1 5 10 15
Gly Asn Leu Pro Glu Arg Gln Ser Pro Pro Lys Asn Pro Tyr Ala Pro
20 25 30
Ser Ala Tyr Thr Asn Glu Phe Ala Asn Arg Gly Ala Pro Val Ser Thr
35 40 45
Gly Pro Pro Ile Xaa Gly Met Thr Gly Val Leu Asn Ser Ser Thr Glu
50 55 60
Glu Ser Pro Phe Val Pro Pro Arg Arg Ser Gln Thr Gln Ser Pro Ser
65 70 75 80
Gln Thr Leu Ser Pro Arg Leu Ser Val Pro Ser Leu Asp Pro Phe Gln
85 90 95
Arg Pro Ala Ser Val His Gly Ser Thr Ser Pro Thr Arg Thr Val Asn
100 105 110
Pro Tyr Ala Pro Ala Pro Val Pro Thr His Asn Arg Ala Pro Ser Gln
115 120 125
Val Leu Glu Phe Ile Pro Pro Thr Asp Gly Gln Gln Leu Asp Ser Leu
130 135 140
Glu Arg Trp Lys Gly Ala Pro Ile Phe Lys Phe Gly Phe Gly Gly Ala
145 150 155 160
Val Ile Ser Cys Phe Pro Lys His Ile Pro Arg Tyr Ser Ala Gly Gln
165 170 175
Ala Ala Pro Met Ile Lys Ser Cys Pro Gly Glu Val Arg Ile Ser Gln
180 185 190
Leu Asn Asp Trp Leu Pro Ala Ala Glu Gly Ile Val Gln His Pro Gly
195 200 205
Pro Leu Lys Gly Lys Ser Lys Lys Lys Asp Leu Val Ala Trp Leu Ser
210 215 220
Ser Lys Ile Ala Ala Phe Glu Asn Ala Asp Ile Pro Asp Phe Asp Arg
225 230 235 240
Leu Ser Pro Asp Ala Ser Lys Leu Arg Glu Glu Lys Thr Leu Leu Trp
245 250 255
Lys Val Ile Arg Val Leu Val Glu Asn Asp Gly Val Leu Glu Gly Ser
260 265 270
Val Glu Ala Gln Lys Ser Leu Arg Asn Leu Leu Phe Pro Asn Leu Gln
275 280 285
Asp Ser Gly Pro Asn Gln Ser Leu Gly Asp Val Phe Thr Pro Ser Ala
290 295 300
Thr Leu Gln Pro Leu Asn Ala Pro Ser Gln Pro Asp Ala Val Asp Ser
305 310 315 320
Arg Ser Val Asp Leu Leu Arg Asp Thr Leu Val Leu Gly Glu Arg Glu
325 330 335
Lys Ala Val Trp Ala Ala Val Asp Lys Arg Leu Trp Gly His Ala Met

```
            340                 345                 350
Ile Ile Ala Ser Arg Met Asp Arg Ser Val Trp Gln Gln Val Val Gln
        355                 360                 365
Glu Phe Val Arg Arg Glu Val Arg Ser Ala Thr Ser Arg Thr Glu Ser
    370                 375                 380
Leu Ala Ala Phe Tyr Glu Ile Leu Ala Gly Asn Ile Glu Glu Ser Ile
385                 390                 395                 400
Asp Glu Leu Val Pro Pro Ser Ala Arg Ala Gly Leu Gln Met Ile Ser
                405                 410                 415
Lys Val Asp Gly His Gly Pro Ala Lys Asn Ser Leu Asp Gly Leu Asp
            420                 425                 430
Ser Trp Arg Glu Thr Val Gly Leu Val Leu Ser Asn Arg Ser Pro Asp
        435                 440                 445
Asp Gln Arg Ala Leu Val Ala Leu Gly Arg Leu Leu Leu Ser Tyr Asn
    450                 455                 460
Arg Thr Glu Ala Ala His Ile Cys Phe Ile Leu Ser Arg Val Ala Val
465                 470                 475                 480
Phe Gly Gly Leu Asp Asp Pro Gln Ala Asn Ile Val Leu Leu Gly Val
                485                 490                 495
Asp His Gln Arg Leu Ser Ser Cys Ala Ala Leu Tyr Asn Asp Asp Ser
            500                 505                 510
Ile Leu Leu Thr Glu Ala Tyr Glu Phe Ala Thr Ser Val Leu Ala Gly
        515                 520                 525
Ser Ser Val Ser Thr Leu Pro His Leu Leu Ala Phe Lys Leu Ile His
    530                 535                 540
Ala Trp Ser Leu Ala Glu Arg Gly Arg Lys Ser Glu Ala Gln Gln Tyr
545                 550                 555                 560
Cys Asp Ala Ile Ala Ala Ala Leu Lys Ala Thr Thr Lys Pro Ser Gly
                565                 570                 575
Tyr His Asn Gln His Leu Phe Phe Gly Val Asp Glu Leu Ser Ala Arg
            580                 585                 590
Leu Arg Glu Thr Thr Ser Asp Gly Gly Ser Ser Trp Ile Ser Arg Pro
        595                 600                 605
Ser Met Glu Lys Val Ser Gly Ser Met Trp Ala Lys Phe Asn Ser Phe
    610                 615                 620
Val Ala Gly Asp Asp Ser Asp Ala Ala Ser Thr Gly Ser Val Lys Ala
625                 630                 635                 640
Glu Glu Ile Gly Pro Phe Ala Arg Val Ser Gly Asn Ser Tyr Asn
                645                 650                 655
```

<210> 35052
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35052

```
Pro Ser Gln Phe Ser Ser Leu Pro Ser Ser Arg Ala Thr Asn Asp Val
1               5                   10                  15
Tyr Thr Gln Ala Ser Thr Gly Lys Pro His Pro Trp Ser Arg Gln Thr
            20                  25                  30
Asp Ile Thr Asp Ser Glu Pro Ile Gln Ile Ser Glu Phe Arg Ala Trp
        35                  40                  45
His Arg Phe Ser Phe Thr Ile Phe Arg Asn Arg Gly Gly Glu Cys Ile
    50                  55                  60
Tyr Val Met Ser Val Val Thr Ala Leu Lys Ala Thr Glu Val Asn Arg
65                  70                  75                  80
```

Ile

<210> 35053
<211> 96
<212> PRT
<213> A.fumigatus

<400> 35053
Gln Cys Leu Lys Val Ser Ile Ser Ala Arg Leu Ile Val Cys Pro Ala
1 5 10 15
Asp Val Glu Asp Thr His Thr Ser His His Thr Gly Phe Met Asp Arg
20 25 30
Met Phe His Asp Arg Gln Asp Asp Asn Lys Gln Glu Gln Asn Glu Gln
35 40 45
His Asp Gln Pro Pro Glu Val Gln Pro Gln Gln Gly Thr Gln Pro Ile
50 55 60
Pro Pro Val Gln Glu Arg Glu Gly Lys Ser Val Glu Asp Tyr Val Asp
65 70 75 80
Glu Glu Arg Lys Leu Leu Gln Gly Gly Asp Thr Tyr Ser Gly Leu Met
85 90 95

<210> 35054
<211> 80
<212> PRT
<213> A.fumigatus

<400> 35054
Gln Cys His His Pro Ile Glu Trp Ile Ile Ile Arg Leu Arg Gln Thr
1 5 10 15
Arg Leu Ser Lys Gln Phe Gln Ile Ile Tyr Ile Ser Leu Lys Thr Asp
20 25 30
Ile Ala Val Thr Ser Thr Ser Arg Arg Pro Phe Val Ile Ala Thr Val
35 40 45
Tyr Thr Ser Glu Ile Gly Phe Cys Arg Gly Trp Ala Lys Ala Ile Tyr
50 55 60
Asn Gln Cys Leu Ser Ile Ser Gly Gln Phe Thr Arg Phe His Ser Leu
65 70 75 80

<210> 35055
<211> 218
<212> PRT
<213> A.fumigatus

<400> 35055
Pro Thr Met Ile Pro Ser Pro Pro Glu Arg Leu Arg Gln Leu Ser Leu
1 5 10 15
Leu Gly Ser Leu Ser Leu Thr Leu Pro Arg Arg Ser Gly Arg Pro Leu
20 25 30
Leu Leu Arg Phe Leu Asn Leu Leu Gln Asp Cys Cys Phe Gln Arg Leu
35 40 45
Arg Leu Gly Asn Thr Ser Pro Ala Pro Asn Asp Leu Pro Ile Gly Gly
50 55 60
Asn Gln Glu Leu Leu Glu Ile Pro Leu Asp Ala Leu Gln Pro His Lys
65 70 75 80
Ser Arg His His Leu Leu His Pro Cys Pro His Gly Arg Arg Ile Val

```
                85                  90                  95
Ala Val Asp Ile Gln Leu Ala Gln His Gly Lys Gly Asp Ala Val Val
            100                 105                 110
Asp Leu Ala Glu Gly Leu Asp Leu Val Val Arg Ala Gly Val Leu Ala
        115                 120                 125
Ala Lys Leu Val Ala Gly Glu Ala Lys Asn Gly Glu Val Phe Gly Met
    130                 135                 140
Leu Gly Leu Asp Gly Leu Val Glu Val Leu Glu Ala Phe Lys Leu Arg
145                 150                 155                 160
Ser Glu Ala Ala Phe Gly Gly Gly Val Asp Asp Glu Asp Asp Phe Ala
                165                 170                 175
Phe Glu Gly Gly Glu Val Glu Gly Phe Ala Leu Leu Cys Arg Gly Ile
            180                 185                 190
Gly Gln Gln Asp Leu Val Ile Val Phe His Gly Val Gly Arg Gly Ser
        195                 200                 205
Arg Lys Asp Lys Thr Tyr Cys Arg Gln Ala
    210                 215

<210> 35056
<211> 84
<212> PRT
<213> A.fumigatus

<400> 35056
Ala Phe Phe Phe Asn Asn Gly Leu Thr Gly Leu Gly Ile Leu Thr Pro
1               5                   10                  15
Asp Gln Ser Arg Leu Ala Val Asn Ser Val Thr Leu Gly Asp Tyr Asn
            20                  25                  30
Arg Pro Val Gln Ile Gly Lys Phe Ile Lys Asp Leu Phe Ala Gly Phe
        35                  40                  45
Gln Leu Leu Asn Leu Lys Asn Asp Ile Leu Arg Lys Arg Ser Asp Gly
    50                  55                  60
Ile Lys Tyr Ser Val Ser Leu Leu Tyr Cys Val Val Leu Asp Arg Val
65                  70                  75                  80
Cys Ser Ala Asn


<210> 35057
<211> 120
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1),(24)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35057
Xaa Ser Ser Phe Ser Val Pro Val His Val His Thr Thr Asn Lys Ile
1               5                   10                  15
Gln Ile Lys Arg Thr Ile Ser Xaa Pro Leu Pro Asn Asn Arg Leu Ala
            20                  25                  30
Ser Phe Ala Leu Gln Ala Ile Glu Val Asp Ala Glu Leu Ser Pro Phe
        35                  40                  45
Val Arg Arg Ser Phe Ala Leu Lys Ser Pro Val Gln Ser Ser Thr Ala
    50                  55                  60
```

```
Asp Glu Asp Glu Ala Val Lys Thr Val Leu Glu Thr Thr Tyr Arg Asp
65                  70                  75                  80
Thr Thr Asn Arg Met Leu Arg Val Ala Val Asn Gly Phe Met Glu Ser
                85                  90                  95
Leu Gly Val Val Leu Gly Val Met Glu Glu Leu Asp Val Asp Val Leu
            100                 105                 110
Asn Glu Glu Ile Glu Glu Glu Lys
        115                 120
```

<210> 35058
<211> 232
<212> PRT
<213> A.fumigatus

<400> 35058

```
Thr Asp Phe Pro Ala Leu Glu Arg Leu Pro Phe Ser Ser Gly Gln Trp
1               5                   10                  15
Pro Pro Arg Arg His Ser Thr Ile Leu Ser Leu Pro Thr Val Cys Phe
            20                  25                  30
Val Phe Ala Thr Pro Ser Pro Asn Pro Val Lys Asn Asn Asp Lys Val
        35                  40                  45
Leu Leu Thr Tyr Pro Pro Thr Glu Lys Gly Glu Pro Phe Asp Leu Ala
    50                  55                  60
Ser Leu Lys Gly Lys Val Val Leu Val Val Asn Thr Ala Ser Lys Cys
65                  70                  75                  80
Gly Phe Thr Pro Gln Phe Lys Gly Leu Glu Asn Leu Tyr Gln Ser Ile
                85                  90                  95
Lys Ala Lys His Pro Glu Asp Phe Thr Ile Leu Gly Phe Pro Cys Asn
            100                 105                 110
Gln Phe Gly Ser Gln Asp Pro Gly Ser Asn Asp Glu Ile Gln Ser Phe
        115                 120                 125
Cys Gln Val Asn Tyr Gly Val Thr Phe Pro Val Leu Gly Lys Leu Asp
    130                 135                 140
Val Asn Gly Asp Asn Ala Ala Pro Val Trp Thr Trp Met Lys Glu Met
145                 150                 155                 160
Met Pro Gly Leu Met Gly Leu Lys Arg Val Lys Trp Asn Phe Glu Lys
                165                 170                 175
Phe Leu Ile Ser Ala Asp Gly Lys Val Val Gly Arg Trp Ala Ser Ile
            180                 185                 190
Thr Lys Pro Glu Ser Leu Glu Ala Thr Ile Leu Lys Glu Ile Glu Lys
        195                 200                 205
Ala Lys Lys Glu Gly Thr Ala Ala Ser Thr Arg Lys Gly Glu Gly Glu
    210                 215                 220
Ala Thr Glu Gln Ala Lys Leu Ser
225                 230
```

<210> 35059
<211> 202
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (178)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35059
Leu Leu Leu His Ser Thr Cys Gln Leu His Phe Leu Ile Met Gly Asp
1 5 10 15
Asp Leu Glu Ala Ser Lys Ser Ser Leu Asp Arg Lys Glu Phe Pro Ser
20 25 30
Ala Glu His Val Glu Gly Thr Thr Val Gly Ile Val Arg Ala Val Asp
35 40 45
Pro His Gln Leu Glu Ser Leu Pro Tyr Gly Pro Ser Gly Phe Lys Gly
50 55 60
Ile Phe Ser Ser Lys Tyr Val Phe Gly Ala Ala Phe Leu Ala Ser Met
65 70 75 80
Gly Gly Phe Ser Met Gly Tyr Asp Met Gly Val Ile Ser Ile Ile Asn
85 90 95
Ser Met Asp Lys Phe His Ala Ala Tyr Pro Arg Ala Glu Ser Ala Phe
100 105 110
Gly Lys Gly Phe Met Thr Gly Met Leu Leu Leu Gly Ala Phe Val Gly
115 120 125
Cys Ile Phe Met Pro Tyr Leu Ala Asp Arg Ile Ser Arg Lys Trp Ala
130 135 140
Leu Thr Ala Met Val Ile Val Phe Asn Phe Gly Ala Ile Leu Gln Thr
145 150 155 160
Gly Ala Thr Asn Tyr Asp Met Leu Val Ala Gly Arg Phe Ile Arg Arg
165 170 175
Ile Xaa Val Gly Thr Leu Ala Met Val Tyr Phe Leu Leu Asn Arg Gln
180 185 190
Cys Phe His His Lys Leu Met Gly Gln Phe
195 200

<210> 35060
<211> 323
<212> PRT
<213> A.fumigatus

<400> 35060
Gly Ala Pro Leu Tyr Ile Ser Glu Val Ser Pro Pro His Met Arg Gly
1 5 10 15
Thr Leu Leu Val Leu Glu Ser Ile Ser Ile Thr Leu Gly Val Val Val
20 25 30
Ala Phe Tyr Ile Thr Tyr Gly Thr Arg His Met Ala Thr Glu Ala Cys
35 40 45
Phe Arg Leu Pro Phe Gly Leu Gln Met Val Thr Ala Thr Ile Leu Gly
50 55 60
Ala Gly Ile His Phe Phe Pro Tyr Ser Pro Arg Trp Leu Ala Leu Val
65 70 75 80
Asn Arg Gln Asp Asp Cys Met Ser Ser Leu Cys Lys Leu Arg Gly Leu
85 90 95
Thr Ser Ser Asp Glu Arg Val Gln Leu Glu Tyr Gln Gln Ile Ile Ala
100 105 110
Glu Ile Asn Phe Gln Arg Ala Val Leu Ala Lys Lys His Pro Gly Ala
115 120 125
Ser Gly Thr Lys Leu Glu Val Leu Ser Trp Met Asp Leu Phe Thr Arg
130 135 140
Lys Leu Trp Lys Arg Thr Ala Val Gly Val Gly Val Ala Phe Phe Gln
145 150 155 160
Gln Phe Ser Gly Ile Asn Ala Phe Ile Tyr Tyr Ala Pro Thr Leu Phe
165 170 175

```
Glu Ser Leu Gly Gln Thr Ala Glu Thr Ser Leu Ile Leu Ser Gly Val
            180                 185                 190
Phe Asn Val Leu Gln Leu Ile Ala Ala Ile Val Cys Phe Leu Val Ile
        195                 200                 205
Glu Lys Val Gly Arg Arg Pro Leu Ala Ile Phe Gly Gly Phe Gly Thr
    210                 215                 220
Ala Val Ala Tyr Ile Ile Ile Ala Val Leu Ser Gly Leu Tyr Ser Thr
225                 230                 235                 240
Ser Trp Ala Ser His Ser Ala Ala Gly Trp Gly Cys Val Ala Met Ala
                245                 250                 255
Phe Ile Phe Ile Leu Ile Tyr Gly Val Thr Tyr Ser Pro Leu Gly Trp
            260                 265                 270
Ala Leu Ser Leu Gly Gly Phe Ser Arg Leu Arg Arg Gly Leu Lys Val
        275                 280                 285
Ser Leu Ser Pro Arg Ala Pro Ser Gly Cys Gln Ile Ser Leu Leu Ala
    290                 295                 300
Leu Ser His Arg Pro Cys Trp Pro Ile Ser Val Thr Glu Arg Thr Ser
305                 310                 315                 320
Ser Leu Pro
```

<210> 35061
<211> 70
<212> PRT
<213> A.fumigatus

<400> 35061

```
Asp Val Ser His Ser Ile Lys Lys Val Tyr Asn Ile Ile Tyr Gly Ser
1               5                   10                  15
Ile Cys Pro Gln Arg Ser Lys Arg Ala Leu Ser Met His Asn Phe Leu
            20                  25                  30
Phe Ser Leu Ser Arg Phe Pro Phe Leu Ala Leu Cys Ser Asp Ser Val
        35                  40                  45
Ser Gly Ile Thr Phe Thr Ile Ala Phe Val Ile Pro Thr Leu Thr Lys
    50                  55                  60
Ser Phe Cys Phe Trp Ile
65                  70
```

<210> 35062
<211> 208
<212> PRT
<213> A.fumigatus

<400> 35062

```
Arg Val Tyr Leu Leu Arg Ala Asn Ala Val Arg Ile Ala Arg Pro Asn
1               5                   10                  15
Ser Gly Asp Val Thr His Ser Leu Arg Cys Leu Gln Arg Ser Pro Thr
            20                  25                  30
Tyr Arg Ser His Cys Leu Phe Pro Arg His Arg Glu Ser Arg Pro Thr
        35                  40                  45
Pro Pro Arg Tyr Leu Arg Arg Leu Trp Tyr Cys Ser Gly Val Tyr His
    50                  55                  60
His Arg Gly Pro Phe Gly Ser Leu Leu Asn Leu Leu Gly Phe Ala Leu
65                  70                  75                  80
Gly Arg Trp Leu Gly Leu Arg Arg His Gly Phe His Leu Tyr Pro Tyr
                85                  90                  95
```

```
Leu Arg Ser His Leu Phe Pro Ala Gly Leu Gly Pro Phe Pro Arg Arg
            100                 105                 110
Val Phe Ser Thr Thr Ser Arg Ser Lys Gly Val Ala Leu Ala Thr Cys
        115                 120                 125
Thr Ile Trp Leu Ser Asp Phe Ile Val Gly Val Val Thr Pro Ser Met
    130                 135                 140
Leu Ala Asp Ile Gly Tyr Arg Thr Tyr Ile Phe Phe Ala Val Met Cys
145                 150                 155                 160
Ser Leu Ala Gly Ile Trp Ala Phe Phe Leu Val Pro Glu Thr Gly Gly
                165                 170                 175
Lys Ser Leu Glu Glu Ile Asp Glu Leu Phe Gly Asp Ser Ser Ala Arg
            180                 185                 190
Glu Glu Trp Glu Leu Ala Gln Glu Ala Ile Met Thr Gly Ser Thr Lys
        195                 200                 205
```

<210> 35063
<211> 78
<212> PRT
<213> A.fumigatus

<400> 35063

```
Leu Thr Ser Val Gly Ile Leu Tyr Gly Lys Pro Ser Val Ile Arg Trp
1               5                   10                  15
Ser Trp Phe Ser Glu Glu Ile Ser Leu Gln Ser Phe Thr Thr Gln Pro
            20                  25                  30
Lys Lys Gly Val Ser Ala Cys Leu Gln Asn Gln Pro Ser Tyr His Asp
        35                  40                  45
Ser Leu Val His Arg Phe His Tyr Gly Ile Ser Leu Glu Leu Pro Arg
    50                  55                  60
Glu Ile Ser Val Val Pro Gly Lys Phe Thr Asn Val Ile Leu
65                  70                  75
```

<210> 35064
<211> 75
<212> PRT
<213> A.fumigatus

<400> 35064

```
Val Ile Pro Leu Pro Pro Ala Glu Phe Ser Arg Phe His Trp Arg Tyr
1               5                   10                  15
Trp Ser His Gly Glu Thr Lys Asn Thr Glu Asp Thr Met His Arg Thr
            20                  25                  30
Met Ser Thr Leu Glu Ile Lys Leu Val Glu Pro Gly Asp Ile Ser Ala
        35                  40                  45
Asn Thr Glu Leu Trp Tyr Ile Thr His Leu Ala Glu Ser Glu Asp Val
    50                  55                  60
Ser Arg Tyr Thr Arg Ser Pro Ala Val Val Glu
65                  70                  75
```

<210> 35065
<211> 703
<212> PRT
<213> A.fumigatus

<400> 35065

```
Pro Pro Ala Leu Pro Ile Ala Thr Pro Ser Ser Pro Arg Ser Arg Ser
```

```
1               5                   10                  15
Ser Arg Met Leu Gly Ala Cys Pro Met Ser Tyr Glu Arg Gln Cys Arg
            20                  25                  30
Glu Leu Trp Glu Cys Trp Met Ser Cys Met Pro Pro Tyr Glu Arg Pro
        35                  40                  45
Cys Arg Gln Asn Leu Leu Gln Lys Ile Asn Leu Ser Phe Asn Leu Ser
    50                  55                  60
Arg Lys Ala Leu Arg Trp Phe Lys Val Ser Cys His Glu Thr Ser Phe
65                  70                  75                  80
Pro Thr Lys Pro Leu Met Gln Thr Glu Ser Gln Thr Val Gln Tyr Gly
                85                  90                  95
Arg Leu Arg Pro His Ile Thr Ser Ser Met Pro Thr Ile Ser Ile Cys
            100                 105                 110
Lys Phe Pro Lys His Pro Asn Gly Glu Arg Glu Ser Asp Pro Phe Ser
        115                 120                 125
Gly Leu Val Gln Ser Pro Ile Glu Ser Leu Pro Asn Ile Phe His Arg
    130                 135                 140
Arg His Gln Pro His Thr Ser Gly Gly Gly Ala Ile Pro Leu Thr Glu
145                 150                 155                 160
Ala Lys His Arg Pro Gln Lys Ala Lys Ala Gln Arg Arg Ser Ala Arg
                165                 170                 175
Lys Glu Leu Ser Pro Ala Gly Val Arg Thr Val Lys Asn Pro Val His
            180                 185                 190
Glu Ser Glu Gln Ile Val His Ala Asn Ser Ser His His Phe Asp Lys
        195                 200                 205
Val Met Ala Asp Met Val Glu Val Arg Pro Pro Leu Ala Val Arg Arg
    210                 215                 220
Ser Ala Ser His Leu Leu Leu Glu Gly Ile Asn Leu Asn Met Arg Ser
225                 230                 235                 240
Pro Ser Leu Arg Val Thr Lys Ile Arg Asp Leu Leu Arg Leu Val Ile
                245                 250                 255
Asn Glu Ser Leu His Val Gly Gly Arg Pro Asp Phe Ser Leu Ser Glu
            260                 265                 270
Ala Thr Glu Leu Gly Glu Arg Ile Glu Val Arg Thr Arg Ser Ser Asn
        275                 280                 285
Gly Glu Ile Phe Cys Lys Thr Ile Val Trp Ser Val Asp Glu Ala Leu
    290                 295                 300
Pro Glu Thr Leu Leu Val Asp Asp Lys Asp Leu Ala Lys Leu Ile Ser
305                 310                 315                 320
Cys Val Phe Leu Asn Ala Val Lys Phe Thr Asn Ser Gly Met Ile Thr
                325                 330                 335
Val Ser Ala Lys Val Gly Ser Asn Ile Gly Glu Val Phe Ile Thr Val
            340                 345                 350
Arg Asp Thr Gly Pro Gly Ile Pro Glu Ala Phe Leu Pro Lys Leu Phe
        355                 360                 365
Gln Pro Phe Ala Arg Gly Asp Ala Ser Ile Thr Arg Ser Lys Asp Gly
    370                 375                 380
Leu Gly Leu Gly Leu Leu Val Ala Lys Gly Leu Ala Arg Lys Met Gly
385                 390                 395                 400
Gly Asp Leu Ile Cys Val Arg Ser Ser Thr Ser Gly Pro Asp His Gly
                405                 410                 415
Ser Glu Phe Glu Ile Ser Ile Pro Val Thr Gln Ser Lys Ser Ser Asn
            420                 425                 430
Lys Pro Val Ala Cys Met Thr Ser Ser Leu Thr Pro Asp Gly Ser Gly
        435                 440                 445
Ser Ser Arg Leu Gly Thr Thr Ser Thr Ser Ser Asn Ser Arg Leu Glu
```

```
    450                 455                 460
Gln Ser Met Leu Ser Pro Leu Ile Arg Arg Pro Ser Pro Pro Ile Gln
465                 470                 475                 480
Gln Pro Ser Pro Ser Leu Thr Glu Glu Ile Ser Ser Gln Thr Ser Thr
                485                 490                 495
Pro Val Arg Ser Val Ser Thr Ala Lys Phe Ile Arg Pro Ser Ile Asn
            500                 505                 510
Gly Asp Ala Tyr Asp Glu Lys Leu Gly Gln Lys His Pro Leu Thr Phe
        515                 520                 525
Leu Val Ala Glu Asp Asn Met Ile Asn Arg Arg Val Leu Val Asn Met
    530                 535                 540
Leu Lys Arg Leu Gly Tyr Gln Asp Ile Tyr Glu Ala Cys Asn Gly Lys
545                 550                 555                 560
Glu Ala Val Arg Ile Met Gln Asp Val Leu Ala Ala Gln Lys Pro Lys
                565                 570                 575
Ala Ser Ser Arg Leu Ser Asp Cys Asp Gln Leu Gly Asp Cys Gly Cys
            580                 585                 590
Lys Arg Met Lys Pro Val Asp Val Val Leu Met Asp Leu Trp Met Pro
        595                 600                 605
Glu Met Asp Gly Tyr Glu Ala Thr Ser Lys Ile Leu Arg Leu Val Asp
    610                 615                 620
Asp Tyr Gln Arg Arg Thr Leu His Ala Gln Pro Arg Ser Gln Ser Asn
625                 630                 635                 640
Asn Leu Leu Leu Pro Leu Pro Thr Val Leu Ala Val Ser Ala Asp Val
                645                 650                 655
Thr Asp Glu Ala Leu Gly Arg Ala Ser Lys Val Gly Ile Lys Gly Tyr
            660                 665                 670
Met Thr Lys Pro Tyr Lys Leu Ser Asp Leu Glu Arg Leu Ile Val Glu
        675                 680                 685
Phe Cys Gly Glu Ala Thr Ser Pro Thr Leu Asp Arg Met Asn Ile
    690                 695                 700
```

<210> 35066
<211> 73
<212> PRT
<213> A.fumigatus

```
<400> 35066
Leu Ala Leu Leu Thr Gln Thr Leu Gly Thr Glu Thr Leu Cys Leu Arg
1               5                   10                  15
Gly Gly Trp Arg Met Thr Arg Arg Asp Phe Ser Tyr Phe Gln Ser Tyr
            20                  25                  30
Phe His Asp Pro Pro Met Thr Ile Cys Lys Lys Thr Thr Pro Arg Thr
        35                  40                  45
Asn Gln Ser Ala Leu Ser Arg Thr Gly Gln Ile His Leu Ser Ser Gln
    50                  55                  60
Ser Ala Gly Leu Asp Thr Arg Glu Gly
65                  70
```

<210> 35067
<211> 410
<212> PRT
<213> A.fumigatus

```
<400> 35067
Pro Thr Leu Gln Met Ser Lys Asp Val Thr Phe Ser Pro Val Ser Thr
```

```
1               5                  10                  15
Ile Ile Pro Arg Ser Pro Pro Asn Asp Pro Thr Asn Pro Tyr Ile Arg
            20                  25                  30
Arg Arg Arg Arg Gln Thr Asp Ser Ala Val Val Leu Lys Arg Thr Thr
        35                  40                  45
His Gly Pro Gln Arg Asp Gln His Pro Ile Leu Ala Arg Arg Ser Ile
    50                  55                  60
Ala Asn Pro Asp Trp Ala Ala Asp Ser Ile Pro Ser Ser Phe Ser Pro
65                  70                  75                  80
Thr Ile Ser Ser Val Ser Ser Arg Leu Ser Leu Thr Gly Ser Ser Ala
                85                  90                  95
Gly Pro Thr Lys Thr Glu Asp Ser Gln Lys Arg Arg Gln Thr Ala Arg
            100                 105                 110
His Asp Leu Asp Asp Arg Gln His Asn Gln Asp Ser Gly Tyr Lys Ser
        115                 120                 125
His Arg Asp Asp Gln Ser Ile Ala Arg Thr Lys Val Phe Ser Arg Gln
    130                 135                 140
Thr Ile Met Phe Ala Ala Ala Ser Arg Asp Thr Gly Arg Ala Ala Thr
145                 150                 155                 160
Leu Ile Ser Ala Gly Pro Ser Ala Ser Pro Ser Val Pro Gly Thr Thr
                165                 170                 175
Thr Thr Thr Pro Ala Asn Ser Thr Ser Ser Ser Ala Ser His Pro Tyr
            180                 185                 190
Pro Ser Ser Ala Ser Pro Pro Arg Leu Pro Gln Ser Arg Phe Ser Phe
        195                 200                 205
Glu Tyr Gln Pro Pro Arg His Lys Gln Ala Leu Pro Thr Ser Ala Ser
    210                 215                 220
Phe Pro Ser Glu Ile Pro Ser Asp Thr Asp Pro Thr Pro Asn Pro Gln
225                 230                 235                 240
Arg Ala Phe Leu Tyr Asp Arg Ser Arg Arg Ser Val Ser Thr Phe Ser
                245                 250                 255
Thr Ser Arg Val Arg Lys Ser Thr Ala Leu Ala Ser Pro Ser Gln Leu
            260                 265                 270
Pro Ser Pro Leu Ser Ile Ser Glu Lys Ser Ser Asp Leu Pro Leu Pro
        275                 280                 285
Phe Asp Ala Asn Ser Ile Asp Asn Ala Leu Ser Phe Asn Ala Ser Lys
    290                 295                 300
Arg Arg Arg Lys Gln Ser Leu Ser Gln Ser Gln Gln Glu Ser Gln Ala
305                 310                 315                 320
Asp Val Lys Arg Arg Met Pro Val Ser Thr Ala Thr Tyr Val Gln Gly
                325                 330                 335
Ser Pro Gln Ala Ser Asp Arg Asp Arg Ala Ile His Asp Leu Asp Gln
            340                 345                 350
Thr Asp Gln Glu Asp Gly Ala Arg Thr Pro Val Ala Glu Asp Ser Lys
        355                 360                 365
Ser Lys Asn Glu Asp Ile Phe Leu Asn Ile Ala Arg Ser Asp Ser Lys
    370                 375                 380
Arg Arg Asp Ser Leu Gly Arg Ser Glu His Arg Arg Val Ser Asp Asn
385                 390                 395                 400
Leu Cys Ser Thr Thr Ile Met Thr Leu Leu
                405                 410
```

<210> 35068
<211> 100
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (98),(99)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35068
Ser Arg Leu Gly Leu Ser Asn Gly His Leu Arg Ser Pro Asn Ser Arg
1 5 10 15
Leu Asn Glu Gln Thr Ser Ser Pro Gly Gln Leu Arg Leu Ser Thr Tyr
20 25 30
Asp Thr Pro Leu His Ser Leu Asn Asn Ser Pro Ser Asn Pro Tyr Ser
35 40 45
Ala Leu Pro Tyr Ser Tyr Ser Ala Ser Ala His Pro Leu Asp Asp His
50 55 60
Pro Arg Ser Arg His Ser Val Val Gly Ser Ser Ser Arg Ser Thr Leu
65 70 75 80
Gly Ile Ser Val Phe Thr Thr Gly Met Glu Glu Ser Thr Leu Asn Ala
85 90 95
Gln Xaa Xaa Arg
100

<210> 35069
<211> 208
<212> PRT
<213> A.fumigatus

<400> 35069
Arg Pro Ala Ser Thr Pro Pro Ile Pro Ala Arg Asn His Ser Pro Ala
1 5 10 15
Ile Leu Ile Leu Thr Phe Phe Pro Ser Leu Asp Glu Ala Phe Phe Phe
20 25 30
Phe Phe Phe Gly Ala Ser Thr Ser Thr Pro Asn Arg Ser Ser Gln Tyr
35 40 45
Ala Pro Thr Arg Leu Gly Ser Thr Pro Ser Thr Thr Gly Arg Ile Pro
50 55 60
Ala Ser Ala Pro Ser Pro Ala Cys Pro Ser Ala Cys Lys Thr Ala Tyr
65 70 75 80
Asn Ile Pro Ser Asn Thr Pro Thr Arg Ser Val His Ser Cys Thr Ala
85 90 95
Leu Pro Pro Pro Glu Arg Asn Arg Cys Leu Ser Met Ser Thr Trp Leu
100 105 110
Gly Arg Tyr Ala Cys Ser Lys Arg Val Thr Ser Ala Tyr Ala Val Arg
115 120 125
Ala Tyr Ser Asp Gly Glu Asn Val Cys Phe Ser Phe Ser Phe Leu Phe
130 135 140
Thr Phe Ala Phe Pro Val Ser Phe Asp Ala Phe Asp Ala Arg Pro Pro
145 150 155 160
Trp Ile Phe Pro Arg Glu Ser Gly Ala Arg Ser Ser Asn Ala Ser Glu
165 170 175
Thr Ala Ser Arg Arg His Ala Phe Ser Phe Thr Thr Val Pro Ala Val
180 185 190
Ala Val Trp Leu Ser Arg Gly Thr Arg Arg Cys Ala Tyr Ala Arg Phe
195 200 205

<210> 35070

<211> 142
<212> PRT
<213> A.fumigatus

<400> 35070
Cys Pro His Thr Val Arg Lys Pro Ile Glu Gly Leu Glu Ser Lys Met
1 5 10 15
Glu Ala Leu Ser Pro Arg Ser Thr Asn His Leu Ile Arg Pro Lys Ile
20 25 30
Ser Met Glu Arg Lys Val Leu Asp Lys Asn Ala Ala Ala Ala Ala Ala
35 40 45
Ala Gln Lys Ala Ala Ser Ser Lys Ile His Ala Pro Pro Pro Pro Ser
50 55 60
Leu Val Ile Glu Pro Ala Glu Gly Gly Glu Arg Tyr Ser Thr Gly Ala
65 70 75 80
Phe Leu Gly Lys Gly Gly Phe Ala Ile Cys Tyr Glu Gly Thr Leu Leu
85 90 95
Arg Asn Gly Arg Val Phe Ala Met Lys Val Val Arg Ser Glu Met Gly
100 105 110
Gln Lys Lys Met Gln Glu Lys Val Cys Leu Glu Ser His Leu Pro Thr
115 120 125
Leu Ala Cys Phe Tyr Gln Pro Gly Ser Asn Gln Asn Thr Leu
130 135 140

<210> 35071
<211> 148
<212> PRT
<213> A.fumigatus

<400> 35071
Phe Arg Thr Glu Leu Gln Ile His Ser Lys Met Arg His Pro His Ile
1 5 10 15
Val Glu Phe His Arg Ala Phe Ala Phe Asp Lys Cys Ile Tyr Val Val
20 25 30
Leu Glu Leu Cys Pro Asn Gly Ser Val Met Asp Met Val Arg Lys Arg
35 40 45
Lys Cys Leu Ser Leu Pro Glu Val Arg Arg Phe Met Ile Gln Leu Cys
50 55 60
Gly Ala Val Lys Tyr Leu His Lys Arg Ser Val Ala His Arg Asp Leu
65 70 75 80
Lys Met Gly Asn Leu Phe Leu Asp Arg Asn Met Asp Ile Lys Val Gly
85 90 95
Asp Phe Gly Leu Ala Ala Met Ile Ile Ser Glu Lys Asp Glu Lys Arg
100 105 110
Arg Lys Thr Leu Cys Gly Thr Pro Asn Tyr Ile Ala Pro Glu Val Leu
115 120 125
Asp Lys Ser Lys Gly Gly His Thr Gln Lys Val Asp Ile Trp Ser Leu
130 135 140
Gly Ile Ile Trp
145

<210> 35072
<211> 539
<212> PRT
<213> A.fumigatus

<400> 35072

```
Ser His Asp Thr Gln Arg Ala Pro Thr Asn Lys Tyr Phe Arg Ser Phe
1               5                  10                  15
Ala Met Leu Thr Gly Tyr Pro Pro Phe Gln Ser Lys Thr Gln Glu Glu
            20                  25                  30
Ile Tyr Lys Lys Val Arg Asn Leu Ser Tyr Val Trp Pro Ser Gly Thr
        35                  40                  45
Gln Cys Ala Asn His Ile Pro Asp Glu Ala Lys Ser Leu Val Ser Ser
    50                  55                  60
Cys Leu Asn Leu Ser Glu Asn Glu Arg Pro Asp Pro Asp Asp Ile Val
65                  70                  75                  80
Glu His Pro Phe Phe Asn Met Tyr Asp Gly Cys Ile Pro Arg Arg Leu
                85                  90                  95
Asp Pro Thr Cys Thr Val Ser Thr Pro Ile Trp Leu Arg Ser Asp Glu
            100                 105                 110
Pro Arg Gly Asp Arg Met Met Leu Gly His Ser Leu Glu Tyr Asp Glu
        115                 120                 125
Lys Leu Ala Gly Tyr Ile Glu Gln Val Asp Asp Pro Thr Gln Arg Tyr
    130                 135                 140
Leu Ile Cys Arg Thr Ala Phe Tyr Ser Leu Cys Gly Val Gly Arg Lys
145                 150                 155                 160
Pro Asp Gly Thr Val Arg Lys Cys Val Gly Lys Asn Cys Ser Lys Ser
                165                 170                 175
Ala Phe Ala Glu Cys Val Ser Glu Glu Glu Lys Gly Met Gln Pro Val
            180                 185                 190
Met Pro Leu Pro Glu Asp Met Val Tyr Arg Tyr Pro Ser Asp Pro Asp
        195                 200                 205
Gly Asp Trp Ser Thr Pro Ser Pro Gly Leu Ala Leu Ser Lys Asp Asp
    210                 215                 220
Ser Ser Leu Asp Gly Ile Arg Ser Ser Gly Lys Arg Thr Val Ser Met
225                 230                 235                 240
Arg Ser Asn Ser Thr Ser Leu Ser Arg Thr Gln Ala Ala Leu Ala Ala
                245                 250                 255
Ala Gln Gln Arg Arg Lys Glu Pro Gln Ser His Ala Ala Thr Leu Arg
            260                 265                 270
Gln Gln Ala Met Gly Ala Arg Ser Ser Val Arg Lys Ile Ala Ala Ile
        275                 280                 285
Cys Asp Pro Pro Ala Val Val Glu Pro Asp Ser Ala Ala Pro Val Met
    290                 295                 300
Pro Thr Gly Gly Leu Ala Glu Arg Pro Ile Arg Ala Arg Arg Gly Val
305                 310                 315                 320
Ala Val Ser Tyr Ser Gly Ser Thr Arg Asp Leu Asp Arg Arg Ile Val
                325                 330                 335
Pro Ser Thr Ser Asp Pro Gly Met Leu Thr Val Gly Lys Thr Arg Ser
            340                 345                 350
Gln Ser Arg Arg Leu Gly Ala Glu Ser Asn Glu Ala Arg Ser Ala Pro
        355                 360                 365
Ala Val Ile Lys Glu Arg Ser Val Ser Ser Ala Leu Asp Asn Leu Pro
    370                 375                 380
Thr Lys Leu Arg Gln Ser Ser Ala Arg Ser Val Ala Arg Glu Glu Ala
385                 390                 395                 400
Leu Gln Ser Ser Lys Arg His Glu Leu Glu Ala Glu Glu Glu Val Lys
                405                 410                 415
Ala Arg Glu Val Pro Ser Gly Asp Gly Arg Leu Arg Thr Glu Ala Ala
            420                 425                 430
Val Ser Arg Ser Ser Asn Lys Thr Ala Ser Thr Ser Ser Ser Lys Arg
```

```
        435                 440                 445
Ser Thr Leu Gly Leu Tyr Pro Leu Leu His Pro Asp Asp His Cys Glu
    450                 455                 460
Met Met Pro Arg Thr Ser Leu Glu Asp Val Asn Thr Asp Leu Arg Leu
465                 470                 475                 480
Met Leu Ser Asn Leu Val Pro Pro Val Ser Gly Arg Arg Arg Val Ser
                485                 490                 495
Ser Arg Arg Thr Pro His Ala Tyr Val Ile Lys Trp Val Asp Tyr Thr
            500                 505                 510
Ile Arg Tyr Gly Ile Gly Tyr Val Leu Asp Asp Gly Ser Val Gly Ser
        515                 520                 525
Ser Arg Arg Ala Gly Ser Lys Arg Ala Ala Gly
    530                 535
```

<210> 35073
<211> 61
<212> PRT
<213> A.fumigatus

<400> 35073

```
Lys Cys Leu Trp Leu Ser Val Ile Ile Asn Cys Ser Ser Ser Leu Asp
1               5                   10                  15
Val Tyr Ser Ile Gln Pro Leu Lys Cys Ile Glu Ser Cys Gln Asp Val
            20                  25                  30
Ser Asp Leu Glu Ala Leu Phe Ser Arg Asp Ser His Ser Ile Lys Ala
        35                  40                  45
Asp Arg Ser Met Leu Gln Pro Leu Asn Pro Ser Ile Ser
    50                  55                  60
```

<210> 35074
<211> 192
<212> PRT
<213> A.fumigatus

<400> 35074

```
Ala Ala Gly Thr Asp Asp Asn Asp Lys Pro Thr Pro Arg Ala Ile Arg
1               5                   10                  15
Glu Arg Leu Val Lys Met Arg Gln Ile Val Lys Ala Ser Gly Ser Gly
            20                  25                  30
Gly Phe Thr Ile Gly Gly Ser Asp Thr Ser Thr Pro Lys Lys Ala Lys
        35                  40                  45
Lys Thr Ala Thr Pro Val Glu Thr Pro Gly Ser Lys Arg Lys Arg Ser
    50                  55                  60
Gly Lys Ala Gly Thr Ser Ala Asp Asp Asn Glu Asn Ile Thr Pro Leu
65                  70                  75                  80
Lys Asn Glu Glu Asn Ala Thr Ser Leu Val Lys Met Glu Ala Ala Glu
                85                  90                  95
Asp Glu Ile Asp Thr Pro Thr Lys Lys Lys Pro Leu His Pro Thr Leu
            100                 105                 110
Ser Gly Asn Gln Val Gln Val Gln Ser Gly Phe Val Lys Thr Glu Glu
        115                 120                 125
Ser Asp Glu Ala Val Phe Gly Ile Leu Thr Thr Pro Thr Lys Arg Ser
    130                 135                 140
Arg Lys Ala Ser Val Leu Pro Ala Gly Met Val Asn Tyr Glu Asp Asp
145                 150                 155                 160
Glu Gln Gly Glu Asp Asp Pro Glu Ser Ser Ala Ser Glu Phe Leu Pro
```

```
                165                 170                 175
Asp Glu Ala Gly Val Lys Met Glu Asp Met Asp Thr Met Asn Tyr Ala
            180                 185                 190

<210> 35075
<211> 75
<212> PRT
<213> A.fumigatus

<400> 35075
Pro Arg Phe Arg Phe Arg Ser Leu Leu Ala Thr Ala His Ser Tyr Ser
1               5                   10                  15
Asn Thr Asp Lys Gln Pro Ser Ser Phe Arg Leu Val Ser Pro Leu Leu
            20                  25                  30
Leu Thr Thr Pro Ser Phe Ser Tyr Ser Thr Tyr Pro Thr Ser Ser Thr
        35                  40                  45
Ser Pro Pro Thr Lys Pro Tyr Val Asp Leu Ala Thr Thr Thr Leu Tyr
    50                  55                  60
Asn Gln His Ile Leu Leu Asn Leu Gln Lys Ile
65                  70                  75

<210> 35076
<211> 64
<212> PRT
<213> A.fumigatus

<400> 35076
Arg Leu Arg Thr Asp Pro Arg Ala Gly Ser Ala Thr Asn Gly Asp Ser
1               5                   10                  15
Ser Thr Leu Pro Thr Pro Glu Lys Arg Lys Arg Gly Cys Ala Lys Lys
            20                  25                  30
Asp Ala Asn Gly Asp Gly Ala Glu Lys Asp Lys Ala Ser Pro Lys Lys
        35                  40                  45
Ala Lys Lys Ala Lys Lys Glu Glu Asn Gly Ser Ala Val Asp Ser Ala
    50                  55                  60

<210> 35077
<211> 406
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (31),(41),(49)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35077
Ser Gln Gly Thr Ile Gln Gly Ser Pro Leu Thr Ser Gly Thr Ser Ser
1               5                   10                  15
Ser Pro Ile Gln Ser Leu Ile Ala Leu Ala Phe Thr Ile Ile Xaa Leu
            20                  25                  30
Ala Gln Pro Arg Pro Asp His Glu Xaa Met Gly Asp Glu Asp Ser Met
        35                  40                  45
Xaa Ser Cys Ser Glu Arg Gln Ala Tyr Gln Asp Val Pro Ile Ser Asn
    50                  55                  60
Gly Val Ser Leu Ser Gly Val Leu Pro Val Arg Arg Ser Pro Gly Gly
```

```
65                  70                  75                  80
His Ala Gly Asp Met Ile Gly Ser Ser Arg His Pro Ser Ala Arg Ser
                85                  90                  95
Val Gln Gln Ala Gln Ile Pro Gln Ser Lys Asn Phe Glu Ile Val Leu
            100                 105                 110
Val Thr Asp Asn Glu Ser Arg Arg Gln Val Arg Arg His Ala Met Arg
        115                 120                 125
Gln Tyr Met Arg Gln Arg Arg Leu Asp Ser Ile Ala Arg Leu Glu Thr
    130                 135                 140
Pro Arg Leu Pro Ile Gly Gly Trp Val Asn Arg Gln Val Leu Ser Glu
145                 150                 155                 160
Ala Ser Ser Ser Ser Ile Pro Pro Ser Pro Val Glu Ile Pro Val Lys
                165                 170                 175
Asp Thr Ser Pro Glu Glu Glu Lys Ser Ser Leu Val Lys Asp Gly Glu
            180                 185                 190
Pro Cys Thr Pro Val Ser Trp Thr Gly Pro Leu Met Pro Leu Ala Ser
        195                 200                 205
Lys Ser Ser Lys Val Lys Thr Glu Glu Pro Ser Ser Pro Ser Phe Pro
    210                 215                 220
Asn Val Ser Tyr Thr Leu Ser Asp Pro Arg Ser Ser Pro Gly His Gly
225                 230                 235                 240
Ala Val Glu Asp Pro Phe Ser Cys Tyr Pro Ile Pro Val Ser His Ser
                245                 250                 255
Asp His Glu Leu Ile Gln His Cys Lys Phe Phe Leu Gly Ser Pro Tyr
            260                 265                 270
Ser His Thr Asp His Ala Asp Leu Asp Thr Ser Ala Arg Gly Ala Ser
        275                 280                 285
Ala Arg Thr Ile Leu Ile Ser Leu Ser Gly Gly Leu His Cys Lys Val
    290                 295                 300
Ile Val Thr Tyr Pro Ser Met Met Asn Lys Phe Ala Asp Ser Val Ala
305                 310                 315                 320
Asn Asn Pro Met Met Glu Ile Phe Arg Gln Leu Ala Leu His Asp Asn
                325                 330                 335
Leu Ser Phe Gln Ala Met Leu Ala Ile Ala Ser Lys His Arg Ala Gly
            340                 345                 350
Val Glu Gly Lys Ala Asp Ser Val Gln Ser Leu Thr His Lys Met Arg
        355                 360                 365
Ala Leu Arg Leu Ile Asn Glu Arg Ile His Thr Asp Ser Gln Gly Leu
    370                 375                 380
Gln Asp Gly Thr Ile Tyr Ala Val Ala Thr Met Ala Val Ile Glu Val
385                 390                 395                 400
Ile Thr Phe Pro Met His
                405
```

<210> 35078
<211> 223
<212> PRT
<213> A.fumigatus

<400> 35078

```
Ile Val Pro Arg Asp Pro Ser Ser Pro Val Val Lys Thr Asn Arg Ala
1               5                   10                  15
Leu Glu Tyr Gly Asp Val Ile Lys Leu Val Gly Val Ala Arg Asn Leu
            20                  25                  30
Asp Asp Asn Thr Ala Leu Arg Lys Phe Lys Asn Trp Ala Glu Glu Ala
        35                  40                  45
```

```
His Asp Val Pro Leu Ile Ala Ile Asn Met Gly Gly Asn Gly Gln Leu
    50                  55                  60
Ser Arg Ile Leu Asn Gly Phe Met Thr Pro Val Ser His Pro Ala Leu
65                  70                  75                  80
Pro Phe Arg Ala Ala Pro Gly Gln Leu Ser Ala Thr Asp Ile Arg Lys
                85                  90                  95
Gly Leu Ser Leu Met Gly Glu Ile Lys Lys Lys Arg Phe Ala Leu Phe
            100                 105                 110
Gly Ser Pro Ile Ser Glu Ser Arg Ser Pro Ala Leu His Asn Thr Leu
        115                 120                 125
Phe Ala Glu Met Gly Leu Pro His Glu Tyr Thr Arg Leu Glu Thr Ala
    130                 135                 140
Asn Val Glu Asp Val Lys Asp Phe Ile Arg Ala Pro Asp Phe Gly Gly
145                 150                 155                 160
Ala Ser Val Thr Ile Pro Leu Lys Leu Asp Ile Met Pro Leu Leu Asp
                165                 170                 175
Glu Ile Thr Ala Glu Ala Glu Ile Ile Gly Ala Val Asn Thr Val Val
            180                 185                 190
Pro Val Ser Asp Gly Glu Gly Lys Pro Gln Arg Leu Val Gly His Asn
        195                 200                 205
Thr Glu Trp Gln Gly Met Phe Gln Ser Ile Arg Lys Arg Ala Pro
    210                 215                 220
```

<210> 35079
<211> 224
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (45),(46),(48)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35079

```
Gly Gln Ala Ala Ala Ala Gly Arg Ser Gln His Gly Met Ala Gly His
1               5                   10                  15
Val Pro Ile His Ser Lys Ala Gly Pro Leu Gly Thr Asp Val Ser Ala
            20                  25                  30
Ser Ala Phe Val Phe Val Gly Gly Gly Thr Ser Arg Xaa Xaa Ile Xaa
        35                  40                  45
Ala Leu His Gln Met Gly Phe Ser Pro Ile Asn Ile Val Gly Arg Asn
    50                  55                  60
Pro Ala Lys Leu Glu Ser Met Val Ser Thr Phe Pro Thr Ser Tyr Asn
65                  70                  75                  80
Ile Gln Ile Val Glu Gly Asn Glu Lys Leu Glu His Val Pro His Val
                85                  90                  95
Ala Ile Gly Thr Ile Pro Ala Asp Arg Pro Ile Asp Pro Gly Met Arg
            100                 105                 110
Glu Ile Leu Cys His Met Phe Glu Arg Ala Gln Glu Ala Asp Ala Asp
        115                 120                 125
Ala Ser Arg Thr Ile Glu Gly Ser Pro Arg Val Leu Leu Glu Met Ala
    130                 135                 140
Tyr Lys Pro Arg Val Thr Ala Leu Met Gln Leu Ala Val Asp Ala Gly
145                 150                 155                 160
Trp Thr Thr Ile Pro Gly Leu Glu Ala Leu Ile Gly Gln Gly Val His
                165                 170                 175
```

```
Gln Val Gly Leu Ile Asp Leu Leu Gln Met Asp Ile Thr Asp Gly Val
            180                 185                 190
Gln Phe Gln His Trp Thr Gly Ile Arg Pro Leu Tyr Glu Arg Ala Arg
        195                 200                 205
Val Cys Cys Asp Ile Leu Leu Ser Gly Arg Thr Met Leu Thr Cys Ser
    210                 215                 220
```

<210> 35080
<211> 157
<212> PRT
<213> A.fumigatus

<400> 35080

```
Pro Thr Ser Arg Cys Gly Leu Pro Ser Pro Ser Glu Thr Gly Thr Thr
1               5                   10                  15
Val Phe Thr Ala Pro Met Ile Ser Ala Ser Ala Val Ile Ser Ser Ser
            20                  25                  30
Arg Gly Met Ile Ser Ser Phe Arg Gly Ile Val Thr Glu Ala Pro Pro
        35                  40                  45
Lys Ser Gly Ala Arg Met Lys Ser Leu Thr Ser Ser Thr Leu Ala Val
    50                  55                  60
Ser Asn Arg Val Tyr Ser Trp Gly Ser Pro Ile Ser Ala Lys Arg Val
65                  70                  75                  80
Leu Cys Ser Ala Gly Glu Arg Asp Ser Glu Ile Gly Leu Pro Lys Arg
                85                  90                  95
Ala Lys Arg Phe Phe Leu Ile Ser Pro Ile Ser Asp Arg Pro Leu Arg
            100                 105                 110
Ile Ser Val Ala Asp Ser Trp Pro Gly Ala Ala Leu Asn Gly Arg Ala
        115                 120                 125
Gly Cys Asp Thr Gly Val Met Asn Pro Phe Lys Met Arg Leu Ser Cys
    130                 135                 140
Pro Leu Pro Pro Met Leu Ile Ala Ile Ser Gly Thr Ser
145                 150                 155
```

<210> 35081
<211> 233
<212> PRT
<213> A.fumigatus

<400> 35081

```
Pro Ser Ser Pro Phe Thr Arg Lys Arg Lys Arg Ile Thr Asn Ser Leu
1               5                   10                  15
Ser Pro Ser Arg Glu Asp Pro Arg Thr Ala Ser Arg Pro Ala Ala Ala
            20                  25                  30
Leu Ser Ala Glu Lys Ser Tyr Ser Gly Arg Ser Glu Tyr Leu Ser Gly
        35                  40                  45
Ser Val Pro Phe Asp Glu Thr Leu Val Gln Ser Gly His Asp Ala Leu
    50                  55                  60
Asp Thr Asp Asn His Glu Asp Met Gln Leu Phe Gln His Gln Arg Val
65                  70                  75                  80
Phe Asp Leu Pro Pro Lys Pro Val Gln Arg His Leu Ile Asp Cys Phe
                85                  90                  95
Met Arg Tyr Cys Ala Pro Trp Thr Pro Ile Ile Asp Pro Gln Trp Leu
            100                 105                 110
Thr Ala Glu Thr Pro Ser Pro Leu Leu Leu Gln Ala Val Leu Leu Ala
        115                 120                 125
```

```
Gly Ser Arg Val Ser Ala Pro Ser Ala Asp Val Ser Ser Lys Asp Phe
    130                 135                 140
Tyr Arg Lys Ala Lys Leu Leu Tyr Phe Phe Gly Ser Gly Asn Asn Ser
145                 150                 155                 160
Leu Ile Ser Ile Val Ser Ala Cys Leu Leu His Trp Tyr Asn Pro Val
                165                 170                 175
Gly Pro Glu Lys Val Ser Thr Asp Thr Ser Gly Phe Trp Ile Arg Thr
            180                 185                 190
Ala Gly Ala Met Ala Phe Gln Ile Gly Leu His Lys Glu Pro Ala Ala
        195                 200                 205
His Ala Lys Asp Arg Gly Leu Arg Arg Arg Leu Trp Trp Ala Leu Val
    210                 215                 220
Val Trp Thr Asp Pro Ile Arg Arg His
225                 230
```

<210> 35082
<211> 133
<212> PRT
<213> A.fumigatus

```
<400> 35082
Gln Leu Arg Gln Ser Lys Gly Arg Val Pro Val Ser Leu Ser Ile Val
1               5                   10                  15
Arg Ser Ser Ser Thr Asp Pro Ala Ala Arg Ser Pro Ala Asn Gly Arg
            20                  25                  30
Glu Ser Pro Thr Ala Cys Pro Pro Pro Gly Arg Thr Arg Ala Pro His
        35                  40                  45
Pro Gly Pro Pro Leu Pro Ser Pro Leu Arg Arg Ala Thr Ala Ala Ala
    50                  55                  60
Ala Ser Ile Ser Ala Ala Val Ser Pro Leu Thr Arg Pro Trp Ser Ser
65                  70                  75                  80
Pro Ala Thr Met Pro Ser Thr Pro Thr Ile Thr Arg Thr Cys Ser Cys
                85                  90                  95
Ser Ser Thr Ser Glu Tyr Leu Ile Ser Arg Arg Ser Pro Ser Ser Gly
            100                 105                 110
Thr Ser Ser Thr Ala Ser Cys Gly Thr Val Arg His Gly Arg Arg Ser
        115                 120                 125
Ser Thr His Ser Gly
    130
```

<210> 35083
<211> 303
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (249)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 35083
Leu Tyr Thr Leu Ser Ser Asp Pro Ser Ala Ala Val Ala Glu Asp Met
1               5                   10                  15
His Pro Gly Thr Phe Ser Ile Leu Phe Arg Asn Asp His Phe Ser Thr
            20                  25                  30
Val Tyr Lys His Pro Gln Arg His Gln Leu Phe Thr Leu Val Thr Asp
```

```
        35                  40                  45
Ala Gly Tyr Ser Asn His Ala Glu Ile Val Trp Glu Cys Leu Val Asp
    50                  55                  60
Val Asn Gly Phe Asn Ala Glu Phe Phe Ser Gly Asp Phe Arg Pro Ile
65                  70                  75                  80
Gly His Ala Pro Pro Gly Thr Val Pro Ser Gly Pro Arg Asn Ser Asn
                85                  90                  95
Asn Gln Thr Asn Val Pro Pro Ser Thr Ser Glu Asp Arg Thr Ser Glu
            100                 105                 110
Leu Ser Pro Gln Glu Gln Ala Asp Ala Asp Tyr Ala Tyr Ala Leu Ser
        115                 120                 125
Leu Gln Tyr Gln Glu Glu Glu Arg Arg Glu Arg Glu Ser Asn Asn Arg
    130                 135                 140
Ser Arg Asn Gln Arg Ala Ser Ala Pro Asn His Pro Pro Gly Ala Phe
145                 150                 155                 160
Trp Gly Ser Gly Ser Ala His Gln Arg Ser Ala Ser Val Ala Asn Gly
                165                 170                 175
Ser Gly Ser Gly Pro Thr Ser Asp Gly Arg Ser Ser Arg His Gly His
            180                 185                 190
Asp Pro Gly Ala Ser Asn Asn Ala Glu Asp Leu Pro Pro Pro Ser Tyr
        195                 200                 205
Glu Gln Ala Ala Thr Ser Pro Ala His Pro Pro Arg Asp Ser His Tyr
    210                 215                 220
Asn Thr Leu Pro Gln Gln Thr Arg Tyr Gln Arg His Ser Leu Gly Arg
225                 230                 235                 240
Arg Ile Arg Pro Arg Tyr Cys Arg Xaa Arg Leu Arg Arg Ser Gly Gln
                245                 250                 255
Gly Ser Lys Gln Arg Leu Cys Gly His Val Val Pro Thr Val Tyr Tyr
            260                 265                 270
Leu Thr Ser Asn Pro Arg Ala His Ser Arg Ala Ser His Val Trp Cys
        275                 280                 285
Ile Pro Arg Thr Leu Ser Ile Phe Gly Asn Ala Ser Cys Cys Phe
    290                 295                 300
```

<210> 35084
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35084

```
His Leu Val Thr Trp Ala Tyr His Phe Thr Gly Asp Ser Pro Asp Trp
1               5                   10                  15
Thr Val Asp Pro Ala Trp Leu Gln Arg Val Ser Asp Val Leu Asp Met
            20                  25                  30
Ile Thr Ser Arg Gly Leu Tyr Ala Ile Val Asn Val His His Gly Lys
        35                  40                  45
Ile Cys Phe Ser Glu Ile Val Pro Val Ile Lys Asp
    50                  55                  60
```

<210> 35085
<211> 112
<212> PRT
<213> A.fumigatus

<400> 35085

```
Glu Phe Cys Gln Phe Met Gln Asn Gln Ala Met Lys Gly Leu Arg Val
```

```
1               5                   10                  15
Ala Ala Leu Val Ala Leu Phe Arg Ser Ala Trp Ala Gln Ala Gly Asn
            20                  25                  30
Cys Pro Gly Thr Phe Thr Ser Ile Ser Ala Ala Asp Phe Val Ser Arg
        35                  40                  45
Val His Pro Gly Trp Asn Leu Gly Asn Thr Leu Asp Ala Val Pro Asn
    50                  55                  60
Glu Gly Ser Trp Asn Asn Ala Pro Val Gln Ala Ser Thr Phe Asp Thr
65                  70                  75                  80
Val Lys Ser Ala Gly Phe Asn Ser Val Arg Leu Pro Gly Glu Phe His
                85                  90                  95
Ser Val Leu His Ala Ser Thr Thr Ala Lys Pro Val Ala Asp Asn Ile
            100                 105                 110
```

<210> 35086
<211> 135
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (135)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35086

```
Glu Ile Asp Ser Trp Ile Trp Ala Asp Val Thr Gln Ser Gly Ala Asn
1               5                   10                  15
Leu Thr Met Ile Glu Glu Lys Phe Tyr Arg Leu Trp Tyr Gln Ile Gly
            20                  25                  30
Thr Lys Leu Gly Cys Lys Ser Asn Met Val Ala Phe Glu Ser Ile Asn
        35                  40                  45
Glu Pro Pro Val Asn Asn Ala Gln Asp Ala Ala Glu Leu Asn Lys Leu
    50                  55                  60
Asn Glu Ile Phe Leu Gln Ala Ile Asn Lys Ala Gly Gly Phe Asn Ser
65                  70                  75                  80
Lys Arg Val Val Asn Leu Val Gly Gly Gly Gln Asp Ser Ile Lys Thr
                85                  90                  95
Ser Gln Trp Phe Lys Ala Pro Thr Gly Phe Ser Asn Pro Tyr Ala Ile
            100                 105                 110
Gln Phe His Tyr Tyr Ser Pro Cys Asn Leu His His Glu Ala Pro Gly
        115                 120                 125
Pro Arg Ser Gly Tyr Ala Xaa
    130                 135
```

<210> 35087
<211> 67
<212> PRT
<213> A.fumigatus

<400> 35087

```
Thr Arg Glu Leu Lys Asn Ser Glu Ser Val Ile Tyr His Ser Val Asn
1               5                   10                  15
Val Gln Thr Cys Gln Ser Arg Gly Ile Tyr Ile Lys Tyr Ile Ala Ser
            20                  25                  30
Tyr Arg Ile Val Val Lys Ser Ser Met Lys Arg Cys Arg Lys Leu Ile
        35                  40                  45
```

```
Gly Phe Val Val Cys Thr Ile Arg Gly Leu Pro Cys Tyr Val Pro Ser
    50                  55                  60
Asp Tyr Leu
65
```

<210> 35088
<211> 733
<212> PRT
<213> A.fumigatus

<400> 35088

```
Pro Gly Leu Ser Pro Thr Ala Ser Arg Val Ala Arg Ala Val Asp Glu
1               5                  10                  15
Lys Val Leu Lys Thr Ser Ile Asp Leu Thr Ala Pro Glu Gly Val Thr
            20                  25                  30
Ala Pro Leu Ile Val Lys Leu Ala Gln Ser Gly Gly Leu Ala Asp Ile
        35                  40                  45
Glu Met Leu Ile Glu Ser Gly His Gly Val Asp Ala Arg His Leu Ser
    50                  55                  60
Thr Arg Arg Thr Ala Leu Leu Val Ala Ala His Cys Gly Asn Glu Ala
65                  70                  75                  80
Val Val Asn Leu Leu Ile Gln Lys Asn Ala Arg Leu Asp Ala Val Asp
                85                  90                  95
Ala Trp Gly Ser Thr Ala Leu His Leu Ala Ala Ser Arg Gly His Cys
            100                 105                 110
Asp Val Ile Gln Leu Leu Leu Leu Glu Pro Leu Asp Arg Glu Ala Arg
        115                 120                 125
Asp Ala Gln Gly Arg Thr Ala Leu Trp Leu Ala Ala Gly Arg Gly Gln
    130                 135                 140
Leu Glu Ala Thr Arg Leu Leu Val Ala His His Ala Lys Val Asn Val
145                 150                 155                 160
Arg Ala Glu Asn His Thr Thr Pro Leu His Ala Ala Ala Lys Arg Gly
                165                 170                 175
Asp Glu Glu Met Val Glu Leu Leu Ile Ser Cys Gly Ala Asp Leu Glu
            180                 185                 190
Ala Arg Asp Gly Ala Met Met Thr Ala Leu His Tyr Ala Cys Glu Glu
        195                 200                 205
Gly His Leu Gly Val Met Lys Leu Leu Leu Asp Asn Arg Ala Asn Ile
    210                 215                 220
Asn Val Pro Gly Ser Asp Arg Arg Thr Pro Leu Ile Cys Ser Ala Ala
225                 230                 235                 240
Met Gly Arg Cys Pro Val Ala Gln Glu Leu Leu Lys Arg Lys Ala Ser
                245                 250                 255
Ala His Cys Val Asp Asp Ala Ser Met Thr Ala Val His Trp Ala Ala
            260                 265                 270
Phe Asn Gly His Ile Glu Ile Val Asp Leu Leu Ser Gln Lys Lys Gly
        275                 280                 285
Val Leu Thr Ala Thr Asn Lys Leu Gly Arg Thr Ala Leu His Leu Ala
    290                 295                 300
Ala Met Asn Ser Arg Phe Ala Val Ile Glu Leu Leu Val Arg Lys Gly
305                 310                 315                 320
Val Pro Val Asp Ala Arg Cys His Asp Gly Leu Thr Pro Leu His Tyr
                325                 330                 335
Ala Cys Leu Ala Asn Ser Leu Glu Ile Ala Arg Leu Leu Leu Ile Ser
            340                 345                 350
Ser Ala Asn Ile Glu Ala Gln Thr Glu Ile Asn Lys Gln Arg Pro Ile
```

```
        355                 360                 365
His Ile Ala Ala Ala Arg Gly Ser Met Asn Ile Leu Asn Leu Leu Cys
    370                 375                 380
Asp Lys Gly Ala Ser Leu Glu Ala Arg Asp Ala Lys Gly Asp Arg Ala
385                 390                 395                 400
Leu Gly Val Ala Ser Arg His Gly His Ala Ala Ala Val Gln Asn Leu
                405                 410                 415
Leu Glu Arg Gly Cys Pro Leu Tyr Leu Ala Tyr Glu Thr Arg Pro Gln
            420                 425                 430
Glu Asp Ser Pro Leu Cys Leu Ala Ala Met Gly Gly His Leu Pro Val
        435                 440                 445
Val Ser Leu Leu Leu Gln His Gly Ala Ser Val Val Arg Arg Asp Glu
    450                 455                 460
Ser Gly Trp Gln Pro His His Tyr Ala Ala Tyr Tyr Gly His Pro Asp
465                 470                 475                 480
Val Leu Ala Leu Leu Leu His His Gly Pro Ala Ser Ala Asn Asp Gly
                485                 490                 495
Thr Arg Phe Gly Leu Asp Ala Ala Gly Ile Gly Phe Ala Pro His Ala
            500                 505                 510
Ile Ile Ser Glu Glu Arg Lys Ala Gln Val Arg Gln Leu Leu Asn Gln
        515                 520                 525
Asp Ser Gly Gln Phe Val Ala Gln Thr Gln Ile Pro Ala Phe Gln Pro
    530                 535                 540
Pro Gln Ala Ile Gly Glu Thr Leu His Asn Arg Thr Ile Ala Pro Gln
545                 550                 555                 560
Leu Pro Leu Thr Thr Arg Ser Leu Glu Pro Cys Ala Glu Pro Ser Ala
                565                 570                 575
Met Ala Pro Gln Glu Leu Pro Val Thr Leu Glu Gln Gly Leu Pro Pro
            580                 585                 590
Ser Arg Ser Val Thr Pro Glu His Met Arg Gly Gly Arg Arg Thr Ser
        595                 600                 605
Ile Gly Leu Arg Ser Ser Ser Ser Gln Ser Arg Gln Phe Glu Ala Ala
    610                 615                 620
Val Gln Ser Ser Ser Ser Gly Thr Ala Pro Arg Gln Pro Glu Pro Ser
625                 630                 635                 640
Leu Ser His Thr Gly Ser Thr Ser Glu Pro Trp Phe Asp Tyr Ser Leu
                645                 650                 655
Pro Tyr Trp Arg Gly Ser Pro Val Ser Thr Val His Glu Thr Gly Thr
            660                 665                 670
Glu Val Glu Val Leu Ala Pro Gln Pro Gly Arg Gly Thr Val Ser Lys
        675                 680                 685
Leu Pro Leu Leu Ser Thr Phe Asn Pro Val Asp Pro Val Cys Glu Pro
    690                 695                 700
Thr Gly Ile Met Asn Ser Asp Ser Glu Ser Ser Ser Ser Val Tyr Thr
705                 710                 715                 720
Ala Arg Glu Lys Ser Val Val Met Asn Arg Val Cys Met
                725                 730
```

<210> 35089
<211> 268
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (244),(250),(255)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35089

```
Gln Ala Ile Phe Ser Ile Leu Asp His Ser Leu Arg Arg Asn Ala Asp
1               5                  10                  15
Gln Glu Arg Val Ile Gly Thr Leu Leu Gly Thr Arg Ser Glu Asp Gly
            20                  25                  30
Thr Glu Val Glu Ile Arg Ser Thr Phe Ala Val Gly His Thr Glu Thr
        35                  40                  45
Thr Asp Gln Val Glu Val Asp Met Glu Tyr Gln Lys Gln Met Leu Ala
    50                  55                  60
Leu His Leu Lys Ala Asn Pro Lys Glu Val Leu Val Gly Trp Tyr Ala
65                  70                  75                  80
Thr Ser Ser Glu Leu Asn Thr Phe Ser Ala Leu Ile Gln Asn Phe Tyr
                85                  90                  95
Ser Gly Gln Gly Asp Gly Thr Trp Pro His Pro Ala Val His Leu Thr
            100                 105                 110
Val Ser Thr Glu Pro Gly Lys Asp Ile Glu Thr Arg Ala Tyr Ile Ser
        115                 120                 125
Ala Pro Val Gly Val Thr Ala Glu Arg Ala Ala Asp Ser Ala Ala Phe
    130                 135                 140
Ile Pro Val Pro Tyr Glu Ile Arg Tyr Gly Glu Ala Glu Lys Ser Gly
145                 150                 155                 160
Leu Glu Ala Ile Ala Ser Ala Lys Asp Ala Glu Ser Arg Ala Thr Asn
                165                 170                 175
Ile Phe Thr Asp Ile Glu Ala Leu Glu Arg Ala Ile Glu Glu Val Leu
            180                 185                 190
Gly Met Ile Asp Arg Val Ser Arg Tyr Val Glu Ser Val Ile Asp Glu
        195                 200                 205
Glu Ala Pro Ala Ser Thr Ala Leu Gly Gln Phe Leu Leu Asn Ala Leu
    210                 215                 220
Ala Leu Ala Pro Lys Val Glu Pro Ala Asp Ile Glu Arg Asp Leu Tyr
225                 230                 235                 240
Val Phe Ser Xaa Gly Leu Leu Leu Phe Xaa Leu Val Cys Phe Xaa Pro
                245                 250                 255
Arg Gly Arg Lys Asp Pro Arg Tyr Ala Tyr Arg Glu
            260                 265
```

<210> 35090
<211> 65
<212> PRT
<213> A.fumigatus

<400> 35090

```
Ala Gly Gly Arg Ile Arg Lys Glu Lys Asp Tyr Arg Ala Ile Pro Thr
1               5                  10                  15
Thr Gly Glu Glu Ala Phe Lys Thr Val Arg Glu Pro Gly Phe Gly Ile
            20                  25                  30
Phe Phe Thr Ser Ser Thr Trp Leu Lys Pro Ile Leu Ser Phe Thr Leu
        35                  40                  45
Leu Ala Leu Trp Ala Gln Trp Gln Trp Gly Leu His Gln Pro Pro Pro
    50                  55                  60
Leu
65
```

<210> 35091

<211> 193
<212> PRT
<213> A.fumigatus

<400> 35091
Leu Lys Lys Lys Leu Cys Gly Pro Ala Thr Glu Arg Ile Pro Glu Ile
1 5 10 15
Ser Gly Asp Ala Gln His Ile Ala Pro Tyr Ile Phe Asn Tyr Gln Asp
20 25 30
Val Leu Tyr Gly Ala Arg Thr Thr Ser Asn Ser Ser Ala Met Arg Asp
35 40 45
Ile Leu Ala Val His Ala Val Asn His Ile Leu Lys Thr Arg Asp Arg
50 55 60
Val Leu Lys Asn Asn Ser Arg Ile Ala Lys Glu Gln Asp Ala Asp Leu
65 70 75 80
Asp Leu Arg Asp Gln Gly Phe Thr Arg Pro Lys Val Leu Tyr Leu Leu
85 90 95
Pro Thr Arg Gln Ala Cys Val Arg Ala Val Glu Ser Ile Thr Arg Phe
100 105 110
Phe Gln Pro Glu Gln Gln Glu Asn Lys Lys Arg Phe Leu Asp Ser Phe
115 120 125
Ser Ala Ala Asp Asp Lys Ser Trp Glu Asn Lys Pro Glu Asp Phe Arg
130 135 140
Glu Leu Phe Gly Gly Asn Asp Asp Asp Met Phe Arg Leu Gly Leu Lys
145 150 155 160
Phe Thr Arg Lys Thr Met Lys Tyr Phe Ser Gln Phe Tyr Asn Ser Asp
165 170 175
Ile Ile Leu Ala Ser Pro Leu Gly Leu Arg Thr Ile Met Asp Gln Ala
180 185 190
Glu

<210> 35092
<211> 162
<212> PRT
<213> A.fumigatus

<400> 35092
Ile Thr Arg Asn Ser Ser Ile Arg Pro Glu Asp His Ser Asp Asn Glu
1 5 10 15
Ser His Leu Asn His Glu Pro Ala Gly Asp Glu Met Asp His Glu Thr
20 25 30
Gln Met Asp Asp Val Leu Ser Asp Ser Asp Asp Asp Glu Asp Gln Gln
35 40 45
Thr Ala Arg Pro Tyr Asn Glu Leu Ile Gln Leu Leu Gln Val Asn Thr
50 55 60
Glu Pro Lys Gly Pro Thr Arg Lys Arg Arg Lys Val Glu Tyr Asn Gly
65 70 75 80
Gly Glu Lys Arg Asp Phe Val Pro Ala Ala Asn Gly Glu Glu Val Asp
85 90 95
Ala Ala Leu Gln Gly Asp Asp Asp Leu Gln Glu Gln Glu Pro Ser Asp
100 105 110
Glu Glu Glu Glu Asp His Pro Glu Glu Ala Asp Gly Asn His Gly Ser
115 120 125
Asp Asp Glu Glu Asp Gly Thr Val Arg Thr Asp Pro Pro Leu Phe Ile
130 135 140

```
Phe Ile Ser Asn Ala Val Gln Gln Thr Thr Leu Leu Arg Leu Ile Ser
145                 150                 155                 160
Arg Pro


<210> 35093
<211> 230
<212> PRT
<213> A.fumigatus

<400> 35093
Leu Pro Ser Ser Val Lys Lys Arg Asp His Asp Phe Leu Ser Ser Val
1               5                  10                  15
Glu Leu Val Ile Val Asp His Ala Asp Ala Leu Leu Met Gln Asn Trp
            20                  25                  30
Asp His Val Gly Tyr Ile Leu Asp Arg Leu Asn Leu Gln Pro Lys Glu
        35                  40                  45
Ala His Gly Cys Asp Phe Ser Arg Val Arg Thr Trp Tyr Leu Asp Asn
    50                  55                  60
His Ala Arg Phe Val Arg Gln Met Ile Val Ser Ala Ser Phe Ile Thr
65                  70                  75                  80
Pro Glu Ile Asn Ser Leu Phe Ser Thr His Met Gln Asn Phe Ala Gly
                85                  90                  95
Lys Val Lys Val Thr Pro Val Tyr Val Gly Ala Ile Ser Glu Val Pro
            100                 105                 110
Leu Pro Val Ser Val Lys Gln Thr Phe Ser Arg Phe Asp Ser Leu Thr
        115                 120                 125
Pro Thr Lys Asp Pro Asp Ala Arg Phe Lys His Phe Thr Thr Thr Val
    130                 135                 140
Leu Ser Ser Leu Val Arg Asn Ile Thr Ser Ser Arg Asp Lys Ser Ser
145                 150                 155                 160
Ala Gly Gly Thr Leu Ile Phe Ile Pro Ser Tyr Leu Asp Phe Val Arg
                165                 170                 175
Val Arg Asn Tyr Phe Ala Thr Ser Ser Gln Thr Thr Asn Val Ser Phe
            180                 185                 190
Gly Ala Ile Ser Glu Tyr Ser Glu Val Arg Glu Met Thr Arg Ala Arg
        195                 200                 205
Thr His Phe Met Asn Gly Arg His Ala Val Arg Leu Thr Arg Pro Gly
    210                 215                 220
Leu Glu Arg Asn Ala Leu
225                 230

<210> 35094
<211> 192
<212> PRT
<213> A.fumigatus

<400> 35094
Lys Arg Leu Ile Tyr Ile Lys Arg Cys Ser Arg Gln Ile Lys Leu Glu
1               5                  10                  15
Asn Leu Arg Pro Leu Val Gln Leu Thr Phe Ile Ile Thr Cys Arg Asn
            20                  25                  30
Arg Arg Asn Ser Met Ala Ala Ile Asn Pro Ile Pro Pro Ser Ala Arg
        35                  40                  45
Pro Arg Ile Arg Glu Leu Leu Pro Asn Leu Tyr Leu Gly Arg His Arg
    50                  55                  60
```

```
Pro Gly Thr Lys Asn Ser Leu Thr Asp Val Pro Gly Val Leu Val His
65                  70                  75                  80
Thr Glu Ser Ile Lys Arg Pro Phe Thr Ala Thr Ser His Ala Val Asn
                85                  90                  95
Thr Gly Val Thr Thr Ile Leu Pro Arg Arg Asp Trp Phe Asp Ser Gly
            100                 105                 110
Cys Tyr Ala Gly Tyr Phe Arg Phe Asn Gly Ser Gly Glu Met Thr Gly
        115                 120                 125
Ser His Trp Leu Asp Glu Thr Gly Leu Leu Asn Ser Pro Ile Ile Leu
    130                 135                 140
Thr Asn Ser Phe Ser Val Gly Ala Cys Tyr Thr Gly Val Tyr Glu Tyr
145                 150                 155                 160
Ala Val Arg Glu Tyr Lys Asp Pro Ala Thr Gly Leu Val Asp Trp Phe
                165                 170                 175
Leu Leu Pro Val Val Ala Glu Thr Cys Asp Leu Phe Val Phe Thr Asp
            180                 185                 190
```

<210> 35095
<211> 568
<212> PRT
<213> A.fumigatus

<400> 35095

```
Gln Gln Ala Leu Pro Arg Cys Val Asn Pro Glu Gly Ile Phe Trp Thr
1               5                   10                  15
Ala Leu Trp Tyr Val Pro Thr Ser Ala Pro Ser Phe Leu Val Cys Ala
            20                  25                  30
His Cys Tyr Glu Lys His Ile Gln Pro Thr Pro His Ala Gly Leu Phe
        35                  40                  45
Glu Ala Val Trp Val Asp Glu Gly Asp Thr Ala Leu Leu Cys Gln Trp
    50                  55                  60
Asn Thr Pro Arg Val Met Ala His Leu Ala Ala Gly Asp Trp Asp Ala
65                  70                  75                  80
Ile Lys Ala Phe Met Ile Glu Arg Val Asn Leu Pro Asn Cys Lys Gly
                85                  90                  95
Pro Ala Gly His Thr Gly Leu Asp Gly Ser Arg Trp Tyr Arg Met Ile
            100                 105                 110
Gly Ala Trp Glu Ile Gln Gly Phe Val Ile Cys Glu Thr Cys Tyr Gln
        115                 120                 125
Glu Leu Val Ala Trp Asn Gln Leu Lys Ser Tyr Phe Ala Thr Thr Pro
    130                 135                 140
Thr Ile Lys Ser Asp Glu His Leu Trp Thr Cys Asp Ala Ala Val Val
145                 150                 155                 160
Pro Leu Ile Lys Glu Gly Leu Arg Arg Ala Ile Ala Ser Pro His Arg
                165                 170                 175
Trp Asp Glu Leu His Arg Leu Phe Arg Arg Arg Met Glu Tyr Pro Ser
            180                 185                 190
Cys Leu Glu Thr Lys Asn Leu Leu Ala Gly Ser Thr Tyr Trp Tyr Ala
        195                 200                 205
Cys Lys Ala Val Pro Asp Leu Val Val Cys Thr Ala Cys Tyr Leu Asp
    210                 215                 220
His Phe Val Leu Asp Tyr Ala Ser Ser Trp Glu Leu His Pro Leu Thr
225                 230                 235                 240
Pro Glu Gln Gln Gln Gln Arg Phe Glu Cys Gly Met Gln Thr Leu Gln
                245                 250                 255
Ile Tyr Ala Ala Leu Gly Val Cys Lys Gln Ile Gly Ile Ala Ala Asn
```

```
            260                 265                 270
Thr Asp Glu Tyr Asp Gly Phe Glu Thr Leu Ala Arg Met Ile Leu Glu
        275                 280                 285
Ser Pro Pro Cys Asn Ala Glu Asp Met Arg Asn Ala Thr Trp Tyr Ala
    290                 295                 300
Pro Lys Asp Cys Thr Val Asp Val Tyr Ala Ile Cys Arg Arg Cys Leu
305                 310                 315                 320
Leu Gly Phe Met Ala Pro Pro Gly Phe Ala Arg Glu Phe Lys Glu Val
                325                 330                 335
Glu Ser Arg Arg Gly Gly Asn Trp Leu Cys Asp Leu His Pro Thr Thr
            340                 345                 350
Pro Arg Phe Arg Lys Tyr Leu Ala Lys Tyr Ala Ala Ala Val Lys Leu
        355                 360                 365
Glu Asp Phe Ser Ile Phe Ser Lys Tyr Val Val Glu Trp Thr Pro Tyr
    370                 375                 380
Pro Glu Cys Pro Arg Asn Glu Ala Cys Thr Asn Arg Lys Trp Tyr Gly
385                 390                 395                 400
Glu Gly Arg Phe Thr Ala Cys Glu Leu Cys Tyr Lys Glu Ala Met Glu
                405                 410                 415
Gly Ala Ser Leu Ala Ser Arg Leu Asp Cys Ala Leu Val Pro Asn Glu
            420                 425                 430
Ala Arg Cys Gln Met Tyr Ser Arg Arg Met Arg Asn Leu Trp Arg Gln
        435                 440                 445
Ala Cys Glu Asn Asn Asp Leu Asp Ser Phe Leu Ala Leu Ala Asn Glu
    450                 455                 460
Arg Met Asp Ala Phe Leu Leu Met Asn Met Glu Lys Glu Arg Gln Leu
465                 470                 475                 480
Ala Glu Met Ser Ile Arg Met Ser Gln Arg Asn Thr Leu Leu Leu Ala
                485                 490                 495
Ser Ser Met Asn Thr Gly Ile Asp Gly Ile Val Ser Ala Ala Arg Gly
            500                 505                 510
Asp Asn Gly Thr Arg Trp Gly Asn Ser Ser Ile Gly Tyr Ile Trp Gln
        515                 520                 525
Thr Ser Ala Gly Ala Glu Gly Arg Leu Gln Phe Asp Gln Ala Met Gly
    530                 535                 540
Met Asn Val Val Pro Ala Ser Ser Asp Leu Ala Arg Met Ala Pro Val
545                 550                 555                 560
Met Gln Arg Trp Ala Glu Leu Glu
                565
```

<210> 35096
<211> 84
<212> PRT
<213> A.fumigatus

<400> 35096

```
Thr Ile Thr Lys Tyr Ser Ile Arg Tyr Ile Ser Thr Thr Glu Ser Ile
1               5                   10                  15
Lys Pro Pro Ser Asn Pro Gly Gln Ile His Thr Asn Leu Thr Asn Ala
            20                  25                  30
Leu Asn Thr Phe Gly Pro Ser Ser Gln Gln Tyr Gln Asn Ile Leu Lys
        35                  40                  45
Ile Leu Lys Glu Cys Leu Gln Asn Ile Asp Asn Asp Lys Lys Glu Arg
    50                  55                  60
Pro Ala Ala Ile Asp Pro Asp Thr Leu Ser Leu Ala Met Lys Phe Leu
65                  70                  75                  80
```

Glu Leu Gly Arg

<210> 35097
<211> 247
<212> PRT
<213> A.fumigatus

<400> 35097
Ile His Tyr Ser Leu Ala Asp Pro Ser Gln Ser Ser Leu Pro Lys Arg
1 5 10 15
Gly Glu Lys Asp Phe Glu Pro Asn Pro Thr Glu Phe Gln Ala Asp Val
20 25 30
Leu Ala Ala Ser Arg Arg Ala Met His Asn Ala Leu Ser Tyr Pro Arg
35 40 45
Leu His His Pro Lys His Arg Ile Val Gly Val Tyr Ala Pro Asp Gly
50 55 60
Pro Ala Ala Pro Ser Ile Ala Pro Val Thr Glu Gly Glu Thr Gln Asn
65 70 75 80
Thr Glu Leu Lys Ser Gly Lys Ala Arg Gly Thr Lys Leu Gly Val His
85 90 95
Gln Asp Ala Cys Val Tyr Val Ala Asn Pro Lys Gly Gln Phe Phe Lys
100 105 110
Thr Met Gly Gln Gly Asp Arg Trp Asn Arg Val Trp Leu Leu Pro Glu
115 120 125
Glu Ala Leu Tyr Met Leu Glu Arg Gly Ser Leu Glu Ile Arg Trp Pro
130 135 140
Val Ser Ala Thr Gly Cys Gly Asp Ala Gly Asn Ala Gly Asp Ser Gly
145 150 155 160
Ile Pro Met Ser Leu Gln Ala Ala Tyr Ala Cys Phe Ile Gly Arg Gly
165 170 175
Gly Leu Thr Ile Asp Arg Phe Thr Val Tyr Thr Gly Leu Lys Arg Leu
180 185 190
Gly Tyr Thr Leu Thr Arg Ala Pro Ala Trp Tyr Asp Asp Thr Glu Glu
195 200 205
Ser Ser Val Gly Ser Glu Thr Gln Glu Pro Val Arg Val Gly Ala Gly
210 215 220
Leu Val Gly Val Tyr Glu Gln Phe Met Lys Trp Ser His His Gly Ala
225 230 235 240
Gly Arg Ile Arg Gly Gly Ala
245

<210> 35098
<211> 80
<212> PRT
<213> A.fumigatus

<400> 35098
Ile Pro Phe Pro Leu Thr Gly Ala Ala Gly Gly Asn Ser Ala Ser Lys
1 5 10 15
Lys Asn Trp Leu Ser Leu Pro Thr Ser Trp Trp Arg Pro Thr Trp Pro
20 25 30
Trp Ala Arg Gly Pro Ser Leu Leu Val Leu Arg Thr Cys Leu Ser Leu
35 40 45
Pro Pro Arg Pro Gly Arg Ile Ser Ala Gly Pro Ser Pro Thr Gln Trp
50 55 60

```
Cys Leu Arg Thr Val Cys Leu Ala Arg Gly Arg Lys Ser Ile Pro Ile
65                  70                  75                  80

<210> 35099
<211> 563
<212> PRT
<213> A.fumigatus

<400> 35099
Thr Lys Met Gln Tyr His Gly His Cys Leu Val Asp Ser Ala Ala Thr
1               5                  10                  15
Gly Lys Leu Leu Tyr Ala Asn Val Gly Leu Ser Phe Trp Ala Gly Val
            20                  25                  30
Asp Ser Gln Thr Gly Glu Ile Ile Asp Arg His His Pro Leu His Gly
        35                  40                  45
Gln Ser Val Asn Gly Arg Ile Leu Ala Ile Pro Cys Ser Arg Gly Ser
    50                  55                  60
Cys Thr Gly Ser Ile Val Leu Ile Glu Leu Leu Leu Asn Gln Cys Ala
65                  70                  75                  80
Pro Ala Gly Leu Ile Phe Gln Gln Pro Glu Gln Ile Ile Thr Leu Gly
                85                  90                  95
Val Val Val Ala Lys Thr Leu Leu Gly Leu Ser Ile Pro Val Leu Val
            100                 105                 110
Leu Lys Pro Ala Glu Phe His Ser Leu Lys Asp Tyr Arg Tyr Ala Ala
        115                 120                 125
Ile Thr Gly Pro Thr Leu Gln Thr Gly Glu Asp Pro Leu Pro Pro Pro
    130                 135                 140
Thr Tyr Glu Ala Pro Ser Cys Ala Pro Ser Gly Thr Ile Asp Leu Ser
145                 150                 155                 160
Glu Thr Asp Glu Ala Ile Leu His Gly Ala Arg Gly Ala Ala Ala Gln
                165                 170                 175
Lys Ala Met Glu Ile Leu Leu Ser Phe Ala Gln Ile Gln Gly Ala Thr
            180                 185                 190
Arg Phe Ile Asp Ile Ser Arg Ala His Ile Asp Ala Cys Ile Tyr Thr
        195                 200                 205
Gly Pro Ala Ser Leu Arg Ile Pro Gln Thr Phe Leu Ser Leu Gly Ala
    210                 215                 220
Arg Val Ala Ile Pro Thr Thr Leu Asn Ser Ile Ser Ile Asp Arg Arg
225                 230                 235                 240
Arg Trp Arg Glu Leu Gly Val Lys Glu Glu Leu Ala Val Pro Ala Asp
                245                 250                 255
Gln Leu Val Glu Thr Tyr Leu Ala Met Gly Ala Arg Pro Val Phe Thr
            260                 265                 270
Cys Ala Pro Tyr Leu Leu Glu Ser Ala Pro Ala Ala Gly Gln Asp Ile
        275                 280                 285
Gly Trp Ser Glu Ser Asn Ala Val Val Phe Ala Asn Ser Val Leu Gly
    290                 295                 300
Ala Arg Thr Gln Lys Tyr Pro Asp Leu Ile Asp Val Cys Ile Ala Leu
305                 310                 315                 320
Thr Gly Arg Ala Pro Leu Ala Gly Gly His Ala Asp Glu Gly Arg Thr
                325                 330                 335
Pro Ser Val Val Val Glu Val Ala Asp Phe Pro Lys Met Asp Asp Ala
            340                 345                 350
Val Trp Pro Leu Leu Gly Tyr His Ile Gly Gln Leu Ala Gly Gly Asp
        355                 360                 365
Ile Pro Leu Val Val Gly Leu Glu Gln Thr Lys Pro Arg Met Ala Asp
```

```
    370                 375                 380
Leu Lys Ala Phe Gly Ala Ala Phe Ala Thr Thr Ala Ser Ala Ser Met
385                 390                 395                 400
Phe His Val Arg Gly Val Thr Pro Glu Ala Thr Lys Phe Glu Gly Val
                405                 410                 415
Arg His Thr Ala Lys Arg Met Ala Val His Lys Ser Asp Leu Val Arg
            420                 425                 430
Thr Trp Glu Asp Leu Asn Thr Ala Gln Asp Ser Ser Val Gly Leu Val
        435                 440                 445
Ser Leu Gly Asn Pro His Phe Ser Leu Glu Glu Phe Glu Ser Leu Ser
    450                 455                 460
Arg Leu Cys Ala Asp Arg Lys Lys Asp Pro Ser Val Gln Met Met Ile
465                 470                 475                 480
Thr Thr Gly Arg Glu Thr Tyr Glu Leu Ala Ala Ser Lys Gly Tyr Ile
                485                 490                 495
Gln Thr Leu Glu Ala Phe Gly Ala Thr Ile Ile Thr Asp Thr Cys Trp
            500                 505                 510
Cys Met Ile Arg Gln Pro Val Ile Pro Pro Gln Thr Ile His Leu Ile
        515                 520                 525
Asn His Ser Pro Gln Tyr Ala Pro Tyr Ala Pro Arg Asn Gly Ala Pro
    530                 535                 540
Arg Asn Cys Leu Trp Gly Pro Trp Ala Pro Cys Phe Gly Gly Pro Leu
545                 550                 555                 560
Pro Arg Gly
```

<210> 35100
<211> 94
<212> PRT
<213> A.fumigatus

<400> 35100

```
Arg Ser Leu Arg Trp Val Ile Lys Met Asn Cys Pro Ser Arg Thr Asp
1               5                   10                  15
Asp Thr Leu Leu His Cys Asp Trp Asn Gln Asn Pro Pro Phe Leu Ala
            20                  25                  30
Pro Asp Leu Thr Thr Arg Gln Asp Phe Asn Gly Ile Thr Asn Ala Arg
        35                  40                  45
Val Tyr Arg Ser Gly Pro Gly Leu Asp Ala Val Ser Ser Thr Ser Trp
    50                  55                  60
Glu Asp Ser Gln Ala Met Pro Glu Gln Arg Asp Thr Pro Ile Gly Ser
65                  70                  75                  80
Lys Ser Asp Leu Arg Gly Ala Ser Leu Ser Ser Pro Arg Gly
                85                  90
```

<210> 35101
<211> 230
<212> PRT
<213> A.fumigatus

<400> 35101

```
Arg Val Leu Ser Arg Val Gln Val Phe Pro Arg Pro His Lys Val Gly
1               5                   10                  15
Phe Val His Gly His Pro Leu Arg Cys Val Pro Asp Ser Leu Glu Leu
            20                  25                  30
Gly Arg Phe Arg Ser His Pro Ser His Met Glu His Arg Arg Gly Arg
```

```
        35                  40                  45
Arg Cys Arg Lys Ser Arg Pro Glu Arg Phe Glu Val Ser His Thr Arg
    50                  55                  60
Leu Arg Leu Leu Gln Pro Asn His Gln Arg Tyr Ile Pro Pro Arg Gln
65                  70                  75                  80
Leu Thr Asn Val Val Ser Gln Gln Arg Pro His Cys Val Val His Leu
                85                  90                  95
Arg Glu Ile Arg Asp Phe Asp His His Arg Trp Arg Pro Ser Phe Ile
            100                 105                 110
Arg Met Pro Thr Arg Gln Gly Ser Pro Pro Arg Gln Arg Asn Thr His
        115                 120                 125
Val Asp Gln Ile Gly Ile Leu Leu Arg Pro Arg Ala Lys His Thr Val
    130                 135                 140
Arg Lys His His Cys Val Gly Leu Gly Pro Ala Asp Ile Leu Pro Gly
145                 150                 155                 160
Arg Gly Gly Arg Leu Lys Gln Val Arg Ser Thr Ser Lys Asp Gly Pro
                165                 170                 175
Arg Ala His Gly Gln Val Gly Leu His Gln Leu Val Gly Arg Asp Ser
            180                 185                 190
Gln Phe Phe Phe Asp Ala Glu Phe Pro Pro Ala Ala Pro Val Asn Gly
        195                 200                 205
Asn Gly Ile Gln Arg Gly Trp Asp Gly Asp Ala Gly Ala Glu Arg Gln
    210                 215                 220
Lys Gly Leu Arg Asp Pro
225                 230
```

<210> 35102
<211> 150
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (141),(148),(150)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35102

```
Gln Tyr Asp Pro Ser Leu Cys Asn Ala Val His Val Ser Pro Ser Pro
1               5                   10                  15
Val Pro Leu Val Glu His Gln Leu Pro Thr His Leu Ser Arg Arg Thr
            20                  25                  30
Ala Ser Gly His Ile Ala Gly Tyr Gly Pro Ala Ser Pro Leu Ala Gln
        35                  40                  45
Ala Pro Gly Pro Gln Asp Ser Pro Gly His Trp Ser Cys Met Leu Arg
    50                  55                  60
Arg Gly Pro Cys Cys Arg Ser Val Arg Arg Ser Arg Arg Lys Pro Thr
65                  70                  75                  80
Thr Thr Thr Gly Arg Trp Pro Cys Arg Cys Gly Gln Lys Pro Pro Ser
                85                  90                  95
Arg Ser Pro Ala Ala Thr Ile Gly Leu Pro Trp Thr Arg Pro Gly Arg
            100                 105                 110
Ala Glu Ser Arg Arg Ser Arg Cys Gly Arg Cys Arg Arg Leu Cys Ile
        115                 120                 125
Leu Ala Thr Trp Cys Trp Thr Gly Trp Pro Trp Cys Xaa Ser Ser Thr
    130                 135                 140
Trp Trp Gly Xaa Ser Xaa
```

145 150

<210> 35103
<211> 135
<212> PRT
<213> A.fumigatus

<400> 35103
Gly Ala Gln Pro Ser Ser Trp Pro Pro Gly Ile Gly Ser Thr Met Phe
1 5 10 15
Pro Thr Pro Pro Val Arg Ser Thr Ser Pro Gln Ser Cys Ser Gly Gln
20 25 30
Arg Cys Arg Ser Asp Ser Pro Gly Ile Gly Arg Pro Ala Arg Ala Arg
35 40 45
Thr Glu Arg Arg Arg Thr Gly Ser Pro Ala Thr Cys Gly Gln Ser Arg
50 55 60
Arg Pro Gly Arg Phe Ala Cys Ala Lys Gly Pro Pro Ile Ala Ala Cys
65 70 75 80
Pro Ala Trp Leu Cys Ala Thr Cys Ala Pro Ser Arg Arg Ser Ala Arg
85 90 95
Lys Arg Trp Pro Arg Arg Arg Ala Ala Arg Arg Ser Thr Met Pro Ala
100 105 110
Ala Arg Lys Ala Arg Cys Pro Thr Ser Ser Asn Leu Lys Gln Pro Leu
115 120 125
Val Arg Arg Ser Gly Pro Val
130 135

<210> 35104
<211> 179
<212> PRT
<213> A.fumigatus

<400> 35104
Cys Ser Thr Asn Gly Thr Gly Leu Gly Leu Thr Cys Thr Ala Leu His
1 5 10 15
Ser Asp Gly Ser Tyr Cys Tyr Ile Gly Gln Ser Asn Leu Tyr Tyr Asp
20 25 30
Asn Gly Glu Cys Asp Trp Thr Cys Ala Leu Ala Tyr Phe Trp Val Cys
35 40 45
His Glu Tyr Pro Tyr Asp Asn Tyr Gln Phe Gly Ile His Leu Pro Gly
50 55 60
Met Glu Gly Gln Arg Thr Glu Leu Ile Pro Ser Ser Val Leu Leu Asp
65 70 75 80
Asp Ser Gln Asn Ser Thr Tyr Gly Trp Ala Thr Val Glu Gln Cys Gly
85 90 95
Trp Thr Thr Asn Asp Ser Leu Pro Leu Tyr Asn Pro Gly Met Ser Lys
100 105 110
Arg Val Val Glu Glu Gln Ser Thr Thr Asn Thr Leu Ala Ala Ser Thr
115 120 125
Ala Thr Ser Thr Ala Thr Ser Thr Ala Thr Ser Thr Ala Thr Thr Pro
130 135 140
Ala Ala Ser Ser Ala Val Thr Ala Asp Ser Gly Thr Gly Ser Ile Arg
145 150 155 160
Met His Leu Asp Thr Gly Met Ala Val Trp Ile Leu Ala Phe Gly Ile
165 170 175
Val Val Leu

<210> 35105
<211> 249
<212> PRT
<213> A.fumigatus

<400> 35105
Arg Ser Phe Leu Gly Gly Pro Pro Thr Arg Asn Gln Asp Arg Arg Trp
1 5 10 15
Asn Met Gly Thr His Leu Ile Thr Thr Arg Gly Pro Thr Asp Glu Pro
20 25 30
Gly Val Val Ser Asn Trp Arg Lys Trp Gly Thr Gly Pro Tyr Gly Leu
35 40 45
Gln Ala Trp Ser Asn Gly Gly Gln Leu Ala Asp Val Ala Thr Ser Phe
50 55 60
Leu Gln Asn Asp Val Thr Val Arg Lys Ser His Thr Ala Lys Leu Gly
65 70 75 80
Thr Leu Arg Trp Glu Val Pro Ser Arg Thr Arg Ile Phe Gln Val Gly
85 90 95
Asp Phe Asp Arg Lys Ser Leu Gly Phe Arg Tyr Gly Gly Ala Pro Tyr
100 105 110
Glu His Ala Leu Val Ala Gln Cys Pro Ala Asn Leu Thr Tyr Thr Val
115 120 125
Gly Gln Ser Thr Thr Ala Asp Trp Cys Phe Gly Gln Ala Ala Leu Gly
130 135 140
Thr Trp Ser Ile Arg Phe Gln Ala Ala Lys Ser Ser Ala Ala Leu Leu
145 150 155 160
Thr Val Ser Leu Ala Gly Tyr Ser Ser Gly Thr Thr Ser Thr Ile Leu
165 170 175
Leu Asn Gly Asp Ala Ala Ser Pro Ile Gly Asn Leu Thr Thr Leu Pro
180 185 190
Asn Asp Pro Cys Leu Tyr Arg Ser Ala Thr Thr Ala Gly Glu Trp Arg
195 200 205
Leu Phe Gln Phe Glu Ile Pro Gln Gly Lys Leu Gln Pro Gly Trp Asn
210 215 220
Ser Ile Asp Phe Ala Val Gly Lys Ala Ser Arg Trp His Gly Phe Met
225 230 235 240
Trp Asp Ser Ile Ile Leu Glu Tyr Leu
245

<210> 35106
<211> 189
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (45),(51),(66),(67),(74)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35106
Ala Arg His Lys Tyr Ala Gln Cys Pro Trp Phe Arg Pro Arg Pro Gly
1 5 10 15
Val Val Gly Thr Gly Ala Gly Phe Cys Gly His Cys Pro Ser Val Gln
20 25 30

```
Pro Ser His Ser Phe Ser Phe Pro Leu Phe Phe Leu Xaa Met Pro Ser
        35                  40                  45
Phe Phe Xaa Phe Leu Leu Ala Ile Gly Val Val Pro Val Trp Ser Phe
    50                  55                  60
Ser Xaa Xaa Thr Pro Thr Lys Tyr Trp Xaa Tyr Thr Thr Ala Ser Leu
65                  70                  75                  80
Ser Ser Thr Thr Ser Pro Glu Cys Lys Ala Ala Tyr Ser Ala His Ile
                85                  90                  95
Asp Cys Asp Asp Phe Leu Leu Ala Leu Ala Val Ser Lys Glu Asp Arg
            100                 105                 110
Trp Trp Leu Gln Asp Phe Asp Ser Ala Val Phe Asp Arg Thr Cys Thr
        115                 120                 125
Ala Thr Cys Gln Ser Ser Leu Ser Ala Tyr Val Ala Asn Val Glu Gln
    130                 135                 140
Thr Cys Asn Lys Ala Arg Asp Ala Ala Cys Lys Thr Asn Gly Pro Glu
145                 150                 155                 160
Asn Leu Gly Asp Pro Val Leu Val Pro Val Val Thr Leu Gly His Ile
                165                 170                 175
Leu Gln Tyr Val Leu Met Arg Ser Cys Ala Lys Asp Glu
            180                 185
```

<210> 35107
<211> 142
<212> PRT
<213> A.fumigatus

<400> 35107

```
Leu Asp Gly Ala Gln Ser Asp Leu Asn Trp Thr Ser Ala Glu Ile Tyr
1               5                   10                  15
Arg Arg Gly Lys Thr Asn Gly Gln Asp Phe Leu Asp Ile Gln Phe Thr
            20                  25                  30
Ala Lys Glu Gly Asp Phe His Trp Val Ile Phe Glu Asp Leu Val Gly
        35                  40                  45
Ala Tyr Gln Tyr Phe Val Asn His Ala Leu Pro Thr Leu Gly Glu Phe
    50                  55                  60
Arg Thr Leu Trp Arg Leu Asp Asn Thr Ser Phe Pro Asn Gly Arg Thr
65                  70                  75                  80
Asn Ile Lys Asp Gly Ala Leu Pro Thr Leu Ala Glu Ile Ala Ser Gly
                85                  90                  95
Thr Lys Val Gln Asp Glu Thr Trp Gln Leu Ala Asp Gly Ser Tyr Ile
            100                 105                 110
Thr Lys Tyr Asp Trp Thr Ala Trp Ile Arg Asp Gln Asp Tyr Tyr Gly
        115                 120                 125
Val Tyr Gly Glu Phe Ser Gln Arg Gly Glu Ile His Leu Gly
    130                 135                 140
```

<210> 35108
<211> 186
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (154),(181)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35108
Pro Ser Tyr Ile Thr Met Glu Ser Pro Thr Tyr Glu Ala Pro Ser Asn
1 5 10 15
Ser Asn Gly Pro Pro Asp Lys Lys Gly Gly Ile His Ser Thr Ile Asp
20 25 30
Val Asp His Asp Tyr Gly Ala Asp Thr Asp Leu His Arg Ser Leu Ser
35 40 45
Thr Arg His Leu Thr Met Ile Ala Leu Gly Ser Ser Ile Gly Met Gly
50 55 60
Leu Trp Leu Gly Ser Gly Thr Ser Leu Val Asn Gly Gly Pro Ala Ala
65 70 75 80
Ile Phe Ile Gly Tyr Leu Leu Ser Gly Thr Met Ile Trp Ala Val Ser
85 90 95
His Ser Ile Gly Glu Met Ala Val Val Tyr Pro Leu Pro Ser Ala Phe
100 105 110
Val Gln Trp Ser Ser Ile Phe Ile Ser Glu Pro Ala Gly Phe Thr Leu
115 120 125
Gly Trp Ser Tyr Trp Phe Gln Phe Phe Ile Thr Leu Ala Asn Glu Leu
130 135 140
Gln Val Arg Arg Pro Leu Phe Cys Asp Xaa Val Arg Ser Asp Trp Tyr
145 150 155 160
Lys Val Trp Ser Pro Cys Ser Ile Phe Gly Pro Asn Asn Cys Pro Thr
165 170 175
Ala Ala Trp Ile Xaa Ile Phe Trp Val Leu
180 185

<210> 35109
<211> 75
<212> PRT
<213> A.fumigatus

<400> 35109
Glu Ser Ser Trp Arg Ile Ser Gln Arg Tyr Ile Pro Ser Ser His Arg
1 5 10 15
Ala Leu Phe Gln Asp Glu Arg Leu Ile Glu Asp Ser Leu Asp Lys Arg
20 25 30
Tyr Asp Gly Ile Pro Cys Ser Pro Val Thr Cys Met His Ala Glu Trp
35 40 45
Gln Thr Gly Glu Gly Tyr Leu Ser Ser Leu Asp Asp Asn Gln His Ala
50 55 60
Ser Asn Gly Gln Thr Lys Gly Leu Ile Ala Ser
65 70 75

<210> 35110
<211> 156
<212> PRT
<213> A.fumigatus

<400> 35110
Leu Ile Glu Ile Met Leu Gln Pro Met Asn Val Thr Trp Ile Met Gly
1 5 10 15
Tyr Pro Thr Gly Lys Glu Gln Gly Lys Phe Leu Ile Leu Asp Met Gly
20 25 30
Gly Thr Asn Leu Arg Val Ser Gln Ala Gln Leu Leu Gly Ser Asp Arg
35 40 45
Asp Met Glu Ser Ile Gln Glu Lys Tyr Ser Ile Pro Gln Ser Ile Lys

```
    50                  55                  60
Gln Gly Thr Ala Asp Asp Leu Trp Asp Phe Val Ala Asp Cys Val Gln
65                  70                  75                  80
Lys Phe Leu Gln Ser Arg Leu Ser Glu Ser Glu Arg Ser Lys Val Leu
                85                  90                  95
Pro Leu Ala Phe Thr Phe Ser Tyr Pro Val Ile Gln Ser Ser Ile Lys
            100                 105                 110
Val Gly Val Leu Gln Cys Trp Thr Lys Asp Phe Cys Val Ser Gly Val
        115                 120                 125
Glu Gly His Asp Val Val Phe Gln Leu Glu Ala Ala Phe Glu Arg Lys
    130                 135                 140
Val Cys Thr Leu Val Ile Pro Ala Gly Cys Lys Ala
145                 150                 155
```

<210> 35111
<211> 262
<212> PRT
<213> A.fumigatus

```
<400> 35111
Lys Ile Pro Val Gln Val Val Ala Leu Val Asn Asp Thr Val Gly Thr
1               5                   10                  15
Leu Phe Ala Ala Ala His Arg Asp Gln Glu Val Lys Ile Gly Ser Ile
            20                  25                  30
Ala Ser Thr Gly Cys Asn Ala Ala Tyr Met Glu Glu Val Ala Ala Ile
        35                  40                  45
Pro Lys Ile Gln Ser Cys Gly Leu Pro Ser Gly Ala Leu Val Ala Ile
    50                  55                  60
Asn Thr Glu Tyr Gly Ala Phe Asp Asn Ser Arg Arg Ile Leu Pro Arg
65                  70                  75                  80
Thr Arg Phe Asp Asp Glu Ile Asp Arg Thr Ser Ala His Pro Gly Gln
                85                  90                  95
Gln Leu Tyr Glu Lys Met Val Ser Gly Pro Tyr Leu Gly Glu Leu Leu
            100                 105                 110
Arg Leu Val Met Leu Glu Leu His Glu Ala Lys Leu Leu Phe Val Gly
        115                 120                 125
Gln Asp Val Ser Cys Leu Arg Gln Pro Asn Ala Leu Glu Val Ser Leu
    130                 135                 140
Phe Pro Thr Leu Glu Glu Asp Ile Ser Glu Cys Met Glu Asn Ala Arg
145                 150                 155                 160
Lys Cys Leu Trp Glu Lys Thr Gly Leu Asp Pro Ala Pro His Glu Leu
                165                 170                 175
Lys Ala Cys Arg Tyr Leu Ala Glu Leu Val Gly Thr Arg Ala Ala Arg
            180                 185                 190
Leu Tyr Ser Cys Gly Ile Ala Ala Ile Cys Lys Lys Arg Asn Ile Glu
        195                 200                 205
Arg Cys His Ile Gly Val Asp Gly Ser Ile Phe Gly His Tyr Gln Asn
    210                 215                 220
Tyr Arg Lys Arg Ala Ala Gln Ala Leu Arg Asp Ile Phe Ala Trp Pro
225                 230                 235                 240
Asp Asp Leu Glu Asp Pro Ile Val Phe Gly Val Tyr Lys Lys Trp Val
                245                 250                 255
Trp Asn Trp Arg Pro Leu
            260
```

<210> 35112

<211> 188
<212> PRT
<213> A.fumigatus

<400> 35112
Leu Leu Gly Glu Glu Pro Arg Arg Ile Ser Cys Thr Glu Leu Arg Cys
1 5 10 15
Pro Gly Val Cys Ala Gly Pro Pro Gly Pro Gln Pro Asp Gly Tyr Ile
20 25 30
Leu His Gln Arg Gln Asp Arg Ala Pro Asp Thr His Gln Arg Pro Pro
35 40 45
Ala Ser Leu Leu Pro Ala Asp Gln Pro Gln Arg Gly His Pro Pro Gly
50 55 60
Gly Gly Arg Val His Arg Gly Arg Gly Arg Val Pro Ala Arg Cys Asp
65 70 75 80
Arg Pro Gln Pro Leu Pro Gly Leu Pro Pro Asp Gly Gly Arg His Ala
85 90 95
Val Glu Ala Pro Val Asp Arg Pro Ala Gln Ala Arg Arg Ala Tyr Arg
100 105 110
Arg Ser His His Gly Arg Arg Glu Pro His Pro Arg Ala Arg Arg Pro
115 120 125
Arg Arg Gly Pro Glu Pro Asp His Pro Arg Arg Ala Gln Pro Ala Pro
130 135 140
Ser Arg Ala Pro Arg Arg Arg Gly Ser Arg Ser Arg Arg Gly Ala Pro
145 150 155 160
Gln Ala Leu Ala Arg Ala His Gly Arg Gln Asp Leu Gln Arg Gly Pro
165 170 175
Arg Cys His Arg Arg Arg Arg Pro Asn Arg Ala Ser
180 185

<210> 35113
<211> 318
<212> PRT
<213> A.fumigatus

<400> 35113
Ile Lys Asp Met Arg Leu Leu Ala Thr Gly Arg Ala Leu Arg Ala Ser
1 5 10 15
Ser Gly Arg Trp Ser Val Val Thr Pro Arg Arg Ser Pro Arg Ile Ser
20 25 30
Thr Ser His Leu Leu Glu Pro Leu Thr Val Thr Val Thr Arg Arg Asn
35 40 45
Leu Ser Ser Thr Ala Asn Arg Lys Ile Asp Glu Lys Pro Glu Thr Lys
50 55 60
Gln Lys Ala Thr Ala Arg Pro Ser Pro Pro Gln Ser Leu Thr Ile Glu
65 70 75 80
Gly Gln Thr Tyr Arg Thr Asp Gln Trp Thr Asn Thr Pro Asp Thr Ile
85 90 95
Leu Ser His Val Gly Arg Arg Leu Tyr Leu Asp Glu Asn His Pro Leu
100 105 110
Ala Ile Thr Arg Lys Leu Ile Glu Ser Gln Phe Pro Gly Pro Val Tyr
115 120 125
Gly Asn Tyr Ser Glu Lys Asn Pro Val Val Ser Val Ala Gln Asn Phe
130 135 140
Asp Val Leu Gly Phe Ala Pro Asp His Pro Gly Arg Ser Arg Thr Asp
145 150 155 160

```
Thr Tyr Tyr Ile Asn Asp Lys Thr Val Leu Arg Thr His Thr Ser Ala
                165                 170                 175
His Gln Gln Ala Tyr Phe Gln Gln Ile Asn Arg Asn Glu Ala Thr Arg
            180                 185                 190
Pro Glu Glu Val Gly Tyr Thr Val Val Ala Asp Val Tyr Arg Arg Asp
        195                 200                 205
Ala Ile Asp Arg Ser His Tyr Pro Val Phe His Gln Met Glu Gly Ala
    210                 215                 220
Met Leu Trp Lys Arg Pro Ser Thr Asp Pro Leu Lys His Ala Ala His
225                 230                 235                 240
Thr Ala Ala Ala Ile Met Glu Asp Val Asn Arg Ile Pro Ala His Gly
                245                 250                 255
Val Pro Val Glu Asp Pro Asn Pro Thr Ile His Val Glu Arg Asn Pro
            260                 265                 270
Leu Gln Ala Glu His His Ala Ala Glu Glu Val Glu Ala Val Ala Ala
        275                 280                 285
His Leu Lys Arg Ser Leu Glu Arg Met Val Val Lys Ile Phe Ser Glu
    290                 295                 300
Ala Arg Asp Ala Thr Ala Ala Ala Asp Pro Thr Ala Gln Ala
305                 310                 315
```

<210> 35114
<211> 307
<212> PRT
<213> A.fumigatus

<400> 35114

```
His Val Ser Leu Leu Lys Val Ile Glu Ser Tyr Thr Thr Pro Leu Gly
1               5                   10                  15
Thr Ser Leu Ala Arg His Leu Thr Thr His Leu Ser His Gln Ile Thr
            20                  25                  30
Tyr Leu Ser Thr Cys Arg Pro Leu Ser Ile Ser Gln Gly Asn Ala Ile
        35                  40                  45
Arg Ala Leu Lys Leu Ala Ile Ser Ser Ile Asp Pro Ser Val Pro Glu
    50                  55                  60
Ala Ser Ala Lys Ala Ser Leu Ser Asp Phe Ile Asp Ser Phe Ile Arg
65                  70                  75                  80
Glu Lys Ile Thr Val Ala Asp Gln Val Ile Ala Asp Ser Ala Ala Gln
                85                  90                  95
Lys Ile Gln Asp Gly Asp Val Ile Val Thr Tyr Ala Gly Ser Ser Ile
            100                 105                 110
Val Lys Gln Thr Leu Leu Thr Ala His Lys Gln Gly Lys Lys Phe Arg
        115                 120                 125
Val Ser Ile Ile Asp Ser Arg Pro Leu Phe Glu Gly Lys Asn Leu Ala
    130                 135                 140
Arg Thr Leu Ala Lys Ala Gly Leu Glu Val Gln Tyr Ser Leu Val Asn
145                 150                 155                 160
Gly Ile Ser His Ala Ile Lys Asp Ala Thr Lys Val Phe Leu Gly Ala
                165                 170                 175
His Ala Met Thr Ser Asn Gly Arg Leu Tyr Ser Arg Val Gly Thr Ala
            180                 185                 190
Leu Val Ala Met Ser Ala Lys Glu Arg Ala Gly Gly Val Glu Val Pro
        195                 200                 205
Val Ile Val Cys Cys Glu Thr Val Lys Phe Thr Asp Arg Val Ala Leu
    210                 215                 220
Asp Ser Ile Val Val Asn Glu Ile Ala Asp Ala Asp Glu Leu Val Met
```

225 230 235 240
Asn Glu Pro Leu Gln Gln Val Thr Gly Leu Pro Asp Ala Ala Ala Val
245 250 255
Ala Gln Pro Glu Pro Lys Lys Gly Asn Lys Ser Ala Ala Asn Ala Thr
260 265 270
Pro Ser Glu Ser Thr Val Val Thr Pro Gly Thr Ser Pro Leu Lys Asp
275 280 285
Trp Lys Asp Thr Pro Asn Leu Gln Leu Leu Asn Ile Met Tyr Asp Val
290 295 300
Thr Thr Gly
305

<210> 35115
<211> 178
<212> PRT
<213> A.fumigatus

<400> 35115
Asn Ala Pro Ala Gly Ser Gly Arg Lys Lys Ala Gln Lys Gln Glu Lys
1 5 10 15
Gly Lys Pro Ala Arg Gly Lys Gly Gly Gly Pro Glu Lys Ser Asn Lys
20 25 30
Leu Gly Gly Cys Gly Ala Gly Ala Arg Ala Pro Gln Ser Pro His Leu
35 40 45
Gly Arg Lys Gly Gln Thr Arg Cys Gly Gly Val Pro Val Val Arg Gly
50 55 60
Gly Lys Asp Ala Ala Ala Ala Gln Ser Gln Lys Gly Arg Gly Tyr Leu
65 70 75 80
Pro Arg Arg Gly Ser Ala Gln Ala Ala Ala Gly Gly Ala Glu Gln Lys
85 90 95
Lys Lys Gln Glu Asp Lys Asn Val Ala Val Phe Gly His Leu Tyr Gly
100 105 110
Gln Gln Arg Arg Thr Thr Val Ala Gly Ala Gly Lys Glu Val His Pro
115 120 125
Ala Val Leu Ala Leu Gly Leu Gln Met Arg Asp Tyr Val Ile Cys Gly
130 135 140
Ser Ser Ala Arg Cys Val Ala Thr Leu Leu Ala Phe Lys Arg Val Cys
145 150 155 160
Phe Val Leu Ser Leu Val Phe Val Asp Tyr Ala Asp Met Phe Leu Ser
165 170 175
Ser Arg

<210> 35116
<211> 190
<212> PRT
<213> A.fumigatus

<400> 35116
Arg Ile Leu Phe Arg His Ser Leu Gln Ser Lys Pro Gln Phe Arg Met
1 5 10 15
Val Ser Pro Ser Pro Thr His Gln Asn Lys Pro His Arg Val Thr Val
20 25 30
Thr Asn Arg Glu Leu Gln Ser Lys Asp Ser Ser Pro Thr Asn Ile His
35 40 45
Met His His Pro Arg Leu Ala Asp Tyr Phe Glu Glu Phe Thr Arg Pro

```
    50                  55                  60
His Thr Ser Gln Thr Ala Asn Met Thr Ala Ser Ala Ser Ala Ser Tyr
65                  70                  75                  80
Leu Tyr Gln His Gly Tyr Asn His Gly Val Thr Tyr Gly Ser Ser Ser
                85                  90                  95
Pro Thr Leu Val Pro Ser Tyr Leu Pro Ile Glu Glu Ile Tyr Val Leu
            100                 105                 110
Pro Gln Tyr Gln Pro Pro Asn Pro Glu Asp Glu Asp Asp Val Val Pro
        115                 120                 125
Asp Gln His Ala Ala Phe Gly Ile Thr Arg Ala Met Glu Arg Arg Arg
    130                 135                 140
Glu Pro Ala Trp Arg Asp Leu Gly Leu Glu Gly Leu Val Asp Gly Gly
145                 150                 155                 160
Gly Asn Gly Ala Ala Lys Gly Asn Gly Val Lys Val Arg Val Lys Glu
                165                 170                 175
Ala Gly Arg Leu Met Gly Gly Lys Arg Thr Val Cys Leu Arg
            180                 185                 190
```

<210> 35117
<211> 95
<212> PRT
<213> A.fumigatus

<400> 35117

```
Gln Lys Phe Ala Tyr Lys Pro Leu Ala Ala Gln Cys Asn Asp Ser Leu
1               5                   10                  15
Phe Ser Gln His Ser Leu Ile Ser His Pro Cys Gln Thr Ala Lys Met
            20                  25                  30
Ser Pro Asn Asn Ser Phe Val Leu Tyr His Tyr Glu Pro Ser Leu Pro
        35                  40                  45
Ala Ala Ile Ala Phe Ser Val Leu Phe Asn Ile Thr Thr Leu Ala His
    50                  55                  60
Val Tyr Gln Arg Val Lys Ser Gly Ser Asn Tyr Met Asn Pro Phe Ile
65                  70                  75                  80
Val Gly Gly Phe Cys Lys Ser Ala Gly Leu Pro Ser Arg His His
                85                  90                  95
```

<210> 35118
<211> 85
<212> PRT
<213> A.fumigatus

<400> 35118

```
Pro Asp Ala Val Gln Val Thr Gly Tyr Gly Cys Arg Ala Ala Ser His
1               5                   10                  15
Phe Leu Gly Thr Ser Thr Thr Leu Tyr Ala Ile Gln Thr Leu Leu Val
            20                  25                  30
Leu Leu Ala Pro Thr Leu Tyr Ala Ala Ser Ile Tyr Met Ile Leu Gly
        35                  40                  45
Arg Val Ile Arg Tyr Leu His Ala Glu Arg Leu Ser Pro Val Pro Val
    50                  55                  60
Lys Trp Met Thr Glu Thr Phe Val Ala Gly Asp Ile Leu Ser Phe Ile
65                  70                  75                  80
Leu Gln Gly Ala Gly
                85
```

<210> 35119
<211> 105
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24),(56)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35119
Arg Phe Leu Thr Gly Ala Thr Pro Ala Ala Pro Ser Gly Thr Gly Ser
1 5 10 15
Lys Cys Asp Ala Pro Asp Pro Xaa Thr His Gly Ser Glu Lys Ile Asn
20 25 30
Ala His Ser Thr Pro Pro Asn His His Ile His Ser His Arg Gly Gln
35 40 45
Gln Arg Asn Arg Ser Thr Pro Xaa Ile Ser Ser Ala Pro Ile Phe Leu
50 55 60
Ala Pro Arg Lys Glu Ile Ser Glu Thr Pro Ser Asp Asn Ser Pro Pro
65 70 75 80
Ala Asn Asn Lys Asp Ile Phe Pro Leu Ser Pro His Pro Arg Phe Ser
85 90 95
Gly Pro Pro Ala Arg Leu Pro Lys Thr
100 105

<210> 35120
<211> 257
<212> PRT
<213> A.fumigatus

<400> 35120
Val Cys Arg Pro Ser Ile Gln Thr Pro Leu Thr Arg Arg Ser Pro Ser
1 5 10 15
His Arg Leu Trp Met Pro Arg Ser Ile Pro Leu Pro Trp Asn Val His
20 25 30
His Ala Leu Arg His Pro Asp Pro Ser Gly Pro Val Gly Thr Asn Ala
35 40 45
Leu Arg Ser Ile Asp Leu His Asp Pro Gly Pro Gly Asp Pro Ile Pro
50 55 60
Pro Cys Arg Thr Thr Lys Ser Arg Ala Gly Glu Met Asp Asp Arg Asp
65 70 75 80
Phe Cys Gly Gly Arg Tyr Pro Leu Val Tyr Pro Pro Gly Ser Arg Leu
85 90 95
Val Pro Ser Thr Arg Gly Glu Thr Phe Val Ala Asp Ser Thr Gly Gly
100 105 110
Gly Val Met Ser Ala Gly Ser Ala Asn Ser His Asp Ile Gly Thr Tyr
115 120 125
Ile Ile Leu Ala Gly Leu Ala Val Gln Leu Leu Phe Phe Gly Val Phe
130 135 140
Val Phe Val Ala Phe Val Phe Arg Phe Arg Phe Ser Ser Ser Gln Gly
145 150 155 160
Ala Gly Thr Ser Gly Asn Val Pro Trp Val Lys Ser Trp Asn Gly Leu
165 170 175
Leu Trp Val Leu Tyr Leu Val Ser Ala Leu Ile Leu Ile Arg Ser Ala
180 185 190

```
Phe Arg Met Val Glu Phe Ala Gln Gly Phe Asp Gly Tyr Leu Ile Arg
        195                 200                 205
His Glu Ile Phe Met Tyr Val Phe Asp Thr Ala Leu Met Phe Val Leu
    210                 215                 220
Met Val Val Met Asn Thr Val His Pro Ser Gly Val Ser Ser Ala Gly
225                 230                 235                 240
Lys Gly Glu Leu Val Glu Cys Glu Thr Leu Arg Ala Arg Gly Ser Asp
                245                 250                 255
Ala
```

<210> 35121
<211> 122
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (122)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35121

```
Trp Asp Arg Lys Cys Val Gly Pro Gly Arg Thr Ala His Asp Leu Tyr
1               5                   10                  15
Val Pro Asp Ser Leu Leu Trp Lys Pro Leu Ile Phe Ala Leu Gly Trp
            20                  25                  30
Gln Phe Ser Thr Gly Trp Asp Leu Ala Ser Asp Asp Ile Arg Val Gln
        35                  40                  45
Thr Trp Ser Arg Arg Leu Thr Glu Ser Leu His Ala Ile Asn Arg Glu
    50                  55                  60
Lys Gly Ile Ser Ser Glu Phe Val Tyr Met Gly Asp Ala Gly Glu Trp
65                  70                  75                  80
Gln Asp Pro Phe Val Gly Phe Pro Ala Ala Asn Val Arg Arg Met Lys
                85                  90                  95
Ala Val Arg Ser Ala Tyr Asp Pro Leu Gly Thr Phe Ser Arg Leu Asn
            100                 105                 110
Trp Gly Gly Phe Lys Leu Gly Phe Asp Xaa
        115                 120
```

<210> 35122
<211> 248
<212> PRT
<213> A.fumigatus

<400> 35122

```
Met Tyr Asp Ala Val Ser Thr Lys Tyr Ser Phe Thr Asp Asn Gly Gln
1               5                   10                  15
Phe Pro Gly Ala Asn Asn Ile Asp Asn Gly Val Leu Ile Ala Leu Ser
            20                  25                  30
Gly Leu Asn Lys Phe Thr Val His Asn Gly Thr Ile Asp Val Gly Pro
        35                  40                  45
Gly Met Thr Trp Tyr Asp Val Tyr Ser Ala Leu Asp Pro Tyr Gly Arg
    50                  55                  60
Ile Ala Ile Gly Gly Arg Leu Lys Thr Ile Gly Val Pro Gly Leu Thr
65                  70                  75                  80
Leu Ile Gly Gly Val His Tyr Phe Ile Asn Lys Tyr Gly Phe Ala Met
```

```
                85                  90                  95
Asp Asn Val Val Arg Tyr Glu Val Val Leu Gly Asn Gly Thr Gln Val
            100                 105                 110
Val Ala Ser Ala Asn Ser His Pro Asp Leu Phe Trp Ala Leu Lys Gly
        115                 120                 125
Gly Ala Asn Asn Phe Gly Ile Val Thr Lys Phe Thr Leu Lys Thr Phe
    130                 135                 140
Ala Ile Pro Lys Ile Ser Thr Thr Leu Gln Ser Phe Asn Glu Ser Gly
145                 150                 155                 160
Ile Tyr Asp Tyr Ile Thr Ala Leu Cys Asp Leu Val Lys Leu Asp Glu
                165                 170                 175
Pro Asn Pro Ile Ala Ala Gly Gly Val Phe Thr Ile Asp Tyr Asn Val
            180                 185                 190
Thr Thr Lys Val Ser Ser Ala Ser Leu Ile Gly Val Gln Glu Gly Ile
        195                 200                 205
Ser Arg Pro Pro Ser Gln Phe Ala Asn Phe Thr Ala Leu Pro Gly Val
    210                 215                 220
Ser Lys Val His Asn Val Thr Thr Gly Lys Gln Phe Ala Ser Gly Leu
225                 230                 235                 240
Val Thr Pro Asn Gln Met Phe Arg
                245
```

<210> 35123
<211> 90
<212> PRT
<213> A.fumigatus

<400> 35123

```
Thr Leu Met Phe Asn Ala Asp Gly Asp Ser Val Met Phe Ser His His
1               5                   10                  15
Thr Val Gln Pro Asp Pro Glu Thr Leu Tyr Ser Ile Tyr Gln Ala Trp
            20                  25                  30
Lys Thr Ala Val Asp Glu Ile Ser Asp Val Lys Gly Leu Tyr Pro Thr
        35                  40                  45
Phe Val Met Asn Leu Ser Pro Ala Gly Ala Ala Arg Val Gly Arg Thr
    50                  55                  60
Asn Gly Ile Gly Asn Val Trp Gly Leu Asp Glu Gln Pro Met Ile Cys
65                  70                  75                  80
Thr Ser Leu Ile Leu Cys Tyr Gly Asn His
                85                  90
```

<210> 35124
<211> 143
<212> PRT
<213> A.fumigatus

<400> 35124

```
Asn Gln Ala Gly Glu Ile Thr Gln Asn Thr Asp Leu Pro Gln Ile Leu
1               5                   10                  15
Thr Asn Leu Cys Leu Leu Val Val Gly Phe Phe Leu Phe Trp Leu Gln
            20                  25                  30
Arg Leu Leu Tyr Gly Pro Leu Arg Pro Ile Glu Thr Glu Gln Leu Tyr
        35                  40                  45
Glu Lys Ala Trp Phe Ala Val Thr Glu Thr Cys Leu Ala Met Thr Ile
    50                  55                  60
Phe Arg Gly Glu Leu Gly Gly Trp Phe Leu Val Met Phe Val Cys Leu
```

65 70 75 80
Leu Val Gly Lys Val Trp Gly Trp Ile Gly Glu Gly Arg Val Glu Phe
85 90 95
Leu Glu Gln Gln Pro Pro Ala Asn Pro Arg Leu Phe His Thr Arg Leu
100 105 110
Ala Ile Ser Leu Val Leu Ala Val Leu Tyr Asp Ser Phe Met Leu Lys
115 120 125
Tyr Cys Ile Thr Cys Ser Pro Arg Gly Arg Lys Glu Pro Arg Tyr
130 135 140

<210> 35125
<211> 596
<212> PRT
<213> A.fumigatus

<400> 35125
His Ser Pro Ile Gln Lys Glu Val Glu Arg Ser Pro Arg Thr His Gln
1 5 10 15
Ala His Arg Pro Asp Tyr Asp Phe Pro Gly Met Met Ala Ser Gln Gln
20 25 30
Leu Leu Phe Thr Ala Thr Arg Thr Gln Thr Phe Thr Tyr Leu Leu Ala
35 40 45
Val Cys Pro Phe Ser Ile Ala Phe Leu Val Phe Val Asn Ser Ser Val
50 55 60
Ser Phe Val Val Thr Asp Leu Ile Gly Leu His Asp Gly Glu Gly Asp
65 70 75 80
Ala Val Gly Thr Leu Gly Phe Ala Asp Glu Leu Leu Ala Leu Ala Ala
85 90 95
Cys Pro Leu Trp Gly Val Leu Ser Asp Arg Ile Gly Val Arg Asn Val
100 105 110
Arg Ser Val Gly Phe Ile Tyr Gln Tyr Gly Phe Lys Ser Leu Ile Thr
115 120 125
Asp Met Pro Ser Thr Lys Val Cys Val Ile Gly Tyr Gly Ile Ile Ala
130 135 140
Val Ser Leu Val Val Phe Val Gln Ala Arg Asn Val Tyr Pro Gln Leu
145 150 155 160
Leu Leu Gly Arg Leu Phe Phe Ser Leu Gly Gly Ser Ala Val Ser Thr
165 170 175
Met Val Thr Ala Val Leu Pro Ala Val Ala Gly Glu Thr Pro Ser Glu
180 185 190
Gln Leu Arg Pro Gly Arg Glu Ser Arg Ala Glu Ala Lys Ser Pro Ser
195 200 205
Ser Arg Leu Ala Gly Phe Val Gly Met Cys Ala Gly Ser Gly Ala Leu
210 215 220
Ile Ser Leu Ala Ile Phe Leu Pro Leu Leu Ala Arg Phe Gln Ser Trp
225 230 235 240
Gly Tyr Ser Pro Ser Glu Ala Ile Gln Asn Ser Tyr Tyr Leu Val Ala
245 250 255
Ser Val Ala Ile Leu Val Ser Phe Cys Cys Phe Met Gly Leu Arg Gly
260 265 270
Leu Ala Ser Glu Gln Gly Lys Gly Trp His Leu Leu Trp Ala Ser Pro
275 280 285
Lys Ala Ser Ala Ser Glu Thr Asp Pro Leu Asp Leu Asn Lys Gly Ala
290 295 300
Ile Gln Leu Pro Tyr Leu Gly Gln Leu Gly Thr Ala Leu Tyr Leu Gly
305 310 315 320

```
Leu Gln Asn Arg Asp Ile Phe Leu Gly Tyr Leu Gly Gly Phe Val Ala
                325                 330                 335
Arg Ala Ser Ser Val Gly Ile Ser Leu Phe Ile Pro Leu Phe Val Asn
            340                 345                 350
His Tyr Tyr Arg Arg Ser Gly Leu Cys Gly His Glu Gln Gly Glu Val
        355                 360                 365
Pro Glu Ser Ile Pro Arg Asp Ile Lys Gln Thr Cys Arg Lys Ala Tyr
    370                 375                 380
Ile Leu Ala Ser Ile Leu Thr Gly Val Ser Gln Leu Val Ala Leu Ile
385                 390                 395                 400
Ala Ala Pro Ala Phe Gly Tyr Leu Ser Glu Arg Ser Arg Arg Tyr His
                405                 410                 415
Ala Pro Leu Leu Phe Ala Ser Leu Ala Gly Ile Leu Gly Tyr Thr Val
            420                 425                 430
Phe Ala Leu Leu Pro Ser Pro Gln Ile Ser Gly Pro Asp Gly Ser Ala
        435                 440                 445
Gly Val Leu Val Leu Met Gly Leu Ile Gly Ile Ser Gln Ile Gly Ala
    450                 455                 460
Ile Val Cys Ser Leu Ala Val Leu Ser Asn Gly Ile Leu Arg Ile Ser
465                 470                 475                 480
Leu Asp Ser Asp Gly Ser Glu Ile Phe His Thr Pro Glu Asp Pro Gly
                485                 490                 495
Ser Thr Ser Thr Asn Gln Val Asn Gln Asp Val Asp Glu His Gln Pro
            500                 505                 510
Leu Leu Gln Gly Ser Pro Arg His Arg Gly His Gln Leu Ser His Leu
        515                 520                 525
Lys Gly Ser Ile Ala Gly Val Tyr Ser Leu Tyr Gly Gly Ala Gly Ile
    530                 535                 540
Leu Phe Leu Thr Lys Leu Gly Gly Leu Leu Phe Asp Asp Leu Ser Pro
545                 550                 555                 560
Lys Ser Pro Phe Tyr Ile Met Gly Gly Phe Asn Ala Val Leu Leu Leu
                565                 570                 575
Ala Arg Ile Gly Thr Gly Ala Met Asn Trp Ala Lys Asp Ser Cys Asn
            580                 585                 590
Arg Ala Glu Ala
        595
```

<210> 35126
<211> 301
<212> PRT
<213> A.fumigatus

<400> 35126

```
Leu Pro Tyr Leu Asn His Phe His Pro Ser Val Ser Val Asn Ala Ser
1               5                   10                  15
His Leu Leu Asn His His Pro Met Ser Gly Lys Pro Asp Met Thr Ile
            20                  25                  30
His Thr Leu Thr His Phe Leu Asp Arg Phe Ile Tyr Arg Thr Pro Lys
        35                  40                  45
Ala Ser Ala Thr Thr Arg Gly Gly Ser Ile Met Gln Pro Leu Ala Gly
    50                  55                  60
Ser Asp Thr Lys Asp Arg Leu Val Val Thr Ala Lys Gly Ser Gln Asp
65                  70                  75                  80
Leu Pro Pro Asn Ser Glu Glu Phe Trp Lys Lys Lys Thr Glu Asp Val
                85                  90                  95
Ala Ala Glu Asp Val Phe Phe His Glu Tyr Phe Ser Arg Val Gly Lys
```

```
            100                 105                 110
Ser Lys Asp Lys Ala Gln Lys Lys Arg Ala Lys Asp Ala Gly Gly Arg
        115                 120                 125
Gly Glu Glu Asn Ala Glu Gly Leu Ser Asp Ala Glu Ser Glu Ile Trp
    130                 135                 140
Glu Ala Leu Val Lys Ser Arg Pro Asp Leu Glu Asp Ala Gly Asp Ser
145                 150                 155                 160
Asp Asp Asp Leu Asp Leu Asp Asp Leu Glu Ser Ala Tyr Asp Gln Gly
                165                 170                 175
Glu Asn Asp Glu Ala Ala Glu Ser Asp Gly Gly Val Ile Phe Asn Asp
            180                 185                 190
Glu Ser Asp Glu Glu Met Glu Asp Leu Asp Ala Ala Ala Glu Ser Asp
        195                 200                 205
Ala Glu Glu Pro Pro Thr Arg Gly Lys Thr Lys Gly Lys Lys Met Glu
    210                 215                 220
Glu Glu Glu Ala Leu Asp Glu Glu Asp Asp Phe Asp Met Asp Ala Ser
225                 230                 235                 240
Asp Glu Glu Ala Phe Val Gly Ser Asp Glu Glu Leu Pro Ser Asp Ile
                245                 250                 255
Asp Leu Gly Gly Val Glu Leu Pro Lys Glu Asp Glu Ala Ser Gly Arg
            260                 265                 270
Lys Lys Arg Arg Lys Leu Lys His Leu Pro Thr Phe Ala Ser Ala Asp
        275                 280                 285
Asp Tyr Ala Ala Leu Leu Ala Gly Glu Asp Glu Gly Met
    290                 295                 300

<210> 35127
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35127
Asp Val Gln Leu Val Arg Asp Leu Val Ile Val His Pro Leu Gln Gly
1               5                   10                  15
Thr Phe Ser Ala Thr Ser Asn Pro Cys Arg Pro Leu Pro Asn Glu Asp
            20                  25                  30
Gly Tyr Asp Asp Tyr Leu Leu Asp Pro Asn Ala His Thr Ser Ser Thr
        35                  40                  45
Thr Pro Ile Ala Ala Val Phe Ala His Ser Pro Ser
    50                  55                  60

<210> 35128
<211> 211
<212> PRT
<213> A.fumigatus

<400> 35128
Pro Val His Arg Leu Ser Glu His Ile Asp Thr Leu Phe Arg Ile Thr
1               5                   10                  15
His Ser Ser Asn Phe Asn Thr Ser Ile Gln Ala Leu Met Leu Ile Gln
            20                  25                  30
Gln Leu Thr Ala Ser His Gln Val Gly Ala Asp Arg Phe Tyr Arg Thr
        35                  40                  45
Leu Tyr Glu Ser Leu Leu Asp Pro Arg Val Ala Thr Ser Ser Lys Gln
    50                  55                  60
Ser Leu Tyr Leu Asn Leu Leu Phe Lys Ala Leu Lys Asn Asp Leu Asn
```

```
65                  70                  75                  80
Leu Arg Arg Val Lys Ala Phe Val Lys Arg Ile Val Gln Val Leu Gly
                85                  90                  95
Leu His Gln Pro Ala Phe Ile Cys Gly Val Phe Tyr Leu Ile Arg Glu
            100                 105                 110
Leu Glu Lys Thr Phe Pro Gly Ile Gln Ala Leu Phe Asp Gln Pro Glu
        115                 120                 125
Asp Asn Glu Ser Asp Asp Glu Glu Val Phe Arg Asp Val Pro Asp Glu
    130                 135                 140
Asp Asp Glu Gln Gln Ala Gln Pro Ala Val Pro Glu Asp Lys Gln Gln
145                 150                 155                 160
Lys Pro Ser Thr Arg Tyr Asp Pro Arg Lys Arg Asp Pro Glu His Ser
                165                 170                 175
Asn Ala Asp Lys Thr Cys Leu Trp Glu Leu Val Arg Trp Thr Ser Thr
            180                 185                 190
Cys Trp His Leu Asn Ile Arg Glu Ser Lys Ala Asn Arg Ile Tyr Ser
        195                 200                 205
Tyr Arg Thr
    210
```

<210> 35129
<211> 68
<212> PRT
<213> A.fumigatus

<400> 35129

```
Cys Arg Tyr Arg Ser Cys Gln Gln Lys Tyr Gly Asn Ala Ala Gly Ser
1               5                   10                  15
His Thr Asn Phe Asp Gln Gln Glu Thr Gly Gly Ser Ala Lys Ser Ile
            20                  25                  30
Leu Thr Asp Ser Trp Arg Leu Glu Asn Ser Gly Asp Asp Val Asp Asp
        35                  40                  45
Pro Glu Ala Asn Cys Thr Phe Val Ala Met Leu Cys Ser Arg Met Ile
    50                  55                  60
Lys Arg Lys Ile
65
```

<210> 35130
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35130

```
Met Pro Pro Arg Asp Glu Ser Ala Ala Tyr Ala Leu Asp Asp Ala Ile
1               5                   10                  15
Val Phe Ala Arg Ile Leu Ala Arg Tyr Arg Gly Glu Pro Leu Thr Asp
            20                  25                  30
Ala Phe Arg Ala Tyr Glu Asp Ile Arg Arg Glu Ile Val Asn Glu Ala
        35                  40                  45
Phe Lys Ser Ala Arg Arg Met Trp Glu Lys His Lys Asp Met Gly Leu
    50                  55                  60
Leu Glu Ser Arg Leu Arg Glu Trp Thr Leu Pro Phe Tyr Ile Arg Asn
65                  70                  75                  80
Ser
```

<210> 35131
<211> 103
<212> PRT
<213> A.fumigatus

<400> 35131
Ala Val Gln Gly Leu Pro Gly Tyr Ile Lys Leu Thr Asp Ala Ala Cys
1 5 10 15
Asp Glu Val Phe Val Ser Val Gly Ser Thr Gly Leu Val Leu Ile Leu
20 25 30
Ile Arg Ser Leu His Leu Leu Ser Phe Ala Leu Phe Ala Ser Leu Val
35 40 45
Lys Ser Gly Thr Cys Phe Ser Phe Asn Ser Thr Thr Met Lys Phe Val
50 55 60
Ala Thr Leu Ile Ala Cys Gly Leu Ser Gly Leu Ala Leu Ala Ala Pro
65 70 75 80
Thr Ala Thr Val Asp Ser Leu Gly Lys Arg Ala Ala Asp Asp Val Arg
85 90 95
Leu Leu Leu Glu Cys Val Ser
100

<210> 35132
<211> 135
<212> PRT
<213> A.fumigatus

<400> 35132
Thr Glu Ala Pro Pro Val Val Leu Glu Val Pro Arg Pro Pro Ser Pro
1 5 10 15
Pro Thr Gln Pro Ser Leu Leu Pro Ser Pro Val Met Arg Arg Arg Trp
20 25 30
Ser Thr Ser Ala Ala Pro Ser Ser Arg Ala Pro Ser Arg Ser Arg Leu
35 40 45
Ala Ala Thr Pro Ala Ser Ser Ala Arg Thr Pro Pro Leu Cys Ser Arg
50 55 60
Asp Ser Ala Cys Thr Tyr Asn Leu Ala Cys Gly Gln Lys Asp Thr Pro
65 70 75 80
Asn Glu Asn Ser Leu Val Lys Glu Lys Ser Asn Val Ile Ile Arg Asn
85 90 95
Leu Gly Val Lys Lys Val Leu Ala Glu Asn Gly Asp Ala Ile Gly Ile
100 105 110
Arg Lys Tyr Pro Phe Phe Gly Gln Trp Thr Gln Leu Met Asn Gly Arg
115 120 125
Ile Leu Gln Gln Cys Val Gly
130 135

<210> 35133
<211> 157
<212> PRT
<213> A.fumigatus

<400> 35133
Gln Leu Gln Val Thr His Ala Ala Asp Tyr Val Thr Ile Ser Asn Ser
1 5 10 15
Tyr Ile His Asp His Trp Lys Ala Ser Leu Val Gly His Ser Asp Asn
20 25 30

```
Asn Gly Asp Glu Asp Lys Gly His Leu Arg Val Thr Tyr Ala Asn Asn
        35                  40                  45
Tyr Trp Ser Asn Ile Asn Ser Arg Ala Pro Ser Leu Arg Phe Gly Thr
    50                  55                  60
Gly His Ile Tyr Asn Ser Tyr Phe Glu Asn Val Ser Asp Gly Ile Asn
65                  70                  75                  80
Thr Arg Asp Gly Ala Gln Val Leu Val Glu Ser Asn Gln Phe Val Gly
                85                  90                  95
Ser Ser Lys Ala Leu Tyr Ser Thr Asp Asp Gly Tyr Ala Val Glu Arg
            100                 105                 110
Asp Asn Asp Phe Gly Gly Ala Lys Asn Thr Ala Leu Gln Gly Thr Leu
        115                 120                 125
Thr Thr Val Pro Tyr Ser Tyr Ser Leu Leu Gly Ser Ser Lys Val Lys
    130                 135                 140
Ser Ala Val Val Gly Val Ala Gly Gln Thr Leu Lys Phe
145                 150                 155

<210> 35134
<211> 103
<212> PRT
<213> A.fumigatus

<400> 35134
Met Arg Phe Leu Val Phe Leu Gln Gly Glu Thr Leu Thr Gly Gln Ala
1               5                   10                  15
Ala Phe Gly Tyr Ala Ser Leu Asn Gly Gly Thr Thr Gly Gly Ala Gly
            20                  25                  30
Gly Thr Thr Thr Thr Val Ser Ser Tyr Ala Ala Phe Thr Ala Ala Val
        35                  40                  45
Ser Ser Asp Ala Lys Lys Val Val Tyr Val Ser Gly Pro Ile Lys Gln
    50                  55                  60
Ser Ala Lys Gln Val Lys Val Gly Ser Asn Thr Ser Ile Ile Gly Lys
65                  70                  75                  80
Asp Ser Thr Ala Val Leu Glu Gly Phe Gly Leu Tyr Val Gln Pro Cys
                85                  90                  95
Leu Trp Thr Lys Gly His Ala
            100

<210> 35135
<211> 149
<212> PRT
<213> A.fumigatus

<400> 35135
Leu Asp Asp Ser Asp Ser Asp Tyr Leu Lys Arg Asp Asp Gln Tyr Leu
1               5                   10                  15
Ala Phe Arg Leu Gln Asn Glu Glu Ala Arg Asn Lys Met Ala Lys Thr
            20                  25                  30
Ala Lys Asp Arg Asp Arg Ala Leu Ala Met Ala Lys Ala Asn Asp Leu
        35                  40                  45
Gly Leu Pro Glu Ala Glu Ala Asp Gly Asp Gly Asp Thr Asn Met Glu
    50                  55                  60
Glu Gly Ala Glu Gly Thr Thr Glu Thr Leu Gly Ser Lys Val Ile Val
65                  70                  75                  80
Val His Val Gly Ser Gln Asn Leu Arg Ile Gly Leu Ala Ser Asp Ala
                85                  90                  95
```

```
Leu Pro Lys Thr Val Pro Met Val Ile Ala Arg Lys Ser Thr Thr Ser
            100                 105                 110
Glu Ser Glu Asp His Ala Glu Pro His Pro Lys Arg Leu Lys Leu Asp
        115                 120                 125
Asp Gly Ser Leu Met Glu Pro Glu Glu Asn Ala Trp Ser Gly Gly Leu
    130                 135                 140
Ser Tyr Pro Ser Ala
145
```

<210> 35136
<211> 544
<212> PRT
<213> A.fumigatus

<400> 35136

```
Phe Ser Ser Leu Tyr Thr Thr Met Ala Ala Glu Leu Lys Ala His Met
1               5                   10                  15
Arg Gln Asn Lys Arg Arg Thr Leu Pro Asn Ser Lys Glu Met Val Ile
            20                  25                  30
Asn Tyr Asn Arg Arg Thr Val Pro Glu Thr Ile Pro Glu His Asn Asp
        35                  40                  45
Pro Leu Arg Val Glu Trp Thr Asp Ile Thr Asp Asp Ala Pro Glu Tyr
    50                  55                  60
Ile Val Gly Gln Ala Ala Leu Arg Ile Pro Asp Asp Ser Lys Pro Arg
65                  70                  75                  80
Tyr Lys Leu Tyr Trp Pro Ile Arg Tyr Gly Trp Cys Asn Glu Arg Asp
                85                  90                  95
Tyr Glu Asn Lys Arg Leu Leu Phe Leu Asp Ile Ser Leu Ile Leu Glu
            100                 105                 110
Asp Thr Ile Lys Ser Gln Leu Gly Leu Thr Ser Lys Lys Asp Trp Pro
        115                 120                 125
Gln Tyr Ser Cys Val Phe Val Ile Pro Asp Leu Tyr Glu Lys Thr Tyr
    130                 135                 140
Val Thr Gln Val Leu Glu Met Leu Met Arg Glu Phe Ser Phe Ala Arg
145                 150                 155                 160
Val Cys Phe Ile Gln Glu Ser Leu Ala Ala Thr Phe Gly Ala Gly Phe
                165                 170                 175
Thr Ser Ala Cys Val Val Asp Ile Gly Ala Gln Lys Thr Ser Ile Cys
            180                 185                 190
Cys Val Glu Glu Gly Met Cys Ile Glu Asn Ser Arg Val Asn Leu Lys
        195                 200                 205
Phe Gly Gly Ala Asp Val Thr Glu Ala Phe Ile Lys Met Met Leu Phe
    210                 215                 220
Asp His Phe Pro Tyr Ala Glu Ile Asn Leu Trp Arg Arg Tyr Asp Phe
225                 230                 235                 240
Leu Leu Ala Glu Glu Leu Lys Lys Asn Val Cys Thr Leu Asn Glu Ala
                245                 250                 255
Ser Val Ser Val Gln Val Phe Asp Phe His Leu Arg Ile Ala Gly Gln
            260                 265                 270
Asp Thr Arg Lys Tyr Ser Phe Lys Ala Tyr Asp Glu Val His Leu Ala
        275                 280                 285
Pro Met Gly Tyr Phe Gln Pro Ser Ile Phe Asp His Ser Arg Lys Leu
    290                 295                 300
Glu Gly Arg Arg Lys Phe Ile Thr Arg Ser Val Asp Ile Tyr Asp Gly
305                 310                 315                 320
Gln Pro Asn Asp Pro Thr Ser Gly Ala Gln Ser Glu Ile Leu Thr Ala
```

```
                325                 330                 335
Ile Ala Pro Pro Pro Ala Asn Gly Gln Val Asn Gly Glu Ser Gln Ser
            340                 345                 350
Phe Thr Leu Asp Val Gln Ser Thr Pro Thr Arg Ser His Gln Val Asn
        355                 360                 365
Ala Leu Ser Arg Val Gln Glu Leu Asp Ala Thr Pro Arg Ser Ser Val
    370                 375                 380
Ala Gly Ser Pro Ala Pro Glu Ala Ile Gly Thr Pro Gln Ala Gly Gly
385                 390                 395                 400
Ala Gly Thr Pro Leu Pro Gly Gly Gln Gly Gln Asn Ala Ser Gln Ala
                405                 410                 415
Arg Ala Pro Thr Val Glu Glu Arg Asp Asp Val Leu Pro Val Phe Pro
            420                 425                 430
Leu Asp Asn Ala Ile Leu Thr Ser Ile Ser His Ala Ala Arg Ser Asp
        435                 440                 445
Glu Arg Lys Met Arg Asp Phe Leu Gly Gly Ile Met Val Val Gly Gly
    450                 455                 460
Gly Ser Leu Val Ser Gly Phe His Ser Phe Leu Glu Glu Arg Leu Gln
465                 470                 475                 480
Thr Leu Arg Pro Gly Phe Ala Ser Glu Ile Met Val Gly Thr Pro Pro
                485                 490                 495
Arg Asp Leu Asp Pro Gln Val Val Val Trp Lys Gly Ala Ser Val Phe
            500                 505                 510
Gly Lys Leu Ser Gly Thr Asn Asp Ser Trp Ile Gly Gln Leu Glu Tyr
        515                 520                 525
Asp Arg Leu Gly His Arg Leu Met Ala Tyr Lys Cys Met Trp Ala Tyr
    530                 535                 540

<210> 35137
<211> 147
<212> PRT
<213> A.fumigatus

<400> 35137
Asp Thr Arg Arg Ile Lys Arg Lys Ala Ala Val Ser Arg Lys Glu Glu
1                   5                   10                  15
Leu Val Cys Pro His Ala Leu Val Arg His Gln Ser Val Thr Gln Ser
            20                  25                  30
Ile Ile Phe Gln Leu Pro Asp Pro Ala Val Ile Gly Ser Ala Gln Leu
        35                  40                  45
Thr Lys His Thr Cys Ala Leu Pro Asp Tyr His Leu Gly Val Glu Val
    50                  55                  60
Ser Trp Arg Cys Thr Asp His Asp Phe Ala Ser Lys Pro Trp Ser Gln
65                  70                  75                  80
Arg Leu Glu Thr Leu Phe Gln Glu Gly Val Glu Ala Ala Asp Lys Thr
                85                  90                  95
Ala Ala Ser Asp Asp His Asp Ser Ser Glu Glu Val Ser His Leu Thr
            100                 105                 110
Phe Ile Arg Ser Ser Cys Met Arg Asn Arg Cys Glu Asp Arg Ile Ile
        115                 120                 125
Gln Arg Glu Asp Trp Lys Asn Ile Ile Ser Leu Phe Asp Ser Arg Cys
    130                 135                 140
Thr Gly Leu
145

<210> 35138
```

<211> 91
<212> PRT
<213> A.fumigatus

<400> 35138
Ala Cys Ile Ile Phe Cys Trp Leu Phe Val Gln Arg Phe Arg Met Ser
1 5 10 15
Thr Arg Asp Pro Leu Phe Ile Ala Gln Glu Ala Val Cys Phe Tyr Pro
20 25 30
Ile Ser Thr Ile Tyr Asp Ser Cys Pro Arg Tyr Leu Phe Tyr Ala Leu
35 40 45
Leu Leu Ala Ser Cys Val Thr Arg Trp Thr Gly Trp Leu Ala Asp Val
50 55 60
Phe Leu Gly Ala Ala Ala Thr Tyr Ala Gly Val Ala Ala Ile Gln Ala
65 70 75 80
Phe Ile Leu Val Ser Ser Pro Ser Ser Pro Ala
85 90

<210> 35139
<211> 176
<212> PRT
<213> A.fumigatus

<400> 35139
Ile Thr Ile Trp Leu Asn Gly Gly Pro Gly Cys Ser Ser Leu Asp Gly
1 5 10 15
Leu Leu Gln Glu Asn Gly Pro Phe Leu Trp Gln Ser Gly Thr Tyr Lys
20 25 30
Pro Ile Arg Asn Pro Tyr Ser Trp Thr Asn Leu Thr Asn Met Val Tyr
35 40 45
Val Asp Gln Pro Ala Gly Thr Gly Phe Ser Pro Gly Pro Ser Thr Val
50 55 60
Asn Asn Glu Glu Asp Val Ala Arg Gln Phe Lys Ser Trp Phe Lys His
65 70 75 80
Phe Val Asp Thr Phe Asn Leu His Gly Arg Lys Val Tyr Ile Thr Gly
85 90 95
Glu Ser Tyr Ala Gly Gln Tyr Ile Pro Tyr Ile Ala Ser Ala Met Leu
100 105 110
Asp Glu Lys Asp Lys Lys Tyr Phe Asn Val Lys Gly Ile Gln Ile Asn
115 120 125
Asp Pro Ser Ile Asn Asp Asp Ser Val Met Ile Tyr Gly Met Ser Ile
130 135 140
Phe His Asp Ile Cys Ser Leu Phe Phe Arg Ala Asn Met Ser Ser Ser
145 150 155 160
Thr Arg Cys Gln Pro Ser Glu Pro Val Pro Glu Arg Leu Leu Ser Gln
165 170 175

<210> 35140
<211> 271
<212> PRT
<213> A.fumigatus

<400> 35140
Ala Ser Ser Met Ile Ser Val His Tyr Ser Ser Gly Leu Thr Cys Arg
1 5 10 15
Val Ala Pro Ala Val Ser His Leu Asn Gln Tyr Leu Asn Val Phe Ser

```
            20                  25                  30
Leu Asn Asp Thr Phe Val Lys His Ile Asn Lys Arg Ala Glu Glu Cys
        35                  40                  45
Gly Tyr Asn Lys Phe Leu Asp Glu Ala Ile Thr Tyr Pro Pro Pro Lys
    50                  55                  60
Glu Phe Pro Val Ala Pro Asp Pro Ser Lys Asn Asn Cys Ala Leu Trp
65                  70                  75                  80
Asp Asp Ile Val Glu Ala Ala Tyr Tyr Val Asn Pro Cys Phe Asn Phe
                85                  90                  95
Tyr His Leu Thr Asp Phe Cys Pro Tyr Leu Trp Asp Glu Met Gly Phe
            100                 105                 110
Pro Ser Leu Ala Gly Gly Pro Asn Asn Tyr Phe Asn Arg Ser Asp Val
        115                 120                 125
Gln Lys Ala Leu His Val Pro Pro Thr Asp Tyr Ser Val Cys Gly Glu
    130                 135                 140
Thr Thr Ile Phe Ala Lys Gly Asp Gln Ser Val Pro Ser Ala Leu Gly
145                 150                 155                 160
Pro Leu Pro Ser Val Ile Glu Arg Thr Asn Asn Val Leu Ile Gly His
                165                 170                 175
Gly Trp Leu Asp Tyr Leu Leu Phe Val Asn Gly Ser Leu Ala Thr Ile
            180                 185                 190
Gln Asn Met Thr Trp Asn Gly Ala Gln Gly Phe Gln His Pro Pro Val
        195                 200                 205
Glu Pro Leu Tyr Val Pro Tyr His Tyr Gly Leu Ala Glu Leu Val Thr
    210                 215                 220
Ser Thr Ala Pro Asn Pro Tyr Thr Leu Asn Ala Gly Ala Gly Tyr Leu
225                 230                 235                 240
Gly Thr Ala His Thr Glu Arg Gly Leu Thr Phe Ser Thr Val Tyr Met
                245                 250                 255
Ala Gly His Gly Lys Glu Asn His Leu Tyr Leu His Val Ser Phe
            260                 265                 270
```

<210> 35141
<211> 103
<212> PRT
<213> A.fumigatus

```
<400> 35141
Asp Phe Val Val Ala Met Phe His Thr Phe Glu Gly Phe Glu Asn Pro
1               5                   10                  15
Gly Ala Ser Ala Pro Ala Lys Gly Arg Glu Arg Gln Gln Ser Val Gly
            20                  25                  30
Arg Arg Val Thr Thr Leu Arg Ala Cys Thr Ser Cys Arg His Arg Lys
        35                  40                  45
Ile Lys Cys Asp Gly Glu Lys Pro Cys Glu Ala Cys Arg Trp Tyr Lys
    50                  55                  60
Lys Ala Asp Gln Cys His Tyr Ser Asp Pro Arg Pro Ser Arg Arg Tyr
65                  70                  75                  80
Val Leu Phe Val Leu Ser Met Ser Ser Val Pro Ser Leu Leu Ser Phe
                85                  90                  95
Pro Trp Ser Ser Arg Asn Arg
            100
```

<210> 35142
<211> 360
<212> PRT

<213> A.fumigatus

<400> 35142

```
Ala Glu Arg Ser Arg His Val Glu Lys Leu Ser Thr Thr Leu Asp Glu
1               5                  10                  15
Tyr Arg Ser Val Leu Glu Arg Leu Phe Pro Ser Thr Ser Pro Glu Ala
            20                  25                  30
Leu Val Ser Leu Pro Arg Glu Lys Leu Leu Glu Leu Ser Gly Lys Gly
        35                  40                  45
Pro Pro Gln Pro His Ala Gln His Pro Ala Ser Pro Ala Thr Ser Ala
    50                  55                  60
Ser Val Glu Ala His Val Ser Pro Ile Ser Asn Glu Asp Gly Asn Leu
65                  70                  75                  80
Glu Ser Leu Gln Thr Met Pro Glu Asp Pro Ser Asp Ser Arg Asn Gln
                85                  90                  95
Ser Thr Ser Asp Ile Ala Asn Glu Ile Ser Asp Asp Val Asn Ala Leu
            100                 105                 110
Ser Leu Ser Ala Lys Gln Pro Ser Ser Tyr Leu Gly Val Ser Ser Ile
        115                 120                 125
His Ala Val Leu Lys Val Ile Val Trp Leu Asp Pro Gly Ser Leu Ser
    130                 135                 140
Tyr Phe Ser Arg Thr Pro Ala Ser Ala Ala Pro Arg Glu Ser Met His
145                 150                 155                 160
Asp Tyr Ser Thr Ser Ala Glu His Gln Asn Trp His Ile Gln Ser Ser
                165                 170                 175
Gln Gln Arg Pro Val Thr Pro Pro Lys Ala His Met Gln Ala Thr Asp
            180                 185                 190
Thr Gln Leu Leu Asp Ala Tyr Phe Thr Trp Phe Gln Pro Phe Val Pro
        195                 200                 205
Met Leu Asp Glu Gln Ala Phe Arg Glu Thr Tyr Leu Ser Gly His Arg
    210                 215                 220
Arg Asp Asp Arg Trp Leu Gly Leu Leu Asn Ile Val Phe Ala Leu Gly
225                 230                 235                 240
Ser Ile Ala Ala Cys Pro Ser Asp Asp Ile Ser His Lys Val Tyr Tyr
                245                 250                 255
Gln Arg Ser Lys Ser Tyr Leu Ser Leu Asp Ser Leu Gly Ser Ser His
            260                 265                 270
Leu Glu Thr Ile Gln Thr Leu Gly Leu Met Gly Gly Tyr Tyr Leu His
        275                 280                 285
Tyr Val Ser Glu Pro Asn Leu Ala Tyr Ser Leu Met Gly Ala Ala Leu
    290                 295                 300
Arg Met Ala Ala Ala Leu Gly Leu His Lys Glu Phe Ser Tyr Asn Gln
305                 310                 315                 320
Asp Ala Ser Asn Lys Gln Lys Leu Ser Ala Met Asp Leu Lys Arg Arg
                325                 330                 335
Thr Trp Trp Ser Leu Phe Cys Met Asp Thr Trp Gly Gly Met Thr Leu
            340                 345                 350
Gly Arg Pro Ser Met Val Val Leu
        355                 360
```

<210> 35143
<211> 351
<212> PRT
<213> A.fumigatus

<400> 35143

```
Arg His His Pro Ile Ala Gln Ala Val Ser Ala Phe Cys Lys Gly Arg
1               5                  10                  15
Ser Glu Ile Pro Val Ala Ala Ser Asp Ile Val Glu Lys Ser Gly Arg
            20                  25                  30
Gly Met Met Gly Thr Phe Thr Ile Ser Ile Asn Asp Pro Ala Ser Asn
        35                  40                  45
Ser Ser Thr Thr Val Val Tyr Glu Ala Ala Ile Gly Asn Glu Ala Leu
    50                  55                  60
Leu Gln Ser Leu Thr Ser Ala Val Asp Thr Tyr Arg Leu Ser Gly Leu
65                  70                  75                  80
Leu Glu Glu Tyr Gln Ser Ala Gly Lys Ser Thr Ala Ile Leu Ser Leu
                85                  90                  95
Arg Lys Ile Asp Pro Thr Ser Pro Asp Lys Pro Ser Phe Thr Pro Ala
            100                 105                 110
Ile Val Phe Ala Ala Thr Asp Ala Ile Arg Pro Gln Ala Ser Glu Ile
        115                 120                 125
Ile Ser Gln Leu Arg Lys Arg Asp Val Asp Val Phe Met Cys Thr Gly
    130                 135                 140
Asp Asn Gln Thr Thr Ala Tyr Ala Val Ala Asp Val Val Gly Ile Pro
145                 150                 155                 160
Arg Ser Asn Val Met Ala Asn Val Met Pro Ala Gly Lys Ala Asp Phe
                165                 170                 175
Val Arg Lys Val Gln Ala Gly Leu Tyr Pro Val Arg Asn Glu Asp Asp
            180                 185                 190
Ala Glu Ser Gln Thr Asn Arg Ser Gly Ser Arg Pro Ile Val Ala Phe
        195                 200                 205
Val Gly Asp Gly Val Asn Asp Ser Pro Ala Leu Ala Ala Ala Asp Val
    210                 215                 220
Ser Ile Ala Met Ala Ser Gly Ser Asp Val Ala Met Asn Ser Ala Ser
225                 230                 235                 240
Phe Ile Leu Leu Asn Ser Lys Leu Asp Thr Ile Leu Gln Leu Val Leu
                245                 250                 255
Leu Ser Arg Arg Val Phe Asn Arg Val Lys Met Asn Phe Gly Trp Ala
            260                 265                 270
Val Val Tyr Asn Leu Cys Leu Val Pro Val Ala Ala Gly Val Phe Tyr
        275                 280                 285
Pro Ile Val Thr Gly Gln Lys His Met Met Met Asp Gly Glu Met Val
    290                 295                 300
Thr Val Asn Asp His Trp Arg Leu Ser Pro Val Trp Ala Ala Leu Ala
305                 310                 315                 320
Met Ala Leu Ser Ser Val Ser Val Ile Cys Ser Ser Leu Ala Leu Ala
                325                 330                 335
Ile Asp Gly Arg Thr Ile Lys Lys Leu Leu Gly Arg Ser Met Ser
            340                 345                 350
```

<210> 35144
<211> 375
<212> PRT
<213> A.fumigatus

```
<400> 35144
Gln Gly Ile Leu Ser Ile Glu Gln Gly Asp Ser Ser Thr His Val Arg
1               5                  10                  15
Ser Asn Thr Ser Thr Ser Ala Ala Pro Gly Pro Arg Asp Asn Asp Asn
            20                  25                  30
Asn Ile Val Ala Gln Glu Ser Leu Asn Gly Asn Asn Asp Glu Pro Ile
```

```
        35                  40                  45
Gln Ile Gln Asp Asn Asp Arg Gly Arg Asp Pro Ile Asp Glu Ile Gly
    50                  55                  60
Ile Glu Pro Ile Ile Leu Pro Ala Asn Ser Phe Thr Ile Gln Leu Val
65                  70                  75                  80
Leu Asp Thr Arg Glu Val Arg Ser Ser Lys Asp Arg Asp Tyr Ile Ala
                85                  90                  95
Asn Glu Leu Ser Lys Lys Gly Ile Thr Pro Glu Val Arg Ala Leu Glu
            100                 105                 110
Leu Gly Asp Ala Met Trp Val Ala Arg Cys Asn Asp Pro Thr Phe Leu
        115                 120                 125
Ser Gln Tyr Gly Glu Glu Cys Asn Glu Val Met Leu Asp Trp Ile Val
    130                 135                 140
Glu Arg Lys Arg Met Asp Asp Leu Leu Gly Ser Ile Lys Asp Gly Arg
145                 150                 155                 160
Phe His Glu Gln Lys Phe Arg Leu Arg Arg Ser Gly Ile Lys Asn Val
                165                 170                 175
Ile Tyr Leu Ile Glu Glu Phe Ala Ile Thr His Asp Val Gly Ser Ala
            180                 185                 190
Ser Ala Met Lys Tyr Gln Glu Met Met Ala Ser Ala Ile Ala Ser Thr
        195                 200                 205
Gln Val Val Asn Gly Tyr Phe Val Lys Gln Thr Arg Asn Leu Asp Asp
    210                 215                 220
Thr Ile Arg Tyr Leu Ala Arg Met Thr Tyr Leu Leu Gln Lys Met Tyr
225                 230                 235                 240
Cys Phe Ser Pro Pro Thr His Thr Leu Ser Leu Ile Pro Ser Arg Gln
                245                 250                 255
Leu Ser Ser Ala Gln Ser Tyr Leu Thr Thr Leu Glu Arg Leu Arg Ala
            260                 265                 270
Arg Asp Pro Ser Val Thr Tyr Ser Val Thr Phe Ser Thr Phe Ser Ala
        275                 280                 285
Leu Thr Ser Lys Ser Asp Ile Leu Ser Leu Arg Asp Val Phe Leu Lys
    290                 295                 300
Met Leu Met Cys Thr Arg Gly Val Thr Gly Glu Lys Ala Leu Glu Ile
305                 310                 315                 320
Gln Lys Arg Trp Ser Thr Pro Arg Glu Phe Val Glu Ala Phe Glu Arg
                325                 330                 335
Leu Asp Glu Lys Gly Arg Glu Asp Met Val Phe Glu Arg Thr Lys Thr
            340                 345                 350
Leu Val Gly Arg Lys Lys Met Gly Lys Val Leu Ser Lys Lys Ile Ala
        355                 360                 365
Asp Ile Trp Gly Thr Gly Gly
    370                 375
```

<210> 35145
<211> 159
<212> PRT
<213> A.fumigatus

<400> 35145

```
His Asp Gly Asn Ser Gln Pro Thr Pro Ser Arg His Arg Pro Thr Gln
1               5                   10                  15
Gln Phe Leu Asp Arg Pro Pro Val Asp Cys Glu Ser Lys Thr Thr Ala
            20                  25                  30
Asp Asn Arg Asn Ala Ala Gln Arg His Ser Gln Arg Ser Pro His Arg
        35                  40                  45
```

```
Thr Lys Pro Pro Val Val Ile Asn Gly Asp His Leu Ala Val His His
    50                  55                  60
His Met Leu Leu Pro Ser Asp Asp Gly Ile Glu His Ala Arg Ser Asn
65                  70                  75                  80
Gly His Lys Ala Glu Ile Ile His Asn Ser Pro Ala Lys Val His Leu
                85                  90                  95
Asp Ala Val Glu Asp Ala Pro Ala Glu Glu Asp Lys Leu Glu Asn Gly
            100                 105                 110
Ile Gln Leu Gly Val Glu Glu Asp Glu Ala Ser Arg Val His Gly Asp
        115                 120                 125
Val Arg Ala Gly Arg His Gly Asp Thr Asn Val Gly Gly Cys Glu Ser
    130                 135                 140
Gly Arg Val Val Asn Ala Val Ala Asp Glu Gly Asp Tyr Arg Pro
145                 150                 155

<210> 35146
<211> 72
<212> PRT
<213> A.fumigatus

<400> 35146
Ile Lys Thr Arg Gly Ser Tyr Arg Lys Leu Phe Gly Ala Arg Arg Ala
1               5                   10                  15
Ala Gln Ser Ile Cys Leu His Gln Ile Leu Leu Ile Arg Phe Leu Asn
            20                  25                  30
Met Val Pro Asn Ala Pro Lys Lys Ser Phe Asn Ser Ile Pro Ala Thr
        35                  40                  45
Glu Arg Asn Thr Ser Ser Met His Glu Thr Thr Ile Phe Asn Arg Asp
    50                  55                  60
Leu Glu Gly Leu Ala Tyr Ala Trp
65                  70

<210> 35147
<211> 445
<212> PRT
<213> A.fumigatus

<400> 35147
His Arg Tyr Gly Phe His Ser Cys Ser Leu Gln Cys Leu His Ser Ala
1               5                   10                  15
Ser Ala Leu Tyr Leu Pro Thr Met Ala Ser Asn Ser His Asn Arg Gly
            20                  25                  30
His Asn Glu Asp Asn Ala Pro Thr Asp Gln Ser Ile Pro Leu Gln Asp
        35                  40                  45
Leu Ser Gly Pro Leu Glu Arg Asn Pro Ser Arg Thr Ser Arg Val Gly
    50                  55                  60
Asn Arg Phe Leu Ser Arg Arg Ser Leu Arg Arg Gly Gly Ser Leu Ser
65                  70                  75                  80
Asn Tyr Glu Lys Val Ser Glu Glu Ser Pro Val Glu Pro Pro Pro Val
                85                  90                  95
Ala Arg Arg Ala Arg Pro Gln Gln Ala Gly His Gly Asn Glu Asp Glu
            100                 105                 110
Phe His Ile Glu Asp Pro Gly Thr Phe Ala Gln Ala Met Ser Ala Val
        115                 120                 125
Gly Leu Ser Phe Asp Pro Thr His Ser Thr Thr Thr Ser Ala Arg Arg
    130                 135                 140
```

```
Arg Glu Ser Ser Ser Asp Leu Ile Asn Val Pro Leu Asp Asp Phe Gly
145                 150                 155                 160
Pro Gln Glu Ala Glu His Tyr Leu Ser Pro Thr Asp Thr Tyr Glu Asp
                165                 170                 175
Thr Ala Pro Leu Thr Asp His Arg Phe Leu Gln Pro Ile Ser Gly Ala
            180                 185                 190
Ser Gln Asn Phe Ser Gly Gly Gln Asp Asp Arg Gly Ser Thr His Gly
        195                 200                 205
Asn Arg Phe Pro Ser Asp Ser Arg Pro Glu Ser Arg Leu Gly Asp Asp
    210                 215                 220
Leu Pro His Leu Glu Ser Gly Leu Gly Arg Arg Arg Arg Gly Ser Ser
225                 230                 235                 240
Ser Ala Gly Asp Ser Arg Ala Arg Ser Leu Ser Pro Ser Ala Thr Gly
                245                 250                 255
Ser Ala Leu Gln Arg Ala Gly Ser Met Met Lys Ser Met Ser Gln Arg
            260                 265                 270
Val Val Asn Leu Ser Asn Glu Pro Glu Val Val Glu Arg Ala Ile Met
        275                 280                 285
Arg Glu Glu Gln His Lys Asn Ala Arg Leu Glu Glu Pro Pro Ser Leu
    290                 295                 300
Pro Ser Leu Ser Gly Tyr Ala His Asp Ala Pro Ser Val Gly Met Ser
305                 310                 315                 320
Asp Asp Gln Leu Pro Arg Thr Gly Thr Ser Ala Ser Lys Ala Trp Arg
                325                 330                 335
Met Tyr Asn Asn Pro Leu Arg Gly Lys Ala Leu Gly Ile Leu Gly Pro
            340                 345                 350
Asn Asn Leu Ile Arg Val Trp Leu Cys Asp Ile Leu Ile His Pro Phe
        355                 360                 365
Met Glu Pro Phe Ile Leu Val Val Ile Ile Ile Gln Thr Ile Leu Leu
    370                 375                 380
Ala Leu Glu Ser Ala Lys Ser Val Trp Asp His Pro Arg Ser Val Arg
385                 390                 395                 400
Trp Gly Ser Asn Pro Met Asp Tyr Ala Tyr Phe Val Ile Phe Val Ile
                405                 410                 415
Tyr Thr Leu Glu Leu Val Ala Lys Ile Leu Val Ser Gly Phe Ile Leu
            420                 425                 430
His Pro Ala Glu Tyr Ser Thr Leu Asp Pro Ser Met Gly
        435                 440                 445
```

<210> 35148
<211> 77
<212> PRT
<213> A.fumigatus

<400> 35148

```
Val Leu Arg Leu Pro Asn Ala Lys Ala Lys Arg Ser Phe Gly Arg Arg
1               5                   10                  15
Phe Arg Arg Gly Gly Gly Ala Ile Ala Cys Ser Cys Cys Glu Gly Ala
            20                  25                  30
Ala Gly Arg Thr Val Cys Asp Thr Leu Glu Gln Val Asp Thr His Met
        35                  40                  45
His Ala Pro Lys Gly Cys Gly Ser Ser Tyr Trp Glu Leu Thr Leu Ala
    50                  55                  60
Ser Gly Lys Arg Lys Pro Lys Ile Tyr Thr Arg Pro Asp
65                  70                  75
```

<210> 35149
<211> 115
<212> PRT
<213> A.fumigatus

<400> 35149
Pro Arg Leu Ser Leu Leu Cys His Ser Ile Arg Thr Ile Ala Trp Asn
1 5 10 15
Pro Thr Gly Gln Leu Ile Ala Thr Gly Ser Ala Asp Arg Thr Leu Arg
20 25 30
Ile Trp Asn Pro Glu Arg Pro Ala Val Lys Tyr Ser Thr Glu Leu Arg
35 40 45
Gly His Ser Ala Gly Ile Glu Lys Val Leu Phe Asn Pro Val Lys Asp
50 55 60
Ser Glu Leu Ala Ser Cys Ser Thr Asp Gly Thr Val Arg Phe Trp Asp
65 70 75 80
Val Arg Ser Lys Thr Cys Val Ser Arg Leu Asp Val Gly Gly Glu Ala
85 90 95
Phe Thr Met Ser Trp Ser Ala Asp Gly Arg Ile Leu Met Ala Gly Arg
100 105 110
Lys Val Cys
115

<210> 35150
<211> 298
<212> PRT
<213> A.fumigatus

<400> 35150
Ala Val Ser Met Ser Ala Glu Arg His Ser Arg Cys Pro Gly Arg Arg
1 5 10 15
Met Ala Gly Ser Ser Trp Arg Glu Glu Arg Cys Val Glu Arg Thr His
20 25 30
Ala Leu His Leu Gly Leu Arg Asn Ser Ser Thr Arg Thr Arg Ser Met
35 40 45
Ser His Gly Lys Ala Thr Cys Arg Lys Arg Thr Asp Phe Phe Gly Ser
50 55 60
Gln Asp Asp Thr Leu Val Pro Ile Ser Ile Glu Ser Pro Ser Ser Ser
65 70 75 80
His Ile Leu Thr Asp Gly Ile Thr Asn Phe Pro Leu Thr Ser Ser Pro
85 90 95
Thr Ser Lys Glu Gly Thr Thr Thr Tyr Thr Ala Leu Glu Ser His Pro
100 105 110
Gln Pro Val Gln Thr Asn Ala Thr Thr Phe Ser His His Ile Pro Thr
115 120 125
Pro Thr Ser Pro Asp Leu His Leu Phe Ala Thr Thr Gly Glu Gly Thr
130 135 140
Val Lys Ile Met Ser Tyr Pro Ser Phe Asp Val Leu His Thr Leu His
145 150 155 160
Ala His Thr Ser Ala Cys Leu Ser Ile Ala Leu Ala Pro Thr Gly Arg
165 170 175
Tyr Leu Ala Val Gly Gly Ser Asp Ala Leu Ile Ser Leu Trp Asp Thr
180 185 190
Thr Asp Trp Ile Cys Arg Arg Thr Val Ser Ser Ser Asn Gly Gly Ala
195 200 205
Val Arg Gly Val Ser Trp Ser Phe Asp Gly Arg Phe Val Cys Gly Ala

```
    210                 215                 220
Cys Asp Glu Val Gly Cys Gly Gly Asn Gly Leu Glu Ile Phe His Ala
225                 230                 235                 240
Glu Thr Gly Glu Ser Val Tyr Thr Val Pro Thr Gly Gly Ser Ser Ala
                245                 250                 255
Ser Gly Ile Pro Thr Val Ala Trp His Pro Ser Arg Tyr Trp Leu Ala
            260                 265                 270
Tyr Ser Thr Thr Ala Asp Gly Pro Gly Ser Ala Gly Ala Gly Gly Leu
        275                 280                 285
Lys Ile Val Gly Ala Ala Gly Gly Ser Leu
    290                 295
```

<210> 35151
<211> 176
<212> PRT
<213> A.fumigatus

<400> 35151

```
Ala Asp Ile Cys Thr His Pro Lys Thr Phe Ala Glu Lys Ala Ala Trp
1               5                   10                  15
Asp Phe Val Glu Lys Glu Lys Pro Asn Phe Asp Ile Ala Thr Ile Asn
            20                  25                  30
Pro Pro Leu Val Leu Gly Pro Ile Val His Tyr Leu Asn Ser Leu Asp
        35                  40                  45
Ala Ile Asn Thr Ser Asn Lys Arg Ile Ala Glu Met Val Arg Gly His
    50                  55                  60
Cys Lys Asp Gly Leu Pro Pro Thr Ser Thr Phe Leu Trp Val Asp Val
65                  70                  75                  80
Arg Asp Val Ala Leu Ala His Val Arg Ala Ile Glu Val Pro Glu Ala
                85                  90                  95
Gly Gly Gln Arg Phe Phe Leu Thr Ala Gly Tyr Phe Ser Asn Lys Ala
            100                 105                 110
Val Ala Asn Ile Ile Arg Glu Ala Tyr Pro Glu Ile Ala Asp Arg Leu
        115                 120                 125
Pro Pro Lys Asp Ser Pro Asp Asp Thr Pro Ala Asp Val Tyr Gly Phe
    130                 135                 140
Asn Asn Lys Lys Ser Ile Glu Val Leu Gly Ile Gln Tyr Arg Ser Leu
145                 150                 155                 160
Glu Gln Ser Val Thr Glu Thr Val Lys Ser Leu Leu Ala Val Gly Ala
                165                 170                 175
```

<210> 35152
<211> 496
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (437),(450),(492)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35152

```
Ala Leu Pro Leu Thr Val Leu Gly Leu Ala Cys Met Val Gln Ser Thr
1               5                   10                  15
Phe Leu Lys Leu Thr Pro His Arg Arg Asp Asn Ile Glu Lys Leu Gln
            20                  25                  30
```

```
Leu Ser Pro Ile Leu Pro Met Ala Thr Ala Arg Leu Ser Pro Thr Ala
        35                  40                  45
Asn Leu Leu Arg Lys Ser Arg Leu Phe Ala Leu Pro Ser Ala Leu Pro
    50                  55                  60
Leu Pro Gln Gln Asp Ala Thr Ser Lys Thr Val Phe Glu Ser Asn Thr
65                  70                  75                  80
Ala Thr Leu Pro His Pro Ile Arg Ala Ser Ile Val Thr Pro Ala Ser
                85                  90                  95
Ser Leu Ala Arg Gly Asp Trp Gly Leu Lys Arg Pro Leu Pro Ala Lys
            100                 105                 110
Ser Thr Ser Glu Lys Ser Ser Arg Pro Val Ile Arg Leu Asn Val Leu
        115                 120                 125
Asp Thr Phe Glu His Val Thr Asp Phe Glu Ser Ala Ala Asp His Thr
    130                 135                 140
Val Thr Leu Glu Lys Phe Gln Glu Leu His Met Pro Met Ser Leu Pro
145                 150                 155                 160
Ser Lys Val Asn Tyr Ala Thr Ser Met Val Pro Arg His Gln Ser Pro
                165                 170                 175
Phe Glu Ser Val Val Asp Asn Thr Asp Thr Ser Lys Ser Leu Gln Glu
            180                 185                 190
Pro Gly Ala Lys Gln Phe Arg His Ser Gly Pro Trp Leu Ala Gly Gln
        195                 200                 205
Thr Glu Ala Glu Phe Asn Ala Tyr Leu Asn Lys Val Arg Ala Arg Lys
    210                 215                 220
Pro Glu Leu Leu Gln Lys Leu Arg Glu His Phe Ile Thr Lys Arg Thr
225                 230                 235                 240
Ala Glu Arg Arg Lys Gln Ala Gln Asp Asn Gly Glu Asp Leu Glu Ala
                245                 250                 255
Leu Gly Pro Leu Asn Val Thr Glu Glu Glu Phe Gln Arg Tyr Ile Lys
            260                 265                 270
Ser Leu Arg Ala Asp Pro Phe Ser Leu Gly Pro Val Val Phe Glu Leu
        275                 280                 285
Leu Asp Leu Pro Ser Pro Pro Ala Val Pro Ser Asp Arg Ile Gly His
    290                 295                 300
Lys Tyr Tyr Gln Ser Pro Gly Thr Lys Leu Ser Ser Ala Glu Tyr Ala
305                 310                 315                 320
Val Ser Gly Pro Pro Lys Thr His Pro Ser Ala Gly Leu Ser Tyr Thr
                325                 330                 335
Arg Ser His Ala Leu Ile Tyr Asn His Pro Lys Phe Gly Pro Gln Ala
            340                 345                 350
Tyr Gln Arg Pro Val Gln Ala Arg Ile Leu Arg Pro Lys Gly Arg Phe
        355                 360                 365
Lys Gly Lys Thr Ser Lys Ala Ile Ala Gly Val Gly Gly Ile Ala Val
    370                 375                 380
Glu Asp Leu Asn Ala Met Thr Phe Ile Glu Gln Gly Ser Pro Ala Gly
385                 390                 395                 400
Leu Gly Tyr Phe Asp Ala Ser Ile Pro Gly Gly Ala Lys Tyr Trp Val
                405                 410                 415
Thr Pro Ile Arg Ala Ser Val Asp Ser Asp Gly Lys Ile Ala Leu Ala
            420                 425                 430
Ser Tyr Arg Ala Xaa Ala Thr Ala Lys Ala Pro Tyr Gly Ile Glu Glu
        435                 440                 445
Tyr Xaa Lys Pro Ser Ser Asn Ser Ile Ser Pro Gly Arg Ser Tyr Arg
    450                 455                 460
Thr Asn Val Leu Val Ser Gln Leu Gly Pro Phe Gly Lys Phe Val Leu
465                 470                 475                 480
```

```
Met Phe Gly Arg Gly Lys Asp Ser Ser Gly Asp Xaa Pro Glu Lys Ser
                485                 490                 495

<210> 35153
<211> 168
<212> PRT
<213> A.fumigatus

<400> 35153
Cys His Trp Arg Gly Pro Ser Gly Ser Ser Arg Leu Ile Ala Phe Lys
1               5                   10                  15
Ala Val Lys Ser Asn Pro Pro Phe Asp Tyr Val Leu His Thr Ala Ser
            20                  25                  30
Pro Phe His Phe Asn Val Ile Asp Pro Val Lys Asp Phe Leu Asp Pro
        35                  40                  45
Ala Ile Lys Gly Thr Thr Gly Ile Leu Lys Ala Ile Lys Ala Tyr Ala
    50                  55                  60
Pro Thr Val Lys Arg Val Val Ile Thr Ser Ser Phe Ala Ala Ile Ile
65                  70                  75                  80
Asn Pro Lys Gln His Ala Lys Glu Tyr Ser Glu Glu Asn Trp Asn Pro
                85                  90                  95
Val Thr Trp Glu Glu Ala Leu Asp Pro Ser Ala Thr Tyr Arg Gly Ser
            100                 105                 110
Lys Val Cys Ile Gln Pro Arg Ile Ser His Cys Ala Arg Leu Thr Tyr
        115                 120                 125
Ala Pro Thr Pro Arg Leu Leu Gln Lys Arg Leu Leu Gly Thr Leu Ser
    130                 135                 140
Arg Lys Arg Asn Pro Thr Leu Thr Leu Gln Pro Ser Thr His Arg Trp
145                 150                 155                 160
Cys Trp Val Gln Ser Cys Ile Thr
                165

<210> 35154
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35154
Leu His Arg Cys Ile Leu Glu Cys Gly Arg Lys Val Tyr Tyr Tyr Thr
1               5                   10                  15
Asp Leu Ile Met Asp Leu Lys Asp Gly Ser Asn Ile Ser Phe Gln Gly
            20                  25                  30
Ser Lys Tyr Ile Cys Ile Glu Leu Tyr Phe Tyr Ile Met Leu Asp Leu
        35                  40                  45
Phe Leu Leu Phe Met Pro Gln Gln Pro Thr Thr Thr
    50                  55                  60

<210> 35155
<211> 555
<212> PRT
<213> A.fumigatus

<400> 35155
Arg Gly Ser Gln Lys Gln Gly Gln Asp Ser Val Asp Ala Ser Thr Thr
1               5                   10                  15
Thr Asp Ile Gly His Ala Leu Ile Asn Gln Leu Arg Val Arg Glu Lys
```

```
            20                  25                  30
Glu Arg Ile Ile Glu Thr Arg Met Thr Gln Leu Ala Phe Ile Glu Leu
        35                  40                  45
Gln Glu Gly Pro Glu Ala Ala Val Asn His Ser Gly Gln Leu Leu Ser
    50                  55                  60
Leu Phe Ala Thr Leu Phe Asn Lys Leu Glu Leu Gln Ala Asp Asp Gln
65                  70                  75                  80
Lys Asp Arg Gln Thr Glu His Leu Val Pro Pro Lys Ser Ala Ala Gly
                85                  90                  95
Thr Val Lys Ser Leu Arg Gly Ser Ile Phe Gly Arg His Lys Ala Ser
            100                 105                 110
Arg Ala Ser Glu Arg Lys Ala Glu Ser Thr Gly Glu Thr Gln Pro Ile
        115                 120                 125
Ser Thr Ser Ser Ser Ile His Asn Glu Gln Met Leu Asn Thr Asp Leu
    130                 135                 140
Ala Pro Ala Ile Gln Val Thr Gln Glu Gln Asn Gly Asn Ala Glu Asp
145                 150                 155                 160
Pro Gln Pro Pro Ala Arg Ser Asp Ser Thr Arg Gln Lys Leu Arg Lys
                165                 170                 175
Arg Ser Gly Thr Leu Lys Lys Gly Glu Gly Gln Ser Ser Thr Gln Ile
            180                 185                 190
Asn Gly Thr Glu Asp Pro Thr Asn Ala Val Ser Thr Ala Thr Asn Gly
        195                 200                 205
Ser Ala Thr Leu Gln Gln Pro Gly Ser Arg Glu Gly Leu Ala Gln Asp
    210                 215                 220
Ala Val Gly Leu Ala Val Ser Ser Thr Ala Asn Gln Pro Gln Ser Ala
225                 230                 235                 240
Lys Gln Pro Leu Arg Pro Val Ala His Asn Met Asn Cys Lys Gln Ala
                245                 250                 255
Pro Pro Pro Thr Gly His Pro Lys Gln Pro Pro Glu Gln Asp Ile Arg
            260                 265                 270
Leu Pro Tyr Arg Phe Asp Ser Pro Thr Lys Ala Ile Thr Arg Phe Pro
        275                 280                 285
Ala Val Gln Ser Gln Lys His Ala Leu Ser Ile Leu Ile Lys Ile Trp
    290                 295                 300
Leu Leu Ile Ala Gly Leu Tyr Arg Arg Ala Ser Leu Phe Glu Asp Ala
305                 310                 315                 320
Gln Glu Ala Cys Glu Glu Ala Ala Lys His Val Asp Arg Val Glu Ala
                325                 330                 335
Leu Val Ala Ala Gln Glu Ser Ser Ala Arg Ala Phe Arg Ser Arg Gly
            340                 345                 350
Trp Ala Ser Pro Lys Ser Ser Asp Glu Leu Trp Ala Asp Leu His Thr
        355                 360                 365
Glu Gln Gly Leu Leu Ala Gln Ala Gln Ser Arg Pro His Asp Ala Met
    370                 375                 380
Glu Leu Phe Glu Glu Ala Leu Val Arg Asp Pro Asp His Leu Lys Ala
385                 390                 395                 400
Thr Val Cys Leu Ala Asn Leu Leu Leu Asp Ile Trp Glu Arg Lys Met
                405                 410                 415
Pro Leu Asn Arg Pro His Thr Asp Asp Leu His Ala Glu Met Ser Thr
            420                 425                 430
Leu Tyr Leu Pro Ala Thr Thr Gln Lys Ser Ser Ala Thr Leu Asn Lys
        435                 440                 445
Ile Gln Tyr Gln Glu Phe Asp Asn Leu Asp Asn Arg Pro Met Pro Ser
    450                 455                 460
Lys Arg Gln Ser Pro Pro Thr Asp Val Glu Glu Asp Glu Pro Lys Leu
```

```
465                 470                 475                 480
Leu Asn Arg Ile Ala Ala Arg Asp Arg Ala Tyr Val Leu Leu Ser Ala
                485                 490                 495
Leu Thr Lys Arg Gly Thr Ala Trp Asp Asn Ser Glu Ala Trp Phe Ala
            500                 505                 510
Leu Ser Arg Ala His Glu Ala Ser Gly Asp Val Glu Lys Leu Lys Glu
        515                 520                 525
Val Leu Trp Trp Cys Val Glu Leu Glu Asp Arg Arg Pro Ile Arg His
    530                 535                 540
Trp Ser Asn Ile Gly Ser Gly Leu Tyr Val Leu
545                 550                 555

<210> 35156
<211> 71
<212> PRT
<213> A.fumigatus

<400> 35156
Ile Asn Val Leu Phe Arg His Ala Trp Leu Ser Tyr Met Val Asp Ala
1               5                   10                  15
Pro Pro Thr Gln Asp Lys Ile Leu Gln Thr Gly Leu Arg Ala Trp Glu
            20                  25                  30
Leu Pro Glu His Arg Pro Asn Pro Thr Leu Ser Arg Gly Ala Tyr Lys
        35                  40                  45
Pro Tyr Ser Thr Leu Val Ser Pro Leu Thr Gly Val Tyr Tyr Glu Ala
    50                  55                  60
Leu Leu Arg Met Arg Asn His
65                  70

<210> 35157
<211> 732
<212> PRT
<213> A.fumigatus

<400> 35157
Lys Pro Cys Lys Asp Gln Arg Asn Glu Leu Val Glu Val Ala Tyr Ala
1               5                   10                  15
Gln Cys Asp Glu Val Ile Ala Lys Tyr Lys Ala Gly Thr Leu Glu Lys
            20                  25                  30
Tyr Pro Gly Cys Asp Glu Leu Gln Thr Met Glu Asn Gln Leu Ser Gly
        35                  40                  45
Ile Leu Ser Lys Val Arg Gln Gln Ala Gly Asp Glu Cys Ile Ala Gln
    50                  55                  60
Leu Ser Lys Tyr Asn Ser Pro Leu Ile Met Ala Thr Ser Gly Ser Lys
65                  70                  75                  80
Gly Ser Ser Ile Asn Val Ser Gln Met Val Ala Leu Val Gly Gln Gln
                85                  90                  95
Ile Ile Gly Gly Gln Arg Val Gln Asp Gly Phe Gln Asp Arg Thr Leu
            100                 105                 110
Pro His Phe Pro Lys Asn Ala Arg Gln Pro Pro Ser Lys Gly Phe Val
        115                 120                 125
Arg Asn Ser Phe Phe Ser Gly Leu Leu Pro Thr Glu Phe Ile Phe His
    130                 135                 140
Ala Met Ser Gly Arg Glu Gly Leu Val Asp Thr Ala Val Lys Thr Ala
145                 150                 155                 160
Glu Thr Gly Tyr Met Ser Arg Arg Leu Met Lys Ser Leu Glu Asp Leu
```

```
                 165                 170                 175
Ser Ser Arg Tyr Asp Asp Thr Val Arg Asn Ser Ser Asp Ala Ile Val
             180                 185                 190
Gln Phe Gln Tyr Gly Asp Asp Lys Leu Asp Pro Val Asp Met Glu Gly
         195                 200                 205
Lys Ala Lys Pro Val His Phe Asp Arg Thr Phe Ile His Ala Glu Ser
     210                 215                 220
Ile Thr Tyr Asp Asn Asp Glu Arg Ser Leu Leu Pro His Glu Ile Met
225                 230                 235                 240
Glu Val Cys Glu Glu Met Leu Ser Lys Glu Arg Ala Lys Leu Val Arg
                245                 250                 255
Glu Asp Leu Leu Gly Asn Lys Leu Ala Tyr Met Asp Arg Ser Asp His
             260                 265                 270
Gly Val Asp Gln Phe Glu Ser Ala Arg Asp Phe Leu Glu Ser Ile Gln
         275                 280                 285
Gln Tyr Ile Ser Ser Lys Ala Asp Lys Leu Ile Ser Arg Gly Gly Asp
     290                 295                 300
Ile Asp Pro Ser Asp Glu Arg Ser Gln Lys Gly Leu Asn His Thr Gly
305                 310                 315                 320
Lys Leu Thr Glu Lys Thr Leu Arg Thr Phe Ile Thr Ser Cys Leu Met
                325                 330                 335
Lys Tyr Lys Lys Ala Gln Val Glu Pro Gly His Ala Val Gly Ala Val
             340                 345                 350
Gly Ala Gln Ser Ile Gly Glu Pro Gly Thr Gln Met Thr Leu Lys Thr
         355                 360                 365
Phe His Phe Ala Gly Val Ala Gly Met Ser Ile Thr Gln Gly Val Pro
     370                 375                 380
Arg Ile Lys Glu Ile Ile Asn Ala Ser Lys Glu Ile Ser Thr Pro Val
385                 390                 395                 400
Ile Ser Cys Asp Leu Val Thr Lys Asp Asn Val Ile Ala Ala Arg Ile
                405                 410                 415
Val Lys Gly Arg Ile Glu Lys Thr Tyr Leu Arg Asp Ile Ile His Tyr
             420                 425                 430
Val Arg Glu Ala Trp Thr Gly Lys Glu Ala Tyr Leu Thr Val Lys Ile
         435                 440                 445
Asn Trp Glu Thr Ile Gln Asn Leu Ala Leu Glu Leu Lys Ile Arg Asn
     450                 455                 460
Ile Val Asp Ala Ile Lys Asn His Lys Arg Phe Lys Ala Asp Asp Leu
465                 470                 475                 480
Lys Phe Arg Ser Thr Asn Ser His Ile His Ile Tyr Met Asp Ile Asp
                485                 490                 495
Pro Ala Ser Lys Ala Ser Leu Ser Lys Thr Glu Ile Ala Ala Thr Ser
             500                 505                 510
Ala Asp Pro Phe Leu Arg Leu Lys His Leu Lys Arg Ile Leu Pro Asp
         515                 520                 525
Ile Gln Val Leu Gly His Pro Gln Ala Asn Arg Ala Ile Ile Arg Thr
     530                 535                 540
Asp Asp Thr Ser Ser Thr Asn Thr Leu Leu Val Glu Gly Tyr Gly Leu
545                 550                 555                 560
Lys Glu Cys Met Thr Thr Leu Gly Val Asn Gly Leu Arg Thr Ser Thr
                565                 570                 575
Asn Asn Val Met Glu Met Arg Asp Val Leu Gly Ile Glu Ala Ala Arg
             580                 585                 590
Val Thr Ile Val Gln Glu Ile Ser Glu Val Met Lys Asp Met Gly Ile
         595                 600                 605
Asp Pro Arg His Met Gln Leu Leu Ala Asp Val Met Thr Tyr Lys Gly
```

```
    610                 615                 620
Glu Val Leu Gly Ile Thr Arg Phe Gly Leu Ala Lys Met Arg Asp Ser
625                 630                 635                 640
Val Leu Gln Leu Ala Ser Phe Glu Lys Thr Ala Asp His Leu Phe Asp
                645                 650                 655
Ala Gly Gly Ala Gly Arg Thr Asp Leu Ile Glu Gly Val Ser Glu Cys
            660                 665                 670
Ile Ile Met Gly Lys Thr Val Ser Leu Gly Thr Gly Ala Met Glu Val
        675                 680                 685
Val Arg Lys Leu Asn Phe Phe Glu Gly Gln Ile Gly Arg Lys Lys Thr
    690                 695                 700
Thr Phe Glu Asp Val Trp Ala Glu Ile Tyr Glu Glu Pro Val Asp Ala
705                 710                 715                 720
Gln Lys Gly Arg Arg Val Arg Arg Lys Ile Arg Ala
                725                 730
```

<210> 35158
<211> 363
<212> PRT
<213> A.fumigatus

<400> 35158

```
Thr Ala Cys Met Arg Leu Ser Arg Arg Arg Trp Ser Arg Gly Leu Ile
1               5                   10                  15
Leu Arg Gly Arg Ser Ala Pro Met Thr Gly Gly Ile Ser Leu Asp Gly
            20                  25                  30
Gly Ser Met Ser Leu Trp Val Leu Arg Gly Met Ser Cys Gly Met Trp
        35                  40                  45
Leu Met Trp His Arg Tyr Gln Arg Ala Phe Val Asp Phe Phe Glu Asp
    50                  55                  60
Glu Leu Val Arg His Gly Tyr Asp Trp Lys Lys Val Val Ala Asp Tyr
65                  70                  75                  80
Leu Phe Ser Gly Lys Glu Pro Leu Phe Ser Ser Leu Val Ala Asp Arg
                85                  90                  95
Glu Trp Leu Arg Tyr Leu Leu Gln Glu Gly Tyr Ala Asp Val Val Arg
            100                 105                 110
Leu Val Gly His Pro Leu Ile His Leu Gly Tyr Ala Phe Glu Met Ser
        115                 120                 125
Ser Arg Glu Val Ala Met Glu Ala Leu Gly Leu Val Ala Thr Cys Tyr
    130                 135                 140
Ser Asp Ile His Lys Tyr Ile Asp Asp Ser Ser Tyr Ser Arg Ala Asp
145                 150                 155                 160
Ser Ser Tyr His Ser Ser Ser Leu Phe Glu Ile Leu Ala Lys Val Arg
                165                 170                 175
Ala Asp Lys Arg Phe Lys Gly Val Phe Ala Thr Pro Gly Asp His Asn
            180                 185                 190
Leu Glu Thr Leu Phe Arg His His Glu Ala Ala Leu Leu Asp His Trp
        195                 200                 205
Asn Ala Trp Lys Ile Glu Asp Pro Val Pro Gln Phe Arg Glu Ser Gln
    210                 215                 220
Gln Leu Ala Ala Ala Val Leu Thr Ala Thr Gln Ala Asp Pro Thr Glu
225                 230                 235                 240
Lys Tyr Asp Phe Phe Leu Val His Ile Leu Thr Thr Ser His Ala Val
                245                 250                 255
Arg Ile Leu Leu Ser Leu Ile Pro Ala Arg Phe Gln Val Pro Leu Val
            260                 265                 270
```

```
Arg Gln Trp Trp Leu Met Thr Leu Ala Val Tyr Ile Ala Gln Leu Arg
        275                 280                 285
Pro Glu Ile Asp Leu Gly Arg Ile Arg Asn Tyr Asp Pro Gln Gly Arg
    290                 295                 300
Asp Trp Lys Trp Thr Ala Lys Gln Ala Val Lys Ser Lys His Ser Thr
305                 310                 315                 320
Asp Ala His Tyr Val Lys Ala Leu Arg Ala Met Arg Glu Ala Ala Ala
                325                 330                 335
Thr Trp Gly Asp Ser Asp Gly Leu Tyr Leu Lys Ala Ala Val Lys Phe
            340                 345                 350
Ala Glu Glu Phe Asp Gly Trp Gly Gly Phe Val
        355                 360
```

<210> 35159
<211> 67
<212> PRT
<213> A.fumigatus

<400> 35159

```
Ile Leu Ser Ser Ala Phe Leu Gln Gly Ala Asp Ala Asp Asp Leu Asn
1               5                   10                  15
Arg Val Tyr Glu Ala Glu Ser Lys Thr Leu Glu Pro Trp Ile Asp Ser
            20                  25                  30
Pro Gly Glu Ile Ser Thr Tyr Asp Trp Arg Asp Phe Leu Gly Arg Arg
        35                  40                  45
Glu Tyr Val Ser Leu Gly Ile Ala Trp Asp Glu Leu Arg Asn Val Ala
    50                  55                  60
Asp Val Ala
65
```

<210> 35160
<211> 243
<212> PRT
<213> A.fumigatus

<400> 35160

```
Gly Leu Gln Ser Val Met Pro Ser Ser Pro Glu Lys Ser Glu Thr Asp
1               5                   10                  15
Val Asp Ala Ser Leu Tyr Leu His Ala Glu Leu Leu Pro Asn Ile Arg
            20                  25                  30
His Ile Thr Phe Tyr Ile Ser Ile Pro Ala Asn Leu Gly Ser Gln Asn
        35                  40                  45
Ile Gln Pro Leu Ile Thr Leu Ser Glu Ser Arg Arg Ser Val Ser Val
    50                  55                  60
Ser Leu Pro Ala Pro Phe Asp His Val Ala Asp Thr Ile Lys Leu Pro
65                  70                  75                  80
Ala Arg Val Asn Glu Ala Ser Arg Arg Val Leu Ala Thr Ser Arg Gln
                85                  90                  95
Gly Asp Ala Ala Thr Ala Asp Asn Asp Ser Gly Val Arg Arg Arg Glu
            100                 105                 110
Phe Ser Phe Arg Met Gln Ile Asp Glu Pro Asp Asp Ser Leu Pro Ser
        115                 120                 125
Lys Asp Pro Leu Ile Asp Asp Phe Val Pro Trp Thr Ala Ala Asp Met
    130                 135                 140
Ser Pro Ser Thr Arg Leu Arg Cys Ser Gly Cys Glu Asn Val Ile Leu
145                 150                 155                 160
```

```
Asn Asn Pro Arg Cys Ala Asp Gly Ser Gly Asp Thr Ser Pro Ala Gly
                165                 170                 175
Trp Thr Trp Lys Asp Leu Pro Ser Gly Asn Trp Ala Glu Met Met Asp
            180                 185                 190
Phe Trp His Cys His Lys Pro Gly Pro Ser Arg Gly Pro Pro Pro Cys
        195                 200                 205
Gly Arg Pro Gln Cys Ser Asp Glu Gly Ile Arg Arg Gly Glu Ser Gly
    210                 215                 220
Gly Gly Asp Gly Arg Asp Gly His Arg Gly Cys Gly Asp Val Ser Cys
225                 230                 235                 240
Val Gly Gly
```

<210> 35161
<211> 107
<212> PRT
<213> A.fumigatus

<400> 35161

```
Ser Ile Glu Leu Leu Ala Met Gly Ile Phe Ser Arg Phe Leu Lys Leu
1               5                   10                  15
Thr Thr Ile Gly Gly Ala Ala Thr Val Gly Gly Phe Phe Trp Tyr Thr
            20                  25                  30
Arg Asn Asp Val Phe Val Pro Leu Pro Leu Thr Asp Arg Ile Phe His
        35                  40                  45
Ser Ala Arg Phe Asn Ala Leu Asn Pro Leu Arg Asn Pro Thr Thr His
    50                  55                  60
Asp Leu Cys Ile Arg Arg Val Pro Leu Ser Asp Ile Asp Pro Thr Leu
65                  70                  75                  80
Leu Glu Lys Lys Gly Lys Leu Val Glu Ala Phe Cys Ala Gly Val Trp
                85                  90                  95
Ser Gly Trp Gly Arg Gln Ala Pro Cys Asn Phe
            100                 105
```

<210> 35162
<211> 163
<212> PRT
<213> A.fumigatus

<400> 35162

```
Ala Gly Thr Leu Gln Leu Leu Ala His Ile Leu Ser Tyr Lys Pro Thr
1               5                   10                  15
Thr Leu Thr Thr Ala Thr Ser Gly Tyr Ala Phe Gln Arg Ala Tyr Leu
            20                  25                  30
Ala Arg Lys Tyr Gln Gly Pro Glu Thr Ala Asn Gln Leu Trp Ser Arg
        35                  40                  45
Ser Glu Leu Arg Ser Ser Thr Tyr Glu Pro Gly Thr Leu Ile Thr Asp
    50                  55                  60
His Phe Glu Val Val Glu Lys Thr Pro Asp Arg Ile Val Val Arg Cys
65                  70                  75                  80
Gly Ala Ser Pro Arg Val Gln Glu Val Arg Pro Ser Asp Gly Leu Phe
                85                  90                  95
Glu Met Ser Val Glu Val Lys Pro Asn Glu Gly Val Ala Glu Phe Gly
            100                 105                 110
Leu Lys Ser Cys Phe Phe Gln Gly Leu Gly Lys Gly Gly Gly Pro Ala
        115                 120                 125
```

```
Asp Ala Pro Ala Tyr Cys Leu Val Ala Ser Ala Val Tyr Glu Val Val
    130                 135                 140
Asp Gly Gly Gly Asp Ser Glu Cys Val Ala Val Ile Ser Cys Leu Val
145                 150                 155                 160
Leu Tyr Ile
```

<210> 35163
<211> 143
<212> PRT
<213> A.fumigatus

<400> 35163

```
Asp Pro Thr Gly Thr Ser Gly Asn Arg Ser Pro Arg Ala Val Ser Thr
1               5                   10                  15
Gly Ser Leu Asp Asp Ser Asp Thr Ala Gln Gly Asp Ser Glu Glu Gln
            20                  25                  30
Gly Ser Ile Ala Ser Ala Ser Val Ala His Ser Thr Ile Pro Val Pro
        35                  40                  45
Ala Ser Ser Ser Ala Ala Ala Leu Gly Gly Ser Ser Ile Ala Ser Ser
    50                  55                  60
Phe Ala Ser Ser Arg Leu Ile Pro Arg Pro Thr Gly Ser Ser Thr Ala
65                  70                  75                  80
Ala Ser Ala Thr Ala Ile Ala Thr Trp Ser Pro Thr Ala Gly Glu Ser
                85                  90                  95
Ala Ser Gly Thr Ala Lys Glu Ser Ala Thr Leu Thr Thr Pro Ser Glu
            100                 105                 110
Val Phe Phe Thr Pro Gly Leu Ser Asn Gly Ala Asn Arg Met Ser Val
        115                 120                 125
Gly Leu Ser Gly Leu Ile Gly Val Met Phe Ile Ala Ala Leu Ala
    130                 135                 140
```

<210> 35164
<211> 220
<212> PRT
<213> A.fumigatus

<400> 35164

```
Asn Leu Pro Lys Asn Tyr Tyr Thr Trp Leu Thr Met Met Asn Gln Arg
1               5                   10                  15
Gly Arg Gly Lys Asn Tyr Gly Lys Asp Pro Leu Pro Asp Pro Ala Leu
            20                  25                  30
Gly Tyr His His Leu Leu Pro Gly Gly Ser Pro Asp Gln Pro Asp Pro
        35                  40                  45
Asn Lys Gln Thr Ile Ile Arg His Pro Thr Asn Ser Phe Leu Glu Ile
    50                  55                  60
Thr Met Ile Leu Pro Ala Glu Ser Asn Ile Arg Phe Asn Ala Glu Ala
65                  70                  75                  80
Ala Lys Trp Asp Asp Asn Pro Phe Val His Glu Ala Thr Arg Leu Ala
                85                  90                  95
Tyr Glu Thr Leu His Pro Leu Ile Thr Thr Leu Ser Asn Gly Arg Asp
            100                 105                 110
Gln Thr Leu Asp Val Leu Glu Val Gly Cys Gly Thr Gly Leu Leu Thr
        115                 120                 125
Leu Arg Val Ala Pro His Val Lys His Ile Val Ala Ile Asp Pro Ala
    130                 135                 140
```

```
Glu Ser Met Ile Asp Val Leu Asn Ala Lys Leu Ser Asp Pro Thr Glu
145                 150                 155                 160
Pro Lys Asn Leu Thr Pro Ala Leu Pro Leu Tyr Ser Pro Thr Gln Glu
                165                 170                 175
Asp Pro Pro Leu Pro Pro Ala Thr Gly Pro Trp Tyr Ser Gly Pro Pro
            180                 185                 190
Asp Arg Gly Pro Asn Arg Lys Tyr Asp Leu Met Ala Phe Pro Thr Ser
        195                 200                 205
Leu Leu Leu Met Ala Pro Asp Leu Arg Leu Ile Pro
    210                 215                 220
```

<210> 35165
<211> 95
<212> PRT
<213> A.fumigatus

<400> 35165

```
Ile Ser Leu Gln Ser Pro Val Gly Thr Arg Pro Val Ser Ser His Tyr
1               5                   10                  15
Pro Arg Thr Ala Pro Gly Gln Ser Gly Pro His His Pro Ala Gly Pro
            20                  25                  30
Cys Arg Thr Pro Lys Thr Asn Glu Gln Trp Pro Gly Thr Thr Asn Pro
        35                  40                  45
Gly Pro Cys Gly Ala Pro Asp Thr Arg Ala Gly Pro Phe His Thr Ser
    50                  55                  60
Thr Ala Ala Ser Leu Gly Ser Arg Ser Ile Ser Leu Ala Gly Thr Arg
65                  70                  75                  80
Arg Gly Arg Glu Ile Leu Pro Arg Arg Gly Leu Trp Pro Thr Arg
                85                  90                  95
```

<210> 35166
<211> 65
<212> PRT
<213> A.fumigatus

<400> 35166

```
Val Ser Val Pro Pro Arg Asp Leu Leu Leu Arg Gly Gly Val Ser Leu
1               5                   10                  15
Met Gln Tyr Ser Asp Ser Pro Asp Glu Asp Phe Glu Lys Ala Ala His
            20                  25                  30
Leu Cys Ala Tyr Val Ser Phe Ala Tyr Lys Asn Gly Gly Ala Tyr Val
        35                  40                  45
Thr Leu Tyr Asn His Ser Phe Asn Pro Val Gly Asp Val Ser Phe Pro
    50                  55                  60
Asn
65
```

<210> 35167
<211> 219
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (67)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35167
Asn Met Ser Arg Ser Ser Pro Pro Leu Ala Arg Thr Phe Gly Asn Thr
1 5 10 15
Ile Leu Ile Thr Pro Phe Ile His Ala Ile Cys Glu Ala Tyr Phe Gln
20 25 30
Arg Thr Gly Asp Tyr Trp Phe Ser Ala Ala Phe Phe Arg Glu Ile Glu
35 40 45
Ser Gly Met Pro Ala Gln Pro Phe His Arg Asp Asp Ala Thr His Pro
50 55 60
Leu Met Xaa Tyr Gln Pro Leu Glu Ala Pro Pro Ile Ser Leu Ser Val
65 70 75 80
Ile Phe Pro Leu Thr Glu Phe Thr Glu Glu Asn Gly Ala Thr Glu Val
85 90 95
Ile Leu Gly Ser His Arg Trp Thr Glu Val Gly Thr Pro Glu Arg Asp
100 105 110
Gln Ala Val Leu Ala Thr Met Asp Pro Gly Asp Val Leu Ile Val Arg
115 120 125
Gln Arg Val Val His Ala Gly Gly Gly Asn Arg Thr Thr Ala Gly Lys
130 135 140
Pro Arg Arg Val Val Leu Ala Tyr Phe Asn Ser Val Gln Leu Thr Pro
145 150 155 160
Phe Glu Thr Tyr Arg Thr Met Pro Arg Glu Met Val Glu Ser Met Thr
165 170 175
Val Leu Gly Gln Arg Met Leu Gly Trp Arg Thr Met Lys Pro Ser Asp
180 185 190
Pro Asn Ile Val Gly Ile Asn Leu Ile Asp Asp Lys Arg Leu Glu Asn
195 200 205
Val Leu Gln Leu Lys Ala Ala Asp Ser Pro Ala
210 215

<210> 35168
<211> 211
<212> PRT
<213> A.fumigatus

<400> 35168
Pro Ser Ala Gly Gln Ile Trp Gln Leu Thr Met Glu Arg Leu Pro Leu
1 5 10 15
Ser Pro Ala Val Leu Phe Leu Ile Ile Ala Leu Pro Ile Leu Tyr Leu
20 25 30
Trp Ile Arg Tyr Thr Ala Pro Ala Arg Pro His Gly Lys His Leu Ser
35 40 45
Leu Pro Pro Gly Pro Pro Arg Leu Pro Lys Ile Gly Asn Leu His Gln
50 55 60
Val Pro Arg Gln Ile Pro Trp Lys Lys Tyr Lys Glu Trp Ser Asp Thr
65 70 75 80
Tyr Gly Pro Ile Met Ser Val Gln Leu Ala Asp Thr Ile Ala Val Val
85 90 95
Phe Ser Ser Trp Asp Leu Ile Lys Asn His Ile Glu Arg Arg Asn Thr
100 105 110
Ile Tyr Ser Ser Arg Pro Ser Val Pro Phe Phe Leu His Ala Thr Gly
115 120 125
Gly Leu Asn Ala Ser Ile Leu Pro Leu Arg Ser Gly Met Glu Thr Pro
130 135 140
Ala Gly His Pro Gln Leu Arg Pro Gln Thr Leu His Asp Gly Gln Val

```
145                 150                 155                 160
Pro Arg Arg Pro Ala Cys Gly Asn Asp Ala Ala Pro Ala Arg Ala Ser
                165                 170                 175
Val His Lys Arg Leu Pro Arg Leu Ser Ala Ser Met Tyr Cys Gln Cys
            180                 185                 190
Leu Ser Asp Cys Gly Val Trp Gly Ala Met Cys Arg Ser Cys Arg Val
        195                 200                 205
Gly Gly Asp
    210
```

<210> 35169
<211> 120
<212> PRT
<213> A.fumigatus

<400> 35169

```
Leu Trp Ser Asp Ser Arg Cys Pro Pro Leu Cys Ser Ser Ser Ser Ser
1               5                   10                  15
Pro Ser Pro Phe Tyr Thr Phe Gly Phe Asp Thr Gln His Pro Pro Gly
            20                  25                  30
Pro Met Gly Ser Thr Phe Pro Ser Pro Arg Gly Leu His Asp Ser Leu
        35                  40                  45
Arg Leu Ala Thr Ser Thr Arg Tyr Pro Ala Arg Ser His Gly Arg Ser
    50                  55                  60
Thr Lys Ser Gly Pro Thr Leu Thr Ala Pro Ser Cys Pro Ser Asn Ser
65                  70                  75                  80
Pro Thr Pro Ser Pro Ser Ser Ser Pro His Gly Thr Ser Ser Lys Thr
                85                  90                  95
Ile Leu Asn Ala Gly Thr Gln Ser Thr Ala Ala Asp Pro Pro Cys Pro
            100                 105                 110
Ser Ser Ser Thr Arg Gln Val Ala
        115                 120
```

<210> 35170
<211> 406
<212> PRT
<213> A.fumigatus

<400> 35170

```
Met Arg Arg Phe Ser Pro Tyr Gly Pro Glu Trp Lys Leu Gln Arg Ala
1               5                   10                  15
Ile Arg Ser Ser Val Leu Lys Pro Ser Met Thr Val Lys Tyr Arg Asp
            20                  25                  30
Val Gln His Val Glu Thr Thr Gln Leu Leu His Glu Leu Leu Ser Thr
        35                  40                  45
Asn Asp Phe Pro Val Cys Leu Arg Arg Cys Ile Ala Ser Val Phe Leu
    50                  55                  60
Thr Val Ala Tyr Gly Glu Arg Cys Val Asp His Ala Gly Leu Glu Ala
65                  70                  75                  80
Ile Asp Arg Leu Glu Glu Leu Asn Arg Ala Ile Ala Leu His Ala Glu
                85                  90                  95
Ala Leu Phe Ser Gly Ala Ala Gly Ile Leu Thr Gln Leu Val Leu Pro
            100                 105                 110
Lys Ala Leu Val Asp Arg Leu Pro Val Arg Trp Lys Lys Asp Ala Asp
        115                 120                 125
Met Leu His Asn Arg Leu Thr Ala Asp Leu Val Ala Arg Thr Arg Ala
```

```
    130                 135                 140
Ala Leu Val Arg Pro Gly Trp Asn Trp Val Lys Glu Phe Ser Met Lys
145                 150                 155                 160
Asp Gly Ile Gly Ser Gly Asp Gly Asp Gly Glu Gln Gly Ser Lys Val
                165                 170                 175
Gly Leu Lys Arg Leu Ala Tyr Met Val Gly Ser Leu Tyr Glu Ala Ser
            180                 185                 190
Met Ala Ala Ser Gln Ala Leu Arg Val Ile Ile Leu Ala Gly Leu Leu
        195                 200                 205
His Pro Asp Ala Thr Arg Arg Met His Asp Glu Leu Asp Ala Val Val
    210                 215                 220
Gly Thr Gly Arg Leu Pro Asp Phe His Asp Ala Ala Gln Leu Pro Tyr
225                 230                 235                 240
Thr Gln Ala Phe Ile Lys Glu Ala Met Arg Trp Arg Ser Leu Thr Pro
                245                 250                 255
Met Gly Ser Pro Arg Ala Thr Ser Asp Glu Asp Asp Cys Arg Gly Tyr
            260                 265                 270
His Ile Pro Cys Gly Ala Thr Val Leu Val Asn Val Trp Ala Ile Asn
        275                 280                 285
His Asp Glu Ala Ile Phe Leu Asp Pro Phe Ala Phe Gln Pro Glu Arg
    290                 295                 300
Trp Ile Glu Asn Pro Asp Leu Pro Gln Leu Met Tyr Gly Met Gly Gln
305                 310                 315                 320
Arg Ala Cys Pro Gly Arg His Met Gly Gln Asp Ser Leu Phe Leu Ala
                325                 330                 335
Thr Ala Arg Leu Phe Trp Ala Phe Asp Met Ala Leu Pro Asp Gly Ala
            340                 345                 350
Asp Pro Ile Asp Gln Glu Arg Phe Leu Asp Ser Gly Thr Thr Leu Ala
        355                 360                 365
Ala Phe Leu Pro Asp Phe Glu Val Arg Phe Thr Pro Arg Ser Glu Lys
    370                 375                 380
Tyr Gln Glu Val Ile Glu Asn Ser Met Ala Val Leu Pro Asp Val Leu
385                 390                 395                 400
Ser Ile Ser Ala Thr Pro
                405
```

<210> 35171
<211> 100
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(32)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 35171
Asn Thr Ile Gly Leu Phe Leu Phe Cys Ser Ser Arg Glu Thr Val Leu
1               5                   10                  15
Xaa Cys Gly Lys Gly Ser Leu Lys Ala Lys Leu Gln Gly Phe His Xaa
            20                  25                  30
Tyr Phe Asp Ser Gln Leu Thr Phe Ile Val Pro Cys Ser Pro Gly Ser
        35                  40                  45
Thr Pro Trp Leu Arg Cys Arg Thr Gly Gly Val Thr Asn Lys Ile Pro
    50                  55                  60
Arg Phe Phe Gly Ser Thr Glu Ile Asn Phe Leu His Trp Asp Gly Asn
```

```
65                  70                  75                  80
Ser Pro Ala Phe Asp Phe Ser Pro Lys Met Asn Pro Pro Lys Leu Asn
                85                  90                  95
Val Tyr Leu Ala
            100

<210> 35172
<211> 120
<212> PRT
<213> A.fumigatus

<400> 35172
Ile Ile Phe Ser Val Ile Pro Leu Leu Ala Ala Thr Ile Tyr Val Pro
1               5                   10                  15
Pro Thr Ile Ser Ser Ser Ser Thr Leu Ser Glu Arg Leu Arg Ser Met
            20                  25                  30
Leu Ser Val Ile Ser Leu Leu Leu Thr Ala Tyr Ile Met Lys Tyr His
        35                  40                  45
Ala Ile Glu Arg Pro Asp Pro Lys Gly Lys Arg Pro Ile Thr Lys Ala
    50                  55                  60
Asp Leu Ile Thr Ser Ala Glu Lys Tyr Ala Ile Pro Thr Asn Ala Ala
65                  70                  75                  80
Leu Cys Ala Leu Leu Ala Leu Thr Ser Ile Met Ala Ser Pro Thr Ala
                85                  90                  95
Val Val Thr Tyr Phe Ile Pro Ala Gly Glu Ser Arg Ala Arg His Tyr
            100                 105                 110
Leu Ser Asp Gln His Val Leu Ala
        115                 120

<210> 35173
<211> 421
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1),(16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35173
Xaa Trp Lys Pro Trp Ser Leu Ala Leu Ser Glu Pro Phe Pro Gln Xaa
1               5                   10                  15
Arg Thr Val Ser Arg Asp Glu Gln Asn Lys Asn Lys Pro Ile Val Phe
            20                  25                  30
Tyr Ser Val Glu His Tyr Ser Lys Leu Val Gly Asp Ile Asp Gly Lys
        35                  40                  45
Ser Met Asp Ser Lys Gln Gln Leu Leu Leu Lys Asp Phe Glu His Leu
    50                  55                  60
Phe Ala Leu Tyr Thr Gln Ile Leu Leu Ser Glu Ser Phe Ser Gln Asp
65                  70                  75                  80
Glu Ala Glu Glu Lys Asp Ile Glu Tyr Ile Pro Leu Asp Ser Asn Ile
                85                  90                  95
Thr Cys Ser Tyr Cys Arg Cys Asn Ile Phe Asn Arg Phe Leu Thr Cys
            100                 105                 110
Pro Trp Cys Ala Gly Gly Gln Thr Ala Asp Gly Glu Asp Pro Tyr Asp
        115                 120                 125
```

```
Ile Cys Met Glu Cys Tyr Val Met Gly Arg Ser Cys Ala Cys Leu Ser
    130                 135                 140
Arg Leu Lys Trp Ala Glu Gln Phe Pro Trp Ser Glu Leu Thr Gly Asn
145                 150                 155                 160
Tyr Glu Asn Trp Arg Asp Gln Ile Cys Arg Leu Asn Gln Gly Asn Pro
                165                 170                 175
Asn Gly Gln Ile Phe Arg Pro Leu Ala Glu Glu Arg Ala Arg Tyr Gly
            180                 185                 190
Lys Lys Thr Leu Ala Glu Met Cys Gln Gly Glu Leu Lys Arg Arg Pro
        195                 200                 205
Trp Val Asp Ile Thr Lys Pro Val Thr Arg Lys Ile Glu Asp Asn Leu
    210                 215                 220
Ser Asp Pro Glu Ser Pro Ala Arg Lys Arg Arg Lys Thr Arg Leu Ser
225                 230                 235                 240
His Glu Ser Glu Lys Gly Gly Arg Cys His Ile Cys Lys Tyr Ile Glu
                245                 250                 255
Pro Lys Trp Lys Leu Ala Ser Cys Asp Tyr Cys Asn Gln Asn Tyr Cys
            260                 265                 270
Tyr Gly Ser Leu Phe Arg Ala Phe Asn Ile Gln Pro His Glu Thr Met
        275                 280                 285
Glu Val Tyr Arg Trp Met Cys Pro Lys Cys Gln Lys Val Cys Ser Cys
    290                 295                 300
Ala Ala Cys Arg Arg Asp Pro Ser Met Lys Pro Phe Glu Pro Thr Cys
305                 310                 315                 320
Thr Leu Leu Gly His Asp Thr Arg Lys Ile Ala Asp Pro Arg Ser Val
                325                 330                 335
Glu Ser Leu Val Asp Phe Arg Gln Ser Asn Leu Arg Trp Leu Lys Lys
            340                 345                 350
Ala Gly Asp Asn Glu Ile Glu Arg Leu Lys Lys His Gln Lys Glu Ala
        355                 360                 365
Asp Glu Lys Arg Gln Gln Ala Met Ile Glu Tyr Ser Ile Gln Leu Glu
    370                 375                 380
Asp Ser Pro Arg Val Ser Ala His Ala Thr Glu Tyr Gly Asp Ile Pro
385                 390                 395                 400
Val Asp Pro Val Leu Glu Glu Leu Ser Gly Ser Ile Leu Thr Pro Pro
                405                 410                 415
Asp Ser Phe Thr Pro
            420
```

<210> 35174
<211> 178
<212> PRT
<213> A.fumigatus

<400> 35174

```
Gly Lys Thr Phe His His Leu Gly Tyr Arg Ser Leu His Asp Gly Cys
1               5                   10                  15
Leu Leu Val Thr Arg Leu Phe Ser Ala Pro Phe Ser Pro Phe Thr Thr
            20                  25                  30
Asn Leu Thr Met Ala Leu Tyr Thr Ala Gln Arg Arg Ile Gly Val Pro
        35                  40                  45
Arg Ala Phe Leu Phe Arg Arg His Asn Met Pro Pro His Arg Cys Leu
    50                  55                  60
Ile Pro Ala Pro Lys Ala Asn Ser Gly Pro Leu Met Glu Arg Arg Ala
65                  70                  75                  80
Asp Arg Glu Leu Pro Ser Ile Asn Thr Glu Lys Arg Arg Trp Ile Lys
```

```
                85                  90                  95
Thr Leu Pro Ile Phe Val Val Val Val Gly Ala Ala Met Leu Gly Ile
            100                 105                 110
Phe Asn Tyr Gln Lys Ser Ser Ser Ser Val Val Ser Ser Thr Leu Tyr
        115                 120                 125
Ala Leu Arg Thr Ser Pro Arg Ala Arg Glu Ile Leu Gly Asp Glu Ile
    130                 135                 140
Tyr Phe Ala Gln Lys Ile Pro Trp Ile Ser Gly Glu Met Asn Gln Leu
145                 150                 155                 160
His Gly Arg Ile Asp Ile Ser Phe Trp Val Lys Gly Thr Lys Gly Gln
                165                 170                 175
Gly Lys
```

<210> 35175
<211> 362
<212> PRT
<213> A.fumigatus

<400> 35175

```
Val Ser Cys Ala Met Pro Gly Val Val Asp Thr Pro Gly Gly Pro Leu
1               5                   10                  15
Trp Pro Gly Leu Gly Phe Thr Val Ala His Gln Lys Val Glu Leu Glu
            20                  25                  30
Ile Asp Phe Ala Thr Lys Ser Leu Lys Gly Lys Thr Glu Ile Thr Ile
        35                  40                  45
His Pro His Tyr Lys Glu Leu Arg Ile Ile Arg Leu Asn Phe Arg Gln
    50                  55                  60
Gly Glu Leu Lys Arg Leu Asn Val Asn Gly Lys Ala Pro Thr Ile Lys
65                  70                  75                  80
Tyr Ala Asp Pro Tyr Glu Ser Leu Gln Leu Tyr Gly Pro His Tyr His
                85                  90                  95
Gln Arg Leu Ser Thr Lys Ile Asp Ser Leu Leu Thr Thr Thr Pro Glu
            100                 105                 110
Pro Asp Leu Leu Val Thr Ile Pro Lys Ser Val Arg Ile Glu Glu Leu
        115                 120                 125
Asp Pro Phe Ser Gln Glu Ala Gln Asp Gln Met Thr Leu Arg Ala Ser
    130                 135                 140
Gly Ala Gly Glu Asp Thr Asp Gly Pro Leu Gly Ser Lys Leu Ala Glu
145                 150                 155                 160
Thr Ser Leu Pro Arg Phe Ser Ala Leu Thr Val Tyr Ile Glu Phe Thr
                165                 170                 175
Ile Glu Asn Ile Arg Asp Gly Leu Gln Phe Val Gly Val Asp Ser Gly
            180                 185                 190
Asp Arg Arg Tyr Pro His Ala Tyr Thr Thr Asn Ser Leu Gly Tyr Gly
        195                 200                 205
Ala Ala Ser Pro Leu Phe Pro Cys Val Asp Asp Pro Leu Ser Arg Cys
    210                 215                 220
Thr Trp Glu Ile Ser Val Lys Cys Pro Cys Ser Leu Gly Asp Val Phe
225                 230                 235                 240
Asp Arg Lys Thr Arg Asp Pro Ser Gly Ala His Arg Ser Lys Gln Thr
                245                 250                 255
Pro Gly Gly Ser Arg Phe Ile Ser Pro Asp Asp Glu Thr Leu Asp Leu
            260                 265                 270
Ser Val Val Cys Ser Gly Asp Met Thr Asp Glu Ile Val Asp Pro Arg
        275                 280                 285
```

```
Asp Pro Ser Lys Lys Thr Val Ser Phe Ala Cys Met Ser Pro Leu Ser
    290                 295                 300
Ala Lys Gln Ile Gly Phe Ala Val Gly Pro Phe Glu Tyr Ile Asn Leu
305                 310                 315                 320
Ser Asp Phe Arg Glu Ser Asp Gln Asp Glu Gln Leu Gly Gln Asn Ala
                325                 330                 335
Ile Pro Leu His Ala Phe Cys Leu Pro Gly Arg Gly Asp Glu Val Arg
            340                 345                 350
Asn Thr Trp Phe Pro His Gly Glu Ser Tyr
        355                 360
```

<210> 35176
<211> 65
<212> PRT
<213> A.fumigatus

<400> 35176

```
Leu Glu Thr Glu Arg Gln Asn Phe Tyr Glu Ser Ile Ser Ile Ala Ser
1               5                   10                  15
Ser Tyr Phe Ala Asn Phe Ala Pro Ala His Leu Asp Phe Ser Pro Pro
            20                  25                  30
Leu Thr Asn Leu Tyr Ser Leu Thr Ile Phe Pro Thr Leu Phe Phe Gly
        35                  40                  45
Arg Ile Ile Gly Lys Tyr Tyr Glu Arg Asn Gly Cys Ser Leu Ser Trp
    50                  55                  60
Thr
65
```

<210> 35177
<211> 113
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (86)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35177

```
Thr Ser Pro Thr Ser Val Arg Ala Ile Arg Met Ser Ser Leu Ala Arg
1               5                   10                  15
Thr Leu Phe Leu Cys Thr Arg Ser Val Ser Gln Glu Gly Glu Met Lys
            20                  25                  30
Ser Glu Thr His Gly Phe Pro Met Ala Lys Ala Ile Asp Phe Leu Ser
        35                  40                  45
Leu Thr Tyr Gly Ser Tyr Pro Phe Ala Ser Tyr Lys Ile Cys Phe Val
    50                  55                  60
Asp Asp Ala Pro Glu Asn Thr Leu Pro Thr Ala Cys Leu Ser Ile Cys
65                  70                  75                  80
Ser Lys His Leu Leu Xaa Pro Glu Asp Ile Ile Asp Pro Met Tyr Asp
                85                  90                  95
Ser Thr Arg Ala Leu Val His Ala Leu Ser Cys Gln Leu Asp Arg Trp
            100                 105                 110
Ser
```

<210> 35178
<211> 100
<212> PRT
<213> A.fumigatus

<400> 35178
Ser Ser His Arg Leu Phe Tyr Lys Leu Ile Asp Pro Phe Ser His His
1 5 10 15
Thr Ala Thr Gln Asp Thr Leu Thr Asp Glu Ile Leu Met Pro Leu Lys
20 25 30
Ser Tyr Lys Tyr Gln Ser Val Asp Lys Ser Tyr Ile Ser Asn His Ile
35 40 45
Leu Lys His Tyr Val Leu Cys Pro Leu Phe Leu Pro His Thr Ile Arg
50 55 60
Ser Arg Ser Asp Gly Lys Ile Val Thr Leu Val Glu Cys Ile Cys Arg
65 70 75 80
Ser Pro Pro Ala Met Asp Cys Leu Thr Arg Arg Ala Asp Trp Lys Val
85 90 95
Asn Glu Pro Ser
100

<210> 35179
<211> 160
<212> PRT
<213> A.fumigatus

<400> 35179
Tyr Ile Ala Tyr Glu Asp Leu Lys Thr Ala Val Lys Thr Gly Tyr Val
1 5 10 15
Ser Glu Pro Thr Ser Glu Tyr Pro Lys Pro Asp Arg Lys Pro Trp Thr
20 25 30
Glu Asp His Glu Lys Arg Phe Val Ser Leu Leu Glu Ser Glu Leu Asp
35 40 45
Lys Val Phe Asn Phe Gln Lys Leu Lys Ser Glu Glu Ile Val Arg Arg
50 55 60
Ile Gln Ala Ser Glu Lys Asp Val Ala Asp Val Val Ser Arg Leu Asp
65 70 75 80
Asn Ala Asn Asn Ser Arg Arg Gln Ser Leu Arg Thr Ser Gln Pro Pro
85 90 95
Pro Ser Asp Glu Asp Phe Leu Leu Leu Glu Gln Val Leu Ser Asp Ile
100 105 110
Ile Ala Asp Val His Asp Leu Ala Lys Phe Thr Gln Leu Asn Tyr Thr
115 120 125
Gly Phe Gln Lys Ile Ile Lys Lys His Asp Val Cys Ser Ala Ser Arg
130 135 140
Ala Leu Leu Glu Cys Phe Trp Tyr Asn Val Arg Glu Ala Asn Val Cys
145 150 155 160

<210> 35180
<211> 97
<212> PRT
<213> A.fumigatus

<400> 35180
Lys Gln Thr Gly Trp His Leu Lys Pro Val Phe Ala Ala Arg Leu Lys
1 5 10 15

```
Ala Lys Pro Phe Phe Lys Asp Asn Tyr Asp Ala Phe Val Val Lys Leu
            20                  25                  30
Ser Lys Leu Tyr Asp Leu Val Arg Thr Lys Gly Asn Pro Val Lys Gly
        35                  40                  45
Asp Ser Ala Ala Gly Gly Ser Gln Gln Asn Phe Val Arg Gln Thr Thr
    50                  55                  60
Lys Tyr Trp Val His Pro Asp Asn Ile Thr Glu Leu Lys Leu Ile Ile
65                  70                  75                  80
Leu Lys Val Cys Lys Ala Leu Ser Leu Phe Val Ser Arg Gln Thr Leu
                85                  90                  95
Asn
```

<210> 35181
<211> 150
<212> PRT
<213> A.fumigatus

<400> 35181

```
Val Ser Leu Cys Pro Phe Leu Ser Val Gln Ile Leu Thr His Thr Gly
1               5                   10                  15
Ile His Val Pro Val Arg Val Glu Pro Lys Val Tyr Phe Ala Ala Glu
            20                  25                  30
Arg Thr Phe Leu Ser Trp Leu Glu Phe Ser Ile Leu Leu Gly Thr Ile
        35                  40                  45
Ala Ala Thr Leu Leu Asn Phe Gly Asn Asp Tyr Ile Thr Phe Val Ser
    50                  55                  60
Ser Trp Ala Phe Thr Ile Leu Ala Ala Val Ala Leu Ile Tyr Ser Leu
65                  70                  75                  80
Met Leu Tyr Ile Trp Arg Val Asp Lys Ile Arg Lys Arg Arg Asp Val
                85                  90                  95
Lys Arg Val Tyr Tyr Glu Lys Trp Gly Pro Thr Val Val Gly Leu Gly
            100                 105                 110
Leu Val Val Ile Met Leu Val Asn Phe Gly Leu Arg Val Arg Gln Thr
        115                 120                 125
Gly Phe Ala Ala Arg Asp Gly Asp Gln Gly Phe Gly His Gly Arg Gly
    130                 135                 140
Ser Ala Gly Gly Glu Leu
145                 150
```

<210> 35182
<211> 559
<212> PRT
<213> A.fumigatus

<400> 35182

```
Gln His Leu Pro Val Leu Val Phe Asn Pro Asn Lys Glu Phe Glu Glu
1               5                   10                  15
Lys Asp Ala Ala Ile Ser Ser Ile Tyr Phe Asp Asn Thr Asn Thr Trp
            20                  25                  30
Glu Leu Tyr Glu Gly Arg Leu Lys Lys Thr Glu Gly Ala Glu Ala Ile
        35                  40                  45
Arg Leu Arg Trp Tyr Gly Gly Met Glu Ser Asp Gln Ile Phe Val Glu
    50                  55                  60
Arg Lys Thr His Arg Glu Asp Trp Thr Gly Glu Lys Ser Val Lys Ala
65                  70                  75                  80
```

```
Arg Phe Ser Leu Lys Glu Lys His Val Asn Ala Tyr Leu Ser Gly Arg
                85                  90                  95
Met Thr Val Glu Ser Ile Phe Glu Lys Met Arg Lys Glu Gly Lys Lys
            100                 105                 110
Ser Glu Gln Glu Ile Ala Asp Leu Glu Gln Leu Ala Arg Glu Ile Gln
        115                 120                 125
Tyr Arg Val Ile Thr Arg Arg Leu Glu Pro Val Thr Arg Thr Phe Tyr
    130                 135                 140
His Arg Thr Ala Phe Gln Leu Pro Gly Asp Ala Arg Val Arg Ile Ser
145                 150                 155                 160
Leu Asp Thr Glu Leu Thr Met Ile Arg Glu Asp Asn Leu Asp Gly Arg
                165                 170                 175
Gln Arg Ser Gly Asn Asn Trp Arg Arg Met Asp Ile Gly Val Asp Trp
            180                 185                 190
Pro Phe Ser Gln Leu Pro Pro Gln Asp Val Glu Arg Phe Pro Tyr Ala
        195                 200                 205
Val Leu Glu Val Lys Leu Gln Thr Gln Ala Gly Gln Glu Pro Pro Lys
    210                 215                 220
Trp Ile Arg Glu Leu Thr Ala Ser His Leu Val Glu Ala Val Pro Lys
225                 230                 235                 240
Phe Ser Lys Phe Ile His Gly Thr Ala Thr Leu Phe Pro Asp Arg Ile
                245                 250                 255
His Leu Leu Pro Phe Trp Met Pro Gln Met Asp Val Asp Ile Arg Lys
            260                 265                 270
Pro Ala Thr Arg Arg Phe Gly Ile Thr Arg Pro Leu Ala Ser Thr Ser
        275                 280                 285
Leu Ser Ala Asn Glu Thr Pro Glu Asp Asp Glu Ser Asp Glu Asp Glu
    290                 295                 300
Ser Asp Glu Ala Gln Ala Arg Thr Arg Ala Ala Thr Arg Asp Ala Gln
305                 310                 315                 320
His Ser Val Val Asp Gln Ser Asp Leu Phe Glu Asp Asn Asp Gly Asn
                325                 330                 335
Ala Leu Asp Ile Glu Glu Arg Ile Ala Ala Gln Pro Leu Pro Gly Asp
            340                 345                 350
Glu Asp Tyr Pro Leu Tyr Asp Ser Asp Glu Glu Ser Asn Tyr Ser Asp
        355                 360                 365
Glu Leu Glu Glu Ala Arg Arg Ile Gly Gly Gly Tyr Tyr Tyr Gln Lys
    370                 375                 380
Leu Val Glu Tyr Tyr Ile His Arg Met Gly His Ala Leu Ile Asn Gly
385                 390                 395                 400
Leu Lys Ala Ile Ala Pro Gly Pro Arg Pro Thr Asp Met Pro Glu Pro
                405                 410                 415
Glu Gln Asn Gly Ile Thr Val Met Gly Asn Lys Arg Thr Ile Lys Arg
            420                 425                 430
Phe Val Ala Pro Lys Gly Lys Arg Arg Tyr Pro Cys Ala Leu Phe Cys
        435                 440                 445
Gln Ser Lys Phe Ser Arg Ile Gln Ala Ser Thr Ser Pro Ser Ala Ser
    450                 455                 460
Asn Pro Arg Ser Ile Ser Pro Pro Ser Glu Pro Ser Ser Pro Gly Ser
465                 470                 475                 480
Asn Phe Pro Ser Ser Ser Ala Pro Leu Leu Arg Leu Tyr Ser Thr Ser
                485                 490                 495
Ala Thr Thr Thr Ser Pro Ser Ser Pro Arg Gly Arg Leu Pro Ser Leu
            500                 505                 510
Leu Gln Trp Pro Ser Ser Thr Val Ser Cys Cys Ile Ser Gly Val Ser
        515                 520                 525
```

```
Thr Arg Ser Ala Ser Ala Ala Thr Ser Asn Glu Ser Thr Met Arg Asn
    530                 535                 540
Gly Ala Leu Pro Ser Ser Asp Ser Val Leu Trp Leu Leu Cys Trp
545                 550                 555

<210> 35183
<211> 436
<212> PRT
<213> A.fumigatus

<400> 35183
Gly Glu Pro Ile His Ile Val Met Ser Lys Pro Leu Ser Pro Leu Pro
1               5                   10                  15
Thr Ser Arg Gln Asn Ser Arg Ala Phe Ser Ser Gly Leu Asn Gly Leu
            20                  25                  30
Glu Ile Glu Ser Leu Val Asn Glu Ser Gly Ser Glu Asn Val Phe Ala
        35                  40                  45
Ser Pro Asn Lys Thr Ile Asp Gly Gly Ala Asp Thr Thr Thr Pro Gln
    50                  55                  60
Ser Gly His Tyr Pro Ala Thr Tyr His Thr Gln Glu Ser Ile Leu Asp
65                  70                  75                  80
Val Gly Asp Leu Glu Ser Val Asp Glu Gln Pro Ser Ser Pro Phe Gln
                85                  90                  95
Tyr Asp Ala Arg Asp Pro Thr Val Asp Phe Arg Val Leu Gly Asn Gln
            100                 105                 110
Gln Ile Ser Ser Gly Leu Arg Glu Cys Ser Met Thr Pro Arg Lys Arg
        115                 120                 125
Ser Tyr Ser His Cys Pro Glu Asp Gly Asp Ala Thr Asp Arg Ser Ser
    130                 135                 140
Glu Arg Ser Lys Lys Gly Met Ser Arg Arg Asp Met Pro Asp Ile Gln
145                 150                 155                 160
Val Tyr Ala Asp Asp Glu Pro Gln Met His Glu Arg Glu Met Thr Gly
                165                 170                 175
Arg Thr Gly His Glu Ile Ala Thr Ser Met Val Glu Gln Lys Arg Asn
            180                 185                 190
Glu Gly Met Ser Thr Val Leu Asp Val His Asn Asn Tyr Asp Asp Ser
        195                 200                 205
Phe Ser Glu Lys Glu Asn Leu Asp Met Lys Ala Ala Asp Asp Val Met
    210                 215                 220
Asn Asp Asp Ser His Asp Pro Met Asp Asp Thr Cys Phe Ser Thr Phe
225                 230                 235                 240
Ser Ala Val Pro Asn Val Asp Met Thr Ser Phe Ala Asn Leu Arg Gly
                245                 250                 255
Asn Ser Pro Phe Lys Thr Gly Arg Gln Leu Pro Ser Ser Pro Gly Arg
            260                 265                 270
Met Asp Glu Asn Gln Ser Arg Ser Pro Ala Pro Ala Thr Pro Asp Thr
        275                 280                 285
Ser Arg Arg Ser Gln Arg Gln Ser Ala Leu Ile Asp Ile Gly Thr Pro
    290                 295                 300
Ile Ala Ser Thr Pro Arg Gly Arg Glu Arg Arg Asp Met Glu Asn Ala
305                 310                 315                 320
Ser Glu Thr Pro Asn Leu Leu Asp Leu Thr Asp Gln Pro Asn Phe Phe
                325                 330                 335
Pro Arg Gln Arg Tyr Ser Ile Gln Lys Glu Arg Tyr Ser Pro Ser Arg
            340                 345                 350
Arg Ser Pro Leu Arg Thr Leu Arg Glu Ser Ile Arg Ser Pro Ala Lys
```

```
        355                 360                 365
Val Ser Leu Leu Asp Phe Asp Ile Pro Pro Ile Pro Thr Pro Arg Ser
    370                 375                 380
Ile Pro Thr Val Thr Pro Arg Glu Leu Glu Ser Leu Lys Ser Gly Phe
385                 390                 395                 400
His Ser Glu Ile Ser Ser Leu Lys Ala Thr Leu Ser Gly Lys Glu Ala
                405                 410                 415
Glu Val Ser Ser Leu Lys Asn Ala Val Ala Asp Ala Glu Arg Arg Val
            420                 425                 430
Gly Arg Ser Ser
        435
```

<210> 35184
<211> 384
<212> PRT
<213> A.fumigatus

<400> 35184

```
Ala Lys Arg Ala Asp Ser Tyr Pro Tyr Leu Phe Ser Ala Asn Gly Leu
1               5                   10                  15
Phe Gly Lys Phe Pro Tyr Leu Leu Pro Asn Leu Val Cys Ser Phe Leu
            20                  25                  30
Leu Leu Leu Ser Ile Ala Gly Ser Trp Leu Phe Leu Gln Glu Asn His
        35                  40                  45
Pro Gly Leu Gln His Gln Asn Ala Ala Gly Asn Leu Asp His Thr Ser
    50                  55                  60
Ala Glu Ser Pro Leu Leu Ala Thr Ala Gly Ala Thr Ala Asn Ala Gly
65                  70                  75                  80
Val Asp Leu Arg Ala Glu Ser Tyr Gly Thr Phe Asn Gln Val Arg Leu
                85                  90                  95
Gln Ala Asp Glu Asp Trp Phe Val Asn Ala Asp Gly Ser Lys Tyr Lys
            100                 105                 110
Thr Gln Lys Gln Pro Val Phe Thr Tyr Arg Val Val Ser Leu Ile Ile
        115                 120                 125
Ala Leu Ser Ile Phe Thr Tyr His Ser Met Thr Tyr Asp His Leu Leu
    130                 135                 140
Pro Ile Phe Leu Gln Asp Lys Asn Gly Arg Asn Thr Ser Gly Phe Ser
145                 150                 155                 160
Asn Ala Pro Phe Ser Phe Ser Gly Gly Leu Gly Leu Ser Thr Arg Thr
                165                 170                 175
Val Gly Leu Ile Met Ser Ser Asp Gly Ile Ile Ala Leu Val Ile Gln
            180                 185                 190
Ser Cys Ile Phe Pro Ile Leu Ala Gln Leu Leu Gly Val Trp Arg Leu
        195                 200                 205
Phe Val Val Val Thr Val Leu His Pro Leu Ala Tyr Phe Ile Val Pro
    210                 215                 220
Phe Leu Ile Phe Leu Pro Gln Ser Phe Val Ile Phe Gly Ile Tyr Ile
225                 230                 235                 240
Cys Leu Ile Val Arg Lys Ile Leu Ser Ile Ile Asp Tyr Pro Val Leu
                245                 250                 255
Leu Ile Leu Ile Lys Gln Ala Cys Pro Ser Glu Ser Val Met Gly Lys
            260                 265                 270
Ile Asn Gly Leu Ala Ala Ser Ala Gly Ala Val Ala Arg Thr Ile Ala
        275                 280                 285
Pro Pro Ile Ala Gly Phe Leu Tyr Ser Thr Gly Ala Asp Met Asn Phe
    290                 295                 300
```

```
Thr Ala Ile Ala Trp Trp Gly Ser Ser Leu Ile Ala Val Ile Gly Ala
305                 310                 315                 320
Val Gln Leu Cys Phe Met Lys His Lys Lys His Thr Ser Ala Thr Ile
                325                 330                 335
Arg Pro Ala Met Pro Cys His Tyr Gln Tyr Val Pro Asp Glu Ser Arg
            340                 345                 350
Pro Gln Lys Glu Thr Ile His Ile Ile Val Thr Asp Thr Asp Ala Asn
        355                 360                 365
Ala Asp Gly Ala Gly Thr Ser Gln Ser Arg Arg Tyr Ser Phe Leu Thr
    370                 375                 380
```

<210> 35185
<211> 232
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (162),(165),(166),(178),(186),(201)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35185

```
Asn Arg Glu His Leu Glu Arg Arg Met Val Glu Leu Glu Ser Gln Leu
1               5                   10                  15
Ser Ala Ala Arg Lys Ser Ala Pro Asn Glu Thr Gly Asp Asp Gly Ser
            20                  25                  30
Ala Gln Arg Thr Thr Ala Ala Glu Glu Thr Ala Arg Glu Val Gln Asp
        35                  40                  45
Ala Val Glu Lys Val Ala Arg Glu Leu His Thr Leu Tyr Lys Ser Lys
    50                  55                  60
His Glu Thr Lys Val Ala Ala Leu Lys Lys Ser Tyr Glu Ala Arg Trp
65                  70                  75                  80
Glu Lys Arg Val Arg Glu Ala Glu Ser Lys Phe Lys Ala Val Ser Glu
                85                  90                  95
Glu Asn Glu Arg Leu Arg Asn Glu Arg Asp Ala Ala Leu Ser Glu Ala
            100                 105                 110
Ser Arg Pro Asp Ala Ser Ile Met Ala His Gln Asn Asp Glu His Glu
        115                 120                 125
Ala Glu Lys His Val Leu Ala Ala Gln Ile Lys Gly Leu Gln Gln Glu
    130                 135                 140
Met Glu Thr Leu Lys Gln Asp Asn Glu Arg Leu His Ala Glu Leu Lys
145                 150                 155                 160
Val Xaa Arg Ala Xaa Xaa Gly Glu Leu Val Ala Ala Val Asp Glu Trp
                165                 170                 175
Leu Xaa Met Gln Gln Asn Val Pro Gln Xaa Val Arg Pro Pro Arg Ser
            180                 185                 190
Leu Pro Leu Leu Ile Val Glu Tyr Xaa Thr Pro Lys Pro Glu Pro Ala
        195                 200                 205
Pro Gly Pro Ser Thr Glu Arg Val Gln Glu Lys Leu Leu Ala Pro Val
    210                 215                 220
Asp Ser Arg Gly Ile Pro Ala Ala
225                 230
```

<210> 35186
<211> 107
<212> PRT

<213> A.fumigatus

<400> 35186

```
Leu Thr Arg Ser Arg Glu Leu Ala Leu Gln Leu His His Ala Pro Phe
1               5                  10                  15
Gln Met Phe Pro Val Leu Leu Arg Leu Leu Lys Leu Ser Asn Lys Pro
            20                  25                  30
Leu Leu Leu Pro Phe Thr Phe Asn Asn Ile Cys Pro Asn Ser Ser Gln
        35                  40                  45
Asp Val Phe His Leu Leu Thr Pro Pro Leu Pro Phe Gly Leu Leu Asn
    50                  55                  60
Phe Glu Ser Phe Phe Pro Arg Ser Phe Ile Thr Asp Phe Leu Lys Ser
65                  70                  75                  80
Phe Ala Gln Arg Ala Val Gln His Leu Gln Gln His Ser Ser Gly Trp
                85                  90                  95
Arg Leu Pro Leu Leu Ser Arg Ser Ala Leu Leu
            100                 105
```

<210> 35187
<211> 290
<212> PRT
<213> A.fumigatus

<400> 35187

```
Leu Val Glu Gly Leu Asp Pro Leu Met Val Gln Tyr Asn Gln Ser Leu
1               5                  10                  15
Pro Tyr Asp Arg Ile Phe Trp Lys Gln Asp Ile Ala Gly Ser Ile Ala
            20                  25                  30
Phe Ala Arg Ala Asn Thr Lys Ser Gly Ile Leu Thr Gln His Glu Phe
        35                  40                  45
Ser Glu Ile Glu Arg Gly Phe Lys Gln Ile Ala Glu Glu Trp Ser Thr
    50                  55                  60
Asn Thr Phe Val Val Lys Glu Ser Asp Glu Asp Ile His Thr Ala Asn
65                  70                  75                  80
Glu Arg Arg Leu Ser Glu Ile Ile Gly Lys Glu Ile Gly Gly Lys Leu
                85                  90                  95
His Thr Gly Arg Ser Arg Asn Glu Gln Ile Ala Thr Asp Met Arg Leu
            100                 105                 110
Trp Leu Arg Asp Glu Leu Arg Lys Leu Asp Ala Val Leu Cys Asp Leu
        115                 120                 125
Ile Lys Val Ser Ile Ala Arg Ala Glu Lys Glu Leu Asp Phe Ile Met
    130                 135                 140
Pro Gly Tyr Thr His Leu Gln Lys Ala Gln Pro Val Arg Trp Ser His
145                 150                 155                 160
Trp Leu Leu Ser His Ala Thr Ala Phe Ala Ser Glu Leu Gln Arg Leu
                165                 170                 175
Arg Glu Val Thr Arg Arg Val Asn Arg Ser Pro Leu Gly Thr Gly Ala
            180                 185                 190
Leu Ala Gly Asn Pro Phe Gln Ile Asp Arg Glu Ala Met Ala Ala Glu
        195                 200                 205
Leu Gly Phe Asp Gly Leu Leu Tyr Asn Ser Met Asn Ala Val Ala Asp
    210                 215                 220
Arg Asp Phe Ala Met Glu Thr Met Gln Trp Gly Ser Ser Phe Met Leu
225                 230                 235                 240
Lys Ile Ser Arg Trp Ala Glu Asp Leu Ile Ile Tyr Ser Ser Leu Glu
                245                 250                 255
```

```
Phe Gly Phe Val Arg Leu Ser Asp Ala Tyr Ser Thr Gly Ser Ser Leu
            260                 265                 270
Met Pro Gln Lys Lys Asn Ala Gly Glu Phe Phe Ser Cys Val Tyr Phe
        275                 280                 285
His Pro
    290
```

<210> 35188
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35188

```
Arg Arg Cys Arg Ser Cys Val Asn His Arg Asn Asn His Leu Asp Ser
1               5                   10                  15
Asp Leu Ser Ile Ala Ser Phe Ser His Phe Ser Leu Leu Phe Asn Ser
            20                  25                  30
Ser Ile Pro Ser Ser Thr Ala Ser Thr Met Ser Ala Pro Lys Ala Val
        35                  40                  45
Ala Glu Asn Met Leu Trp Gly Gly Arg Phe Thr Arg Val Tyr Pro Leu
    50                  55                  60
Pro Gln Leu Gln Phe Leu Arg Ile Leu Leu Thr Tyr Leu Ser Phe Asp
65                  70                  75                  80
Ser
```

<210> 35189
<211> 175
<212> PRT
<213> A.fumigatus

<400> 35189

```
Pro Ser Thr Ser Ser Pro Arg Ser Ser Ala Asp Ser Ser Arg Ser Pro
1               5                   10                  15
Arg Asn Gly Ala Pro Thr Pro Ser Ser Ser Arg Arg Ala Thr Arg Ile
            20                  25                  30
Ser Thr Gln Pro Thr Ser Ala Asp Ser Arg Arg Ser Ser Ala Arg Arg
        35                  40                  45
Ser Glu Ala Ser Cys Thr Pro Ala Gly Pro Ala Thr Ser Arg Leu Gln
    50                  55                  60
Pro Thr Cys Ala Cys Gly Cys Gly Met Ser Cys Ala Ser Trp Thr Pro
65                  70                  75                  80
Ser Cys Ala Ile Ser Ser Arg Cys Arg Ser Arg Ala Pro Arg Lys Ser
                85                  90                  95
Ser Thr Ser Ser Cys Pro Val Thr Pro Thr Cys Arg Arg Pro Asn Pro
            100                 105                 110
Ser Gly Gly Ala Thr Gly Tyr Cys Arg Met Pro Pro Leu Ser Pro Val
        115                 120                 125
Ser Cys Ser Val Cys Gly Arg Ser Pro Gly Val Ser Thr Ala Ala Pro
    130                 135                 140
Trp Ala Pro Ala Leu Trp Pro Glu Thr Pro Ser Arg Ser Ile Gly Arg
145                 150                 155                 160
Gln Trp Pro Arg Ser Trp Ala Ser Thr Val Cys Cys Thr Thr Arg
                165                 170                 175
```

<210> 35190

<211> 135
<212> PRT
<213> A.fumigatus

<400> 35190
Thr Arg Pro Asp Ser Leu Glu Leu Leu Arg Gly Lys Ala Gly Arg Ala
1 5 10 15
Phe Gly His Met Ala Gly Leu Met Met Thr Ile Lys Gly Leu Pro Thr
20 25 30
Thr Tyr Asn Lys Asp Leu Gln Glu Ser Val Glu Pro Leu Leu Asp His
35 40 45
Ile Lys Thr Val Ser Asp Ser Ile Gln Ile Ala Thr Gly Val Leu Ser
50 55 60
Thr Leu Thr Val Leu Pro Glu Lys Met Thr Ala Ala Leu Ala Pro Glu
65 70 75 80
Met Leu Ala Thr Glu Ile Ala Asp Tyr Leu Val Arg Lys Gly Val Pro
85 90 95
Phe Arg Glu Gly His His Ile Ser Gly Arg Val Val Ala Leu Ala Glu
100 105 110
Lys Asn Asn Val Pro Met Asp Thr Leu Ser Leu Glu Gln Arg Leu His
115 120 125
Gln Ala Ala Glu Gly Gln Asp
130 135

<210> 35191
<211> 341
<212> PRT
<213> A.fumigatus

<400> 35191
Leu Val Trp Asp Ala Met Pro Met Thr Pro Glu Thr Asp Glu Ser Met
1 5 10 15
Thr Lys Lys Ser Ser Pro Pro Arg Val Glu Asn Ala Val Cys Arg Phe
20 25 30
Gln Leu Pro Leu Ser Leu Gly Ala Arg Pro Leu Phe Gln Ser Ala Ser
35 40 45
Val Ile Cys Ser Lys Ile Ala Ser Arg Arg Ser Met Ala Pro Trp Met
50 55 60
Thr Pro Arg Thr Gly Gly Arg Pro Ser Ser Ser Gln Ala Arg Arg Ala
65 70 75 80
Leu Ala Arg Glu Leu Ala Arg Ala Met Ser Gln Leu Thr Gly Phe Thr
85 90 95
Arg Gln Pro Ala Ala Arg Ser Ser Arg Thr Asn Arg Ala Pro Ser Ala
100 105 110
Phe Trp Phe Trp Ala Arg Ser Arg Ser Pro Ala Leu Arg Glu Arg Arg
115 120 125
Ile Arg Phe Trp Ala Pro Trp Ser Thr Ser Gln Cys Ala Ile Asp Arg
130 135 140
Pro Met Pro Pro Thr Pro Pro Thr Thr Arg Tyr Asp Ala Ser Glu Arg
145 150 155 160
Ser Arg Gly Arg Gly Val Ile Pro Leu Gly Arg Gly Thr Thr Gly Thr
165 170 175
Thr Ser Ser Gly Pro Ala Gly Ser Thr Thr Phe Pro Met Cys Ala Pro
180 185 190
Val Cys Arg Asn Arg Lys Ala Ser Trp Thr Cys Cys Val Gly Ala Gln
195 200 205

```
Arg Arg Gly Trp Thr Gly Phe Arg Ala Arg Trp Ser Thr Arg Arg Val
    210                 215                 220
Thr Ser Pro Arg Met Arg Trp Met Ser Gly Pro Arg Arg Arg Lys Ser
225                 230                 235                 240
Val Gly Thr Ser Asn Glu Ala Ser Glu Met Pro Arg Glu Lys His Ser
                245                 250                 255
Ser Ala Thr Arg Leu Phe Val Ser Ile Ser Phe Leu Pro Asn Ser Ile
            260                 265                 270
Arg Trp Pro Arg Gly Ala Met Thr Leu Arg Leu Ala Cys Arg Ser Gly
        275                 280                 285
Pro Gly Ser Glu Leu Ser Met Thr Ser Thr Pro Arg Pro Ser Val Ala
    290                 295                 300
Ala Arg Thr Ala Gly Ala Asn Glu Ala Ser Arg Leu Leu Lys Met Arg
305                 310                 315                 320
Ser Ala Gly Met Pro Tyr Ser Arg Val Arg Arg Ser Arg Phe Ser Cys
                325                 330                 335
Asp Pro Ala Val Ala
            340
```

<210> 35192
<211> 552
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (437)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35192

```
Ser Arg Val Ser Arg Ser Ala Thr His Thr Arg Pro Thr Gly Arg Pro
1               5                   10                  15
Ser Arg Phe Asn Ser Ser Gly Ile Val Asn Arg Glu Glu Gly Val Val
            20                  25                  30
Lys Asn Trp Ser Trp Gly Gly Pro Ser Cys Trp Pro Asp Thr Trp Ala
        35                  40                  45
Gly Arg Arg Ser Leu Arg Asp Ser Arg Val Ala Gly Glu Ala Arg Pro
    50                  55                  60
Pro His Ala Arg Val Arg His Pro Cys Arg Ala His Leu Gln Gln Pro
65                  70                  75                  80
Arg Arg Phe Val Cys Pro Ser Gly Pro Gly Arg His Arg Gly Ala Arg
                85                  90                  95
Gly Arg Arg His Ala Gln Leu Ala Ala Arg Ser Thr Pro Ala Gly Gln
            100                 105                 110
Pro Gln Arg His Arg Ala Pro Arg Pro Ser Asp Arg Ile Arg Gln Glu
        115                 120                 125
Arg Asp Arg Asp Glu Gln Pro Gly Arg Ala Gly Val Leu Leu Ala Arg
    130                 135                 140
His Leu Ala Gly Leu Val Gly Cys Ala His Ala Leu Ala Pro Ser Arg
145                 150                 155                 160
Thr Arg His Pro Pro His Pro Gly Arg Gly His Pro Ser Gly Gly Pro
                165                 170                 175
Ala Arg Pro Glu Ala Arg Pro Thr Pro Ser Leu Cys Thr His Ala Ala
            180                 185                 190
Cys Pro Gly Arg Leu Ser Ile Pro Ala Asp Gly Gly Thr His Gly Lys
        195                 200                 205
```

```
Gly Cys Ala Ala Gly Gly Pro Arg Gly Gly Arg Ser Ser Ser Pro Thr
    210                 215                 220
Ala Gln Gly Asp His Pro Ser Thr Pro Thr Ala Leu Arg Cys Ile Ile
225                 230                 235                 240
Pro Gly Arg Gly Arg Arg Arg Arg His Trp Pro Val Tyr Arg Ala Leu
                245                 250                 255
Ala Gly Arg Pro Arg Arg Pro Glu Pro Asp Pro Pro Leu Pro Gln Arg
            260                 265                 270
Arg Arg Ser Arg Ser Arg Pro Glu Pro Lys Arg Arg Gly Arg Ser Val
        275                 280                 285
Arg Pro Arg Ala Thr Arg Arg Arg Leu Pro Arg Glu Ala Gly Gln Leu
    290                 295                 300
Arg His Arg Pro Ser Gln Leu Pro Arg Gln Gly Pro Pro Arg Leu Arg
305                 310                 315                 320
Gly Arg Gly Ser Pro Thr Arg Ala Gly Arg His Pro Gly Arg His Ala
                325                 330                 335
Pro Ala Arg Arg Asp Leu Arg Ala Asp Asp Ala Gly Arg Leu Glu Glu
            340                 345                 350
Arg Pro Gly Ala Gln Ala Gln Arg Gln Leu Glu Pro Ala His Gly Val
        355                 360                 365
Leu Asp Ala Arg Trp Ala Arg Leu Leu Arg His Ala Leu Val Cys Leu
    370                 375                 380
Gly Gly His Arg His Arg Val Pro Asp Gln Leu Arg Arg Gly Trp Leu
385                 390                 395                 400
Leu Arg Gly Cys Ala Gly Pro Leu Ala Pro Gly Pro Gly Ser Pro Arg
                405                 410                 415
Arg Ile Asp Arg Pro Trp Thr His Leu Gly His Trp Leu Arg Phe Ala
            420                 425                 430
Lys Ser Asn Val Xaa Lys Arg Cys Ala Arg Thr Glu Thr Pro His Ala
        435                 440                 445
Arg Gln Val Asn Leu Ala Pro Gly Pro Gln Cys Arg Leu Leu Leu Pro
    450                 455                 460
Leu Arg Thr Ser Ser Arg Pro Gln Leu Val Val Gly Leu Asn Ser Glu
465                 470                 475                 480
Pro Gly Pro Gln Trp Asp Pro Ala Gly Gly Ser Gln Leu Gly Arg Asp
                485                 490                 495
Ala Arg Phe Leu His Leu Arg Pro Arg Arg Lys Ala Ser Pro His Gly
            500                 505                 510
Lys Ala Ala Asp Gly Gly Ala Asp Ser Ser Ser Val Ser Leu Ala Thr
        515                 520                 525
Gln Leu Ala Gly Ala Ala Ser Pro Ala Arg Gly Cys Leu Ala His Arg
    530                 535                 540
Gly Cys His Cys Leu Glu Ala Gly
545                 550
```

<210> 35193
<211> 70
<212> PRT
<213> A.fumigatus

<400> 35193

```
Ile Ile Tyr Arg Leu Asn Cys Ile Tyr Ser Gln Asn Pro Val His Cys
1               5                   10                  15
Phe Leu Thr Val Gly Asp Asn Met Ala Trp Asn Ala Pro Ile Asn Gln
            20                  25                  30
Ile Leu Val Ile Cys Asn Cys Ser Glu Ile Cys Phe Ser Val Gln Asp
```

```
        35                  40                  45
Ala Thr Glu Asp Ile Tyr Phe Ile Ala Val Lys Cys Ala Asp Val Pro
    50                  55                  60
Met Ile Pro Ala Trp Phe
65                  70
```

<210> 35194
<211> 555
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (541)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35194

```
Pro Leu Val Val Ser Ser Asp Leu Gln Ala Gln Gly Phe Ala Ala Gly
1               5                   10                  15
Pro Leu Gly Val Ser Pro Ser Arg Ser Ala Ile Glu Asp Ala Arg Pro
            20                  25                  30
Glu Lys Gly Phe Gly His Gln Asp Asp Arg Asp Arg Cys Arg Gly Glu
        35                  40                  45
Leu His Gly Trp Asp Val Pro Arg Gly Leu Asp Gly His Trp Arg Gly
    50                  55                  60
Arg Arg Val Gln Arg Gly Ala Gln Thr His Thr Thr Asp Gly Ser Gln
65                  70                  75                  80
Gly Ala Ala Ser Gly Glu Gly Gly Ala Thr Leu Pro His His Leu Pro
                85                  90                  95
Arg Leu Leu Asp Ala Asp Ala Pro Asp Pro Gly Ser Gln Gly Arg Arg
            100                 105                 110
Arg Ile Arg Asp Pro Arg Ala Asp His His Asp Ser Ile Leu Ala Gly
        115                 120                 125
Leu Ser Thr Val Arg Lys Gly Trp Ser Arg Ile Gly Ala Gly Ala Ala
    130                 135                 140
His His Ala Gly Gln Thr Leu Gly Arg Asp Gly Asp Leu Tyr Ala Thr
145                 150                 155                 160
Ala Gly Ser Gln Glu Lys Arg Asp Leu Leu Thr Arg Glu Tyr Gly Ile
                165                 170                 175
Pro Ala Glu Arg Ile Phe Ser Ser Arg Asp Ala Ser Phe Ala Pro Ala
            180                 185                 190
Val Leu Ala Ala Thr Glu Gly Arg Gly Val Asp Val Met Leu Asn Ser
        195                 200                 205
Leu Pro Gly Pro Leu Leu Gln Ala Ser Leu Ser Val Ile Ala Pro Leu
    210                 215                 220
Gly His Leu Ile Glu Phe Gly Lys Lys Glu Ile Glu Thr Asn Ser Leu
225                 230                 235                 240
Val Ala Leu Glu Cys Phe Ser Arg Gly Ile Ser Leu Ala Ser Leu Asp
                245                 250                 255
Val Pro Thr Leu Leu Arg Arg Arg Gly Pro Asp Ile His Arg Ile Leu
            260                 265                 270
Gly Glu Val Thr Arg Leu Val Asp Gln Arg Ala Leu Lys Pro Val Gln
        275                 280                 285
Pro Arg Arg Cys Ala Pro Thr Gln His Val Gln Asp Ala Phe Arg Phe
    290                 295                 300
Leu Gln Thr Gly Ala His Met Gly Lys Val Val Leu Pro Ala Gly Pro
```

305 310 315 320
Glu Glu Val Val Pro Val Val Pro Arg Pro Lys Gly Ile Thr Pro Arg
325 330 335
Pro Arg Leu Arg Ser Asp Ala Ser Tyr Leu Val Val Gly Gly Val Gly
340 345 350
Gly Ile Gly Arg Ser Ile Ala His Trp Leu Val Asp His Gly Ala Gln
355 360 365
Asn Arg Ile Leu Leu Ser Arg Ser Ala Gly Asp Leu Asp Leu Ala Gln
370 375 380
Asn Gln Asn Ala Glu Gly Ala Leu Phe Val Arg Glu Leu Arg Ala Ala
385 390 395 400
Gly Cys Arg Val Lys Pro Val Ser Cys Asp Ile Ala Leu Ala Ser Ser
405 410 415
Leu Ala Lys Ala Arg Arg Ala Cys Glu Asp Glu Gly Leu Pro Pro Val
420 425 430
Arg Gly Val Ile Gln Gly Ala Met Leu Leu Arg Asp Ala Ile Phe Glu
435 440 445
Gln Met Thr Leu Ala Asp Trp Lys Ser Gly Leu Ala Pro Lys Leu Asn
450 455 460
Gly Ser Trp Asn Leu His Thr Ala Phe Ser Thr Arg Gly Gly Leu Asp
465 470 475 480
Phe Phe Val Met Leu Ser Ser Val Ser Gly Val Ile Gly Ile Ala Ser
485 490 495
Gln Thr Asn Tyr Ala Ala Gly Gly Ser Tyr Glu Asp Ala Leu Ala Arg
500 505 510
Trp Arg Gln Ala Arg Gly Leu Pro Gly Val Ser Ile Asp Leu Gly Pro
515 520 525
Ile Ser Asp Ile Gly Tyr Val Ser Gln Lys Ala Met Xaa Pro Asn Ala
530 535 540
Ala Gln Gly Arg Lys Leu Pro Met Leu Asp Lys
545 550 555

<210> 35195
<211> 265
<212> PRT
<213> A.fumigatus

<400> 35195
Ile Leu Leu Arg Ala Pro Asn Ala Ala Cys Cys Tyr Arg Phe Gly Arg
1 5 10 15
Ala Ala Ala Pro Ser Ser Ser Ser Ala Ser Thr Pro Ser Leu Ala Arg
20 25 30
Ser Gly Ile Pro Pro Ala Ala Pro Ser Ser Asp Val Met Arg Asp Ser
35 40 45
Cys Thr Cys Gly Arg Ala Gly Arg Arg Arg Arg Met Ala Lys Arg Pro
50 55 60
Met Ala Ala Pro Thr Ala Ala Val Ser Arg Trp Arg His Ser Leu Arg
65 70 75 80
Gly Arg Pro Pro Arg Gln Glu Ala Ala Ser Leu Ile Gly Ala Ala Ile
85 90 95
Ala Ser Lys Leu Ala Asp Ile Phe Met Ala Pro Val Thr Glu Ile Asp
100 105 110
Leu Ser Lys Pro Pro Ala His Phe Gly Val Asp Ser Leu Ile Ala Val
115 120 125
Glu Leu Arg Asn Met Leu Val Leu Gln Ala Ala Ala Asp Ile Ser Ile
130 135 140

```
Phe Asn Leu Leu Gln Thr Pro Ser Leu Ala Ala Leu Ala Ala Ser Val
145                 150                 155                 160
Ala Glu Lys Ser Arg His Val His Ala Ala Ala Tyr Thr His Val Leu
                165                 170                 175
Gly Pro Gly Cys Ile Leu Thr Arg Phe Leu Ser Ser Tyr Glu Pro Met
            180                 185                 190
Leu Gly Arg Asp Glu Glu Ala Glu Tyr Pro Gly Met Ala Gln Ala Arg
        195                 200                 205
Arg Lys Glu Gln Phe Asn Cys Gly Ala Gly His Ser Thr Tyr Phe Cys
    210                 215                 220
Ala Leu Cys Phe Ile Leu Phe Leu Ile Gly Tyr Ile Leu Arg Val Glu
225                 230                 235                 240
Gly Ser Ser Thr Leu Gly Arg Ser Glu Phe Thr Arg Pro His Cys Ser
                245                 250                 255
Ser Met Asp Asn Ser Ile Lys Tyr Arg
            260                 265

<210> 35196
<211> 139
<212> PRT
<213> A.fumigatus

<400> 35196
Ile Arg Pro Arg Arg Pro Pro Val Leu Asn Val Ala Pro Ser His Trp
1               5                   10                  15
Ser Phe Pro Arg Thr Ser Arg Arg Arg Asp Leu Leu Gln Val Leu Trp
            20                  25                  30
Glu Ser Leu Pro Ala Glu Ala Gln Ser Lys Thr His Ala Gln Lys Lys
        35                  40                  45
Val Ser Asp Ile Lys Thr Thr Glu Thr Gly Val Val Val Ser Cys Thr
    50                  55                  60
Asp Gly Thr Ser His Glu Gly Ser Met Val Ile Gly Ala Asp Gly Ala
65                  70                  75                  80
Tyr Ser Val Val Arg Lys His Ile Gln Leu Met Ala Leu Arg Glu Gln
                85                  90                  95
Pro Ala Ala Lys Glu Glu Arg Pro Phe Leu Thr Thr Tyr Arg Ala Phe
            100                 105                 110
Trp Met Leu Met Pro Leu Ile Pro Gly Leu Lys Val Gly Asp Ala Tyr
        115                 120                 125
Glu Thr His Gly Pro Thr Ile Thr Ile Gln Phe
    130                 135

<210> 35197
<211> 190
<212> PRT
<213> A.fumigatus

<400> 35197
Pro Phe Pro Pro Arg Gly Ala Ser Asn Tyr Val Ala Lys Thr Ile Asn
1               5                   10                  15
Pro Arg Ser Arg His Thr Pro Leu Asp Lys Val Lys Val Val Ile Ile
            20                  25                  30
Gly Gln Asp Pro Tyr His Asn His Asn Gln Ala His Gly Leu Ala Phe
        35                  40                  45
Ser Val Arg Pro Pro Thr Pro Ala Pro Pro Ser Leu Val Asn Ile Tyr
    50                  55                  60
```

```
Thr Gly Ile Lys Asn Asp Tyr Pro Thr Phe Gln Pro Pro Pro Asn Lys
65                  70                  75                  80
Gly Gly Leu Leu Ile Pro Trp Ala Glu Arg Gly Val Leu Met Leu Asn
                85                  90                  95
Thr Cys Leu Thr Val Arg Ala His Gln Ala Ala Ser His Ser Asn Lys
            100                 105                 110
Gly Trp Glu Arg Phe Thr Gln Lys Ala Ile Asp Thr Val Ala Arg Val
        115                 120                 125
Arg Thr Asn Gly Val Val Phe Leu Ala Trp Gly Ser Pro Ala Gly Lys
    130                 135                 140
Arg Val Ala Gly Ile Asn Arg Gln Lys His Cys Val Leu Gln Ser Val
145                 150                 155                 160
His Pro Ser Pro Leu Ser Ala His Arg Gly Phe Val Ser Pro Ala Ser
                165                 170                 175
Leu Leu Arg His His Ser Thr His Tyr Arg Ala Leu Val Tyr
            180                 185                 190
```

<210> 35198
<211> 99
<212> PRT
<213> A.fumigatus

```
<400> 35198
Phe Asn Asn Gly His Phe Lys Lys Cys Asn Glu Trp Leu Ala Lys Arg
1               5                   10                  15
Tyr Gly Pro Asp Gly Ile Ile Asp Trp Ser Leu Thr Pro Lys Thr Thr
            20                  25                  30
Gly Gly Ser Leu Ala Ala Val Ser Asp Gln Ala Pro Met Ile Asp Gln
        35                  40                  45
Val Lys Thr Ser Thr Ser Lys Val Leu Asp Ser Asn Ser Ser Glu Glu
    50                  55                  60
Ser Lys Val Ala Ser Asp Lys Arg Leu Asp Ala Asp Gly Leu Leu Asp
65                  70                  75                  80
Glu Phe Asp Asp Asp Val Asp Ala Leu Glu Val Leu Ala Ala Ala Glu
                85                  90                  95
Ala Ala Thr
```

<210> 35199
<211> 193
<212> PRT
<213> A.fumigatus

```
<400> 35199
His Phe Phe Phe Phe Trp Asn Leu Leu Tyr Tyr Ser Arg Ser Thr Thr
1               5                   10                  15
Pro Ser Ser Phe Ser Ser Cys Arg Tyr Gln Gln Ser Ser Ser Val His
            20                  25                  30
Asn Thr Gln Arg Glu Arg Val Met Ala Ser Pro Thr Gly Leu Lys Arg
        35                  40                  45
Thr Ala Asn His Leu Ser Thr Pro Ala Cys Asp Ala Lys Lys Pro Arg
    50                  55                  60
Ala Asn Gly Ser Ile Thr Ser Phe Phe Gly Ala Pro Lys Pro Lys His
65                  70                  75                  80
Gly Asp Thr Lys Thr Leu Thr Ile Ser Ser Ser Ser Ser Asn Phe Asn
                85                  90                  95
```

```
Lys Asp Lys Trp Val Ala Ser Leu Thr Pro Glu Gln Gln Glu Leu Leu
            100                 105                 110
Arg Leu Glu Ile Asp Thr Leu His Glu Ser Trp Leu Ser Arg Leu Lys
        115                 120                 125
Glu Glu Leu Val Thr Pro Glu Phe Leu Gly Leu Lys Arg Phe Leu Lys
    130                 135                 140
Lys Glu Lys Glu Ser Gly Ala Lys Ile Phe Pro Pro Glu Asn Glu Ile
145                 150                 155                 160
Tyr Ser Trp Tyr Asn Pro Ser His Phe Leu His Glu Ala Arg Arg Thr
                165                 170                 175
Met Leu Leu Lys Arg Ser Thr Pro Gly Leu Asp Ile Arg Pro Trp Ile
            180                 185                 190
Lys
```

<210> 35200
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35200
```
Pro Trp Gly Thr Ile Gly Gln Arg Ile Glu Ile Glu Arg Leu Arg Arg
1               5                   10                  15
Glu Ile Arg Tyr Thr Arg Lys Ser Arg Gln Leu Ile Lys Asp Asp Gln
            20                  25                  30
Leu Leu Tyr Ile Leu Thr Gly Leu Ala Asp Phe Arg Gln Leu Arg Thr
        35                  40                  45
Ser Arg Pro Lys Thr Asn Ala Pro Thr Thr Lys Gln
    50                  55                  60
```

<210> 35201
<211> 82
<212> PRT
<213> A.fumigatus

<400> 35201
```
Ala Val Trp Ile Cys Gly Cys Ser Glu Ser Leu Ala Ala Ala Phe Gln
1               5                   10                  15
Ser Arg Phe Ala Val Leu Leu Phe Pro Thr Val Ser Asp Met Ala Ser
            20                  25                  30
Lys Gln Gly Gly Lys Phe Arg Pro Thr Leu Gly Phe Gln Gln Asp Leu
        35                  40                  45
Glu Asp Leu Ile Ser Cys Tyr Asn Leu Ile Ile Pro Leu His Val Leu
    50                  55                  60
Ser Ile Val Leu Pro Cys Ser Asp Ile Leu Tyr Ile Cys Pro Asn Leu
65                  70                  75                  80
Met Glu
```

<210> 35202
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35202
```
Pro Cys Tyr Ser Phe Ser Gly Thr Leu Ala Ala Leu Thr Thr Ile Gly
```

```
1               5                   10                  15
Val Thr Ala Thr Thr Glu Met Thr Ser Ser Ala Ser Met Ile Ser Ser
            20                  25                  30
Thr Thr Thr Gly Gly Pro Ser Pro Ala Ala Ser Thr Val Ala Ala Glu
        35                  40                  45
Thr Asn Thr Ser Ala Pro Leu Glu Pro Asn Gln Leu Gly Ser Arg Pro
    50                  55                  60
Glu Ser Ser Gln Ala Leu Gln Leu Ala Val Ser Ser Val Trp Leu Pro
65                  70                  75                  80
Ser
```

<210> 35203
<211> 95
<212> PRT
<213> A.fumigatus

<400> 35203

```
Glu Ser Cys Thr Asp His Thr Trp Arg Ser Ser Ala Cys Pro Leu Phe
1               5                   10                  15
Cys Ile Asn Leu Asp Pro Leu Asn Leu Asn Asn Leu Ala Gly Gly Gln
            20                  25                  30
Gly Ile Lys Lys Cys Pro Asn Thr Asp Leu Asp Met Tyr Tyr Cys Ile
        35                  40                  45
Asp Tyr Asn Met Gly Asn Ala Asn Tyr Ser Ala Gln Gln Gln Val Leu
    50                  55                  60
Ile Phe Lys Gly Met Ser Gln Pro Tyr Ile Gly Ile Leu Ala Gly Asp
65                  70                  75                  80
Pro Ile Ala Asp Leu Val Ile Pro Ser Gln Val His Leu Pro Leu
                85                  90                  95
```

<210> 35204
<211> 375
<212> PRT
<213> A.fumigatus

<400> 35204

```
Ser Phe His Pro Arg Gly Glu Asp Ser Lys Pro Pro Thr Asn Arg Ile
1               5                   10                  15
Arg Pro Met Thr Ser Thr Leu Tyr Lys Pro His Pro Thr Glu Gln Met
            20                  25                  30
Lys Ala Ala Gln Trp Met Gly Thr Arg Leu Ile Gln Leu Asp Thr Val
        35                  40                  45
Ala Lys Pro Thr Ile Thr Asp Pro Ala Asp Ala Ile Ile His Ile Thr
    50                  55                  60
His Cys Thr Ile Gly Gly Ala Asp Leu His Leu Tyr Asp Gly Glu Leu
65                  70                  75                  80
Ser Asp Met Leu Ala Gln Gly Asp Ile Leu Gly His Glu Ala Ile Gly
                85                  90                  95
Thr Val Glu Asp Ala Gly Glu Ala Val Arg Ser Ile Ser Pro Gly Asp
            100                 105                 110
Arg Val Met Ile Leu Pro Val Ile Ala Cys Gly His Cys Glu Phe Cys
        115                 120                 125
Lys Arg Gln Glu Phe Ser Leu Cys Asp Thr Thr Asn Pro Ser Arg Glu
    130                 135                 140
Met Glu Ser Ala Tyr Gly His Arg Val Ala Gly Met Leu Gly Phe Thr
```

```
145                 150                 155                 160
Arg Leu Tyr Gly Gly Tyr Pro Gly Ala Gln Ala Glu Tyr Val Arg Val
                165                 170                 175
Gln His Ala Asp Phe Cys Cys Val Arg Val Pro Ala Asp Met Asp Ala
            180                 185                 190
Lys Glu Leu Leu Gly Leu Ala His Val Thr Thr Ala Ala Trp His Gly
        195                 200                 205
Cys Glu Leu Ala Asp Val Gln Pro Gly Asp Thr Val Gly Val Trp Gly
    210                 215                 220
Cys Gly Pro Val Gly Leu Ser Val Gln Arg Leu Ala Val Leu Arg Gly
225                 230                 235                 240
Ala Thr Lys Val Tyr Ala Val Asp Lys Asp Ala Gly Arg Leu Gln Ile
                245                 250                 255
Ala Glu Gly Phe Gly Met Ile Pro Val Asp Val Gly Val His Ser Glu
            260                 265                 270
Val Gly Asp Tyr Ile Leu Ser Met Glu Pro Arg Gly Leu Asp Cys Ala
        275                 280                 285
Val Glu Ala Ser Gly Phe Arg Ser Thr Gln Lys Pro Gln His Ala Ala
    290                 295                 300
Met Arg Ala Ile Gly Leu Glu His Asp Ser Ser Asp Thr Val Ser Ala
305                 310                 315                 320
Met Ile Lys Ala Thr Arg Lys Gly Gly His Leu Ala Leu Leu Gly Asp
                325                 330                 335
Phe Phe Tyr Arg Thr Asn Asp Phe Pro Ile Gly Pro Leu Met Glu Lys
            340                 345                 350
Gly Leu Thr Ile Arg Gly Gly Gln Val Asn Ser Gln Lys Ala Phe Thr
        355                 360                 365
Val Ala Asp Met Arg Val Asn
    370                 375

<210> 35205
<211> 135
<212> PRT
<213> A.fumigatus

<400> 35205
Thr Ala Met Trp Asn Ala Thr Ser Pro Thr Ala Arg Gly Pro His Gly
1               5                   10                  15
Leu Pro Pro Asn Leu Ser Pro Pro Pro Ser Ser Pro Ser Thr Ala Trp
            20                  25                  30
Pro Pro Ala Ser Thr Thr Ala Asn Lys Pro Thr Lys Ala Ser Lys Pro
        35                  40                  45
Ser Ala Thr His Arg Ala Thr Ser Pro Ser Ser Ala Pro Thr Ala Thr
    50                  55                  60
Pro Arg Ala Ser Ala Ala Pro Gln Ser Ser Ser Pro Cys Pro Pro Ser
65                  70                  75                  80
Arg Arg Ile Ser Ser Cys Asn Ala Ser Ser Ser Pro Ser Pro Pro Thr
                85                  90                  95
Pro Ser Ser Ser Arg Pro Met Lys Pro Ala Pro Arg Cys Thr Ser Ala
            100                 105                 110
Pro Cys Ser Ser Gly Arg Pro Arg Ser Trp Ala Ser Pro Arg Gln Thr
        115                 120                 125
His Ile Pro Leu Trp Cys Leu
    130                 135

<210> 35206
```

<211> 142
<212> PRT
<213> A.fumigatus

<400> 35206
Ser Pro Ala Asp Thr Ala Ser Ser Ala Arg Gly Arg Ser Ser Arg Cys
1 5 10 15
Ala Thr Arg Arg Ile Pro Arg Ala Arg Trp Arg Ala Arg Thr Asp Thr
20 25 30
Gly Trp Arg Ala Cys Trp Gly Ser His Gly Cys Thr Ala Gly Ile Pro
35 40 45
Glu Arg Arg Arg Ser Thr Cys Gly Ser Ser Thr Arg Thr Ser Ala Ala
50 55 60
Ser Gly Cys Arg Arg Thr Trp Thr Arg Arg Ser Cys Trp Gly Trp Arg
65 70 75 80
Met Ser Pro Pro Leu Arg Gly Met Gly Ala Ser Trp Arg Thr Ser Ser
85 90 95
Arg Gly Ile Pro Trp Val Phe Gly Gly Val Gly Pro Ser Gly Tyr Arg
100 105 110
Cys Ser Gly Trp Arg Ser Cys Ala Gly Arg Arg Arg Cys Thr Pro Leu
115 120 125
Thr Arg Thr Arg Val Ala Cys Arg Leu Pro Lys Gly Leu Gly
130 135 140

<210> 35207
<211> 168
<212> PRT
<213> A.fumigatus

<400> 35207
His His Leu Ile Ile Ser His Leu His Leu Tyr Thr Ser Ala Thr Gln
1 5 10 15
Phe Ile Tyr Thr Met Ser Phe Pro Pro Pro Pro Val Asp Thr Ile Asp
20 25 30
Trp Ser Asn Val Gly Phe Lys Val Arg Asp Gly Lys Leu Pro Phe Pro
35 40 45
Pro Ser Pro Thr Ser Ala Pro Thr Ser Ser Arg Gln Leu Thr Ser Pro
50 55 60
Ser Lys Arg Pro Cys Gly Met Pro Leu Leu Pro Gln His Gly Gly His
65 70 75 80
Met Val Ser Pro Gln Ile Cys Leu Leu Pro Leu Pro Pro Pro Pro Arg
85 90 95
His Gly Pro Arg Pro Gln Leu Arg Pro Thr Ser Leu Arg Arg Pro Gln
100 105 110
Ser Leu Pro Pro Pro Ile Gly Pro His Leu His Leu Pro Pro Arg Pro
115 120 125
Gln Arg Arg Ala Pro Pro Pro Leu Arg Arg Val Arg Leu His Ala Pro
130 135 140
Arg Pro Gly Gly Ser Leu Pro Ala Met Arg Gln Ala Arg Arg Arg Arg
145 150 155 160
Gln Arg Arg Val Arg Pro Ala Pro
165

<210> 35208
<211> 233
<212> PRT

<213> A.fumigatus

<400> 35208
Gln Asp Gln Thr Asn Asp Lys His Ala Leu Gln Ala Pro Ser His Arg
1 5 10 15
Ala Asp Glu Ser Arg Ala Val Asp Gly His Ala Leu Asp Pro Ala Arg
20 25 30
His Arg Arg Gln Thr His His His Gly Pro Arg Gly Arg His His Pro
35 40 45
His His Pro Leu His His Arg Arg Arg Arg Pro Pro Pro Leu Arg Arg
50 55 60
Gly Thr Glu Arg His Ala Arg Pro Gly Arg His Pro Arg Pro Arg Gly
65 70 75 80
Asp Arg His Arg Arg Gly Arg Arg Arg Ser Gly Pro Gln His Leu Pro
85 90 95
Gly Arg Pro Arg His Asp Pro Pro Arg Asp Arg Leu Arg Thr Leu Arg
100 105 110
Val Leu Gln Glu Ala Gly Val Leu Ala Val Arg His Asp Glu Ser Leu
115 120 125
Ala Arg Asp Gly Glu Arg Val Arg Thr Pro Gly Gly Gly His Ala Gly
130 135 140
Val His Thr Ala Val Arg Arg Val Ser Arg Ser Ala Gly Gly Val Arg
145 150 155 160
Ala Gly Pro Ala Arg Gly Leu Leu Leu Arg Pro Gly Ala Gly Gly His
165 170 175
Gly Arg Glu Gly Ala Ala Gly Ala Gly Ala Cys His His Arg Cys Val
180 185 190
Ala Trp Val Arg Ala Gly Gly Arg Pro Ala Gly Gly Tyr Arg Gly Cys
195 200 205
Leu Gly Val Trp Ala Arg Arg Ala Ile Gly Ala Ala Ala Gly Gly Pro
210 215 220
Ala Arg Gly Asp Glu Gly Val Arg Arg
225 230

<210> 35209
<211> 360
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (152)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35209
His His Leu Val Asn Gly His Val Glu Cys His Phe Ser His Ser Thr
1 5 10 15
Gly Ala Thr Trp Ser Pro Pro Lys Phe Val Ser Ser Pro Phe Leu Pro
20 25 30
Leu His Gly Met Ala Pro Gly Leu Asn Tyr Gly Gln Gln Ala Tyr Glu
35 40 45
Gly Leu Lys Ala Phe Arg His Pro Ser Gly His Ile Ser Ile Phe Arg
50 55 60
Pro Asp Arg Asn Ala Ala Arg Leu Arg Arg Ser Ala Glu Phe Val Ser
65 70 75 80
Met Pro Pro Val Pro Glu Asp Leu Phe Leu Gln Cys Val Lys Leu Ala

```
                85                  90                  95
Val Ala Ala Asn Ala Glu Phe Val Pro Pro His Glu Thr Gly Ala Ala
            100                 105                 110
Met Tyr Ile Arg Pro Leu Leu Phe Gly Ser Ser Ala Gln Leu Gly Leu
        115                 120                 125
Ser Pro Pro Asp Ala Tyr Thr Phe Val Val Phe Val Met Pro Thr Gly
    130                 135                 140
Val Tyr His Gly Val His Ala Xaa Asp Ala Leu Ile Leu Glu Asp Phe
145                 150                 155                 160
Asp Arg Ala Ala Pro Gln Gly Thr Gly Ser Ala Lys Val Gly Gly Asn
                165                 170                 175
Tyr Ala Pro Val Leu Arg His Ser Ala Arg Ala Ala Ala Glu Gly Phe
            180                 185                 190
Gly Ile Thr Leu His Leu Asp Ser Arg Thr Arg Ser Glu Ile Asp Glu
        195                 200                 205
Phe Ser Thr Ser Ala Phe Ile Gly Val Arg Arg Asp Gly Asp Lys Val
    210                 215                 220
Thr Leu Val Gln Pro Asp Ser Thr Asn Val Ile Asp Ser Val Thr Ala
225                 230                 235                 240
Arg Ser Val Cys Glu Ile Gly Glu Arg Leu Phe Gly Phe Ala Val Glu
                245                 250                 255
Lys Arg Arg Ile Gly Tyr Asp Glu Ile Lys Glu Phe His Glu Val Ile
            260                 265                 270
Ala Ala Gly Thr Ala Ala Ala Leu Val Pro Ile Arg Ser Ile Thr Met
        275                 280                 285
Arg Ser Arg Gly Glu Lys Phe Thr Phe Asp Cys Gly Ala Asp Gly Gln
    290                 295                 300
Ser Gly Gly Glu Ile Cys Ile Lys Leu Leu Gln Thr Leu Lys Gly Ile
305                 310                 315                 320
Gln Ala Gly Lys Ile Glu Asp Pro Phe Gly Trp Asn Cys Leu Val Asp
                325                 330                 335
Gln Ala Pro Pro Ala Ala Trp Leu Glu Gly Ala Thr Gly Gln Glu Gly
            340                 345                 350
Asp Thr Glu Gly Ile Gly Val Pro
        355                 360
```

<210> 35210
<211> 102
<212> PRT
<213> A.fumigatus

<400> 35210

```
Gln Gly Gly Ile Val Thr Tyr Ser Val Trp Ser Met His Arg Arg Glu
1               5                   10                  15
Asp Ile Tyr Gly Pro Asp Ala Asn Glu Phe Arg Pro Glu Arg Trp Ala
            20                  25                  30
Asp Leu Arg Pro Gly Trp Glu Tyr Leu Pro Phe Asn Gly Gly Pro Arg
        35                  40                  45
Ile Cys Val Gly Gln Gln Tyr Ala Leu Thr Glu Ala Gly Tyr Val Thr
    50                  55                  60
Val Arg Leu Ala Gln Gln Phe Ala Val Leu Glu Ser Arg Asp Pro Gly
65                  70                  75                  80
Pro Trp Glu Glu Asn Leu Thr Leu Thr Leu Cys Ser Arg Asn Gly Thr
                85                  90                  95
Lys Val Ser Leu Arg Asn
            100
```

<210> 35211
<211> 402
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (254)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35211

```
Phe Ser Arg Ser Gln Ser Phe Leu Arg His Val Ser Thr Phe Asp Phe
1               5                  10                  15
Ser Thr Phe Asp Asp Ala Leu Leu Val Cys Met Asn Asn His Glu Arg
            20                  25                  30
Phe Gln Arg Arg Asp Ser Leu Ala Thr Ala Thr Ile Leu Trp His Thr
        35                  40                  45
Asp Pro Leu Gly Val Thr Leu Leu Pro Arg Cys Ala Phe Lys Pro Cys
    50                  55                  60
Arg Arg Arg Gly Leu Ile His Glu Thr Ile Pro Pro Lys Arg Ile Leu
65                  70                  75                  80
Asp Leu Pro Gly Leu Asp Pro Leu Glu Gly Leu Gln Gln Phe Asp Thr
                85                  90                  95
Asp Leu Ala Pro Thr Leu Pro Ile Arg Ala Ala Val Glu Arg Lys Leu
            100                 105                 110
Leu Pro Ala Arg Pro His Arg Asp Thr Pro Asp Arg Asp Gln Arg Arg
        115                 120                 125
Arg Arg Ala Arg Arg Asn His Leu Val Lys Leu Leu Asp Leu Ile Val
    130                 135                 140
Ala Asn Ala Ser Leu Leu Asp Arg Glu Ala Lys Glu Ser Leu Pro Asn
145                 150                 155                 160
Leu Thr His Arg Pro Arg Arg His Arg Ile Asn His Val Arg Thr Val
                165                 170                 175
Arg Leu His Gln Arg Asp Leu Val Ser Ile Pro Pro His Pro Asp Lys
            180                 185                 190
Arg Arg Arg Arg Glu Leu Ile Asp Leu Arg Pro Arg Pro Thr Ile Gln
        195                 200                 205
Val Gln Gly Asp Ala Glu Pro Leu Arg Arg Gly Ala Arg Ala Met Pro
    210                 215                 220
Gln His Arg Arg Ile Val Ala Pro Asp Leu Arg Arg Pro Gly Ala Leu
225                 230                 235                 240
Gly Arg Gly Ala Val Lys Val Phe Gln Asp Gln Gly Ile Xaa Gly Met
                245                 250                 255
His Ala Val Val Asn Ala Gly Arg His His Lys His His Lys Gly Ile
            260                 265                 270
Cys Val Trp Arg Gly Glu Ala Gln Leu Arg Gly Arg Pro Glu Glu Gln
        275                 280                 285
Gly Ala Asp Val His Arg Gly Ala Gly Phe Met Gly Arg Asp Glu Leu
    290                 295                 300
Gly Val Gly Gly Asp Gly Glu Leu Asp Ala Leu Gln Glu Glu Ile Leu
305                 310                 315                 320
Arg Asp Gly Gly His Gly Asp Glu Leu Cys Gly Ala Ala Glu Ala Arg
                325                 330                 335
Gly Val Ala Val Gly Ala Glu Asp Gly Asp Val Ala Arg Trp Val Ala
            340                 345                 350
```

```
Glu Gly Phe Glu Ala Phe Val Gly Leu Leu Ala Val Val Glu Ala Gly
        355                 360                 365
Gly His Ala Val Glu Gly Glu Glu Gly Gly Gly Asp Lys Phe Gly Gly
    370                 375                 380
Arg Pro Cys Gly Pro Arg Ala Val Gly Glu Val Ala Phe His Met Ala
385                 390                 395                 400
Val Tyr
```

<210> 35212
<211> 199
<212> PRT
<213> A.fumigatus

<400> 35212

```
Ser Pro Thr Ser Glu Cys Thr Pro Thr Ser Thr Gly Ile Ile Pro Asn
1               5                   10                  15
Pro Ser Ala Ile Cys Lys Arg Pro Ala Ser Leu Ser Thr Ala Tyr Thr
            20                  25                  30
Phe Val Ala Pro Arg Arg Thr Ala Ser Arg Cys Thr Asp Ser Pro Thr
        35                  40                  45
Gly Pro His Pro Gln Thr Pro Thr Val Ser Pro Gly Trp Thr Ser Ala
    50                  55                  60
Ser Ser His Pro Cys His Ala Ala Val Val Thr Cys Ala Ser Pro Ser
65                  70                  75                  80
Ser Ser Phe Ala Ser Met Ser Ala Gly Thr Arg Thr Gln Gln Lys Ser
                85                  90                  95
Ala Cys Trp Thr Arg Thr Tyr Ser Ala Cys Ala Pro Gly Tyr Pro Pro
            100                 105                 110
Tyr Ser Arg Val Asn Pro Ser Met Pro Ala Thr Arg Cys Pro Tyr Ala
        115                 120                 125
Leu Ser Ile Ser Arg Glu Gly Phe Val Val Ser His Ser Glu Asn Ser
    130                 135                 140
Cys Leu Leu Gln Asn Ser Gln Cys Pro Gln Ala Ile Thr Gly Arg Ile
145                 150                 155                 160
Met Thr Arg Ser Pro Gly Glu Met Leu Arg Thr Ala Ser Pro Ala Ser
                165                 170                 175
Ser Thr Val Pro Ile Ala Ser Trp Pro Arg Met Ser Pro Trp Ala Ser
            180                 185                 190
Met Ser Leu Ser Ser Pro Ser
        195
```

<210> 35213
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35213

```
Val Lys Met Arg Asp Asp Glu Met Met Ser Arg Gln Lys Asp Asp Asp
1               5                   10                  15
Arg Met Arg Gly Asp Leu Phe Ile Pro Pro Thr Val Asp Glu Leu Gly
            20                  25                  30
Gln Ala Gly Asn Asn Thr Thr His Pro Arg Trp His Ala Arg Val Pro
        35                  40                  45
Tyr Pro Ser His Leu Met Asp Met Phe Met Ser Thr Pro Asn Ser Tyr
    50                  55                  60
```

```
Thr Val Ser Tyr Leu Val Ser Ser Phe Thr Asn Ala Ala Glu Val Arg
65                  70                  75                  80
Pro


<210> 35214
<211> 120
<212> PRT
<213> A.fumigatus

<400> 35214
Ser Ser Pro Thr Pro Tyr Arg Cys Cys His Ala Pro Ala Gln Ser Pro
1               5                  10                  15
Ala Ser Pro His Ala Ala Val Ser Ala Tyr Ser Glu Thr His Ser Pro
            20                  25                  30
Arg Pro Arg Ser Pro Thr Leu Gly Ala Pro Ser Thr Gly Tyr Ser Pro
        35                  40                  45
Arg Pro Arg Asn Ala Arg Arg His Pro Pro Glu Ser Ser Gln Thr Leu
    50                  55                  60
Arg Gln Ser Ala Ser Asp Pro Arg Pro Cys Gln Arg Arg Thr Pro Ser
65                  70                  75                  80
Ser Pro Arg Ala Gly Pro Pro Ala Ala Ala Pro Ile Ala Arg Arg Ala
                85                  90                  95
His Thr Pro Lys His Pro Arg Tyr Pro Pro Ala Gly Arg Pro Pro Ala
            100                 105                 110
Arg Thr His Ala Thr Gln Arg Trp
        115                 120

<210> 35215
<211> 161
<212> PRT
<213> A.fumigatus

<400> 35215
Leu Leu Val Arg Ile Thr Ala His Pro Asp Leu Asp Phe Leu Val Val
1               5                  10                  15
Val Asn Pro Asn Ser Gly Pro Gly Asp Leu Pro Ser Pro Asn Lys Asp
            20                  25                  30
Tyr Ala Arg Glu Val Pro Lys Leu Asn Ala Phe Pro Asn Val Tyr Thr
        35                  40                  45
Val Gly Tyr Ile Arg Ile His Tyr Cys Asp Lys Pro Leu Glu Lys Val
    50                  55                  60
Tyr Gln Glu Ile Asp Arg Tyr Ala Ser Trp Ser Ala Cys Asp Gly Leu
65                  70                  75                  80
Gly Leu Gly Gly Ile Leu Leu Asp Glu Thr Pro Asn His Tyr Ser Glu
                85                  90                  95
Ala Arg Glu Glu Tyr Leu Arg Ala Cys Thr Gly Phe Ile Lys Gly Asn
            100                 105                 110
Gln Gly Ile Leu Arg Asp Arg Met Val Ser Ser Leu Leu Phe Phe Phe
        115                 120                 125
Tyr Phe Ser Ser Phe Leu Ile Phe Ser Phe Leu Gln Leu Ser Phe Phe
    130                 135                 140
Leu Ser Phe Tyr Leu Gly Phe Ser Phe His Gly Met Ala Ala Asn Arg
145                 150                 155                 160
Gly
```

<210> 35216
<211> 325
<212> PRT
<213> A.fumigatus

<400> 35216
Ser Ser Leu Tyr Pro Ser Met Thr Ser Ser Ser Arg Ser Ala Arg Ser
1 5 10 15
Pro Ser Ala Ser Pro Arg Ile Phe Ser Glu Val Pro Thr Pro Asp Ser
20 25 30
Glu Ala Asp Gly Leu Asp Thr Leu Thr Pro Val Arg Asp Gly Glu Glu
35 40 45
Tyr Val Leu Val Thr Gly Gly Leu Gly Phe Ile Gly Ser His Thr Cys
50 55 60
Leu Glu Leu Leu Lys Ala Gly Tyr Asn Val Leu Ile Val Asp Asp Leu
65 70 75 80
Ser Asn Ser Tyr Arg His Val Phe Ser Arg Ile Leu Leu Ala Ala Lys
85 90 95
Leu His Cys Asp Arg Thr Asp Gly His Cys Pro Lys Ala Thr Leu Tyr
100 105 110
Asp Val Asp Tyr Arg Asp Thr Ser Ala Met Arg Lys Leu Leu Asp Ala
115 120 125
Tyr Gln Arg Asp Pro Ser Thr Arg Gln Ser Arg Ile Ile Gly Val Ile
130 135 140
His Phe Ala Ala Phe Lys Gln Val Glu Glu Ser Ile His Thr Pro Leu
145 150 155 160
Lys Tyr Tyr Arg Asn Asn Ile Asn Gly Leu Val Asp Leu Leu Val Leu
165 170 175
Leu Asp Gln Tyr Arg Ile Thr Thr Phe Ile Phe Ser Ser Ser Ala Asn
180 185 190
Val Tyr Gly Thr Leu Ala Glu His Arg Pro Leu Leu His Glu Asp Ala
195 200 205
Cys Thr His Gln Pro Asp Pro Gly Gln Arg Phe Gly Ala Phe Arg Pro
210 215 220
Ala Glu Ile His Asn Ser Gln Ile Thr Asn Pro Tyr Gly Arg Thr Lys
225 230 235 240
Leu Phe Gly Glu Ala Ile Leu Ala Asp Leu Ala Arg Ala Asn Pro Ala
245 250 255
Trp Thr Met Val Ala Leu Arg Tyr Phe Asn Pro Asn Arg Leu Gly Arg
260 265 270
Val Gly Pro Pro Arg Ala Lys Pro Gln Gly Ser Thr Pro Gly Thr Ser
275 280 285
Ser Pro Pro Leu Gly Arg Asn Leu Thr Trp Ser Thr Asn Arg Ser Ser
290 295 300
Ser Ser Thr Gly Val Thr Gly Lys Thr Pro Asp Gly Thr Pro Arg Pro
305 310 315 320
Gly Ile Leu Ser Pro
325

<210> 35217
<211> 110
<212> PRT
<213> A.fumigatus

<400> 35217

```
Val Val His Asn Pro Gly Thr Pro Pro Asp Ala Gly Leu Ala Asn Thr
1               5                  10                  15
Cys Pro Asp Leu Ile Leu Thr Cys Glu Glu Pro Tyr Glu Arg Tyr Arg
            20                  25                  30
Ser Asp Glu Val Gln His Arg Leu Ala Glu Leu Pro Tyr Asp Arg Val
        35                  40                  45
Arg Cys Gly Tyr Met Ile Asn Ala Val Pro Val Gly Glu Leu Thr Gly
    50                  55                  60
Leu Val Arg Glu Leu Arg Asp Arg Ala Thr Tyr Val Phe Ala Thr Glu
65                  70                  75                  80
Val Glu Gly Asp Phe Tyr Glu Arg Phe Gly Pro Thr Ser Trp Lys Gln
                85                  90                  95
Leu Met His Ala Leu Lys Arg Asp Ser Asp Ser Glu Thr Val
            100                 105                 110
```

<210> 35218
<211> 148
<212> PRT
<213> A.fumigatus

<400> 35218

```
Ser Thr Thr Ala Thr Thr Ser Thr Gly Ser Ser Thr Ser Ser Ser Cys
1               5                  10                  15
Ser Thr Ser Thr Ala Ser Pro Pro Ser Ser Ser Pro Arg Pro Pro Thr
            20                  25                  30
Ser Thr Ala His Ser Pro Ser Thr Gly Pro Ser Ser Thr Lys Thr His
        35                  40                  45
Ala Pro Thr Ser Gln Thr Pro Gly Ser Asp Ser Val Arg Phe Ala Pro
    50                  55                  60
Arg Arg Ser Thr Thr Pro Arg Ser Pro Thr Pro Thr Ala Ala Pro Asn
65                  70                  75                  80
Ser Ser Ala Lys Pro Ser Ser Arg Thr Trp Arg Ala Arg Thr Pro Pro
                85                  90                  95
Gly Pro Trp Ser Pro Tyr Ala Thr Ser Thr Pro Ile Gly Trp Asp Ala
            100                 105                 110
Ser Gly Leu Leu Gly Gln Asn Pro Lys Gly Pro Pro Leu Glu Pro Arg
        115                 120                 125
Pro Arg Pro Trp Gly Glu Thr Ser Leu Gly Arg Arg Thr Glu Ala Pro
    130                 135                 140
His Leu Arg Glu
145
```

<210> 35219
<211> 233
<212> PRT
<213> A.fumigatus

<400> 35219

```
Pro Asp Gly Arg Pro Leu Ser Gln Gly Asp Ala Val Arg Arg Arg Leu
1               5                  10                  15
Pro Arg His Val Arg His Ala Glu Ala Pro Arg Arg Leu Ser Ala Gly
            20                  25                  30
Pro Ile Asp Thr Ala Ile Glu Asp His Arg Ser His Pro Leu Arg Arg
        35                  40                  45
Leu Gln Ala Gly Arg Arg Glu His Pro His Pro Ser Glu Val Leu Pro
    50                  55                  60
```

```
Gln Gln His Gln Arg Ala Arg Arg Pro Pro Arg Pro Ala Arg Pro Val
65                  70                  75                  80
Pro His His His Leu His Leu Leu Leu Val Arg Gln Arg Leu Arg His
                85                  90                  95
Thr Arg Arg Ala Pro Ala Pro Pro Pro Arg Arg Arg Met His Pro Pro
            100                 105                 110
Ala Arg Pro Arg Ala Ala Ile Arg Cys Val Ser Pro Arg Gly Asp Pro
        115                 120                 125
Gln Leu Pro Asp His Gln Pro Leu Arg Pro His Gln Thr Leu Arg Arg
    130                 135                 140
Ser His Pro Arg Gly Pro Gly Ala Arg Glu Pro Arg Leu Asp His Gly
145                 150                 155                 160
Arg Pro Thr Leu Leu Gln Pro Gln Ser Ala Gly Thr Arg Arg Ala Ser
                165                 170                 175
Ser Gly Lys Thr Pro Arg Val His Pro Trp Asn Leu Val Pro Ala Leu
            180                 185                 190
Gly Glu Lys Pro His Leu Val Asp Glu Pro Lys Leu Leu Ile Tyr Gly
        195                 200                 205
Ser Asp Trp Glu Asp Pro Gly Arg Asp Pro Pro Ala Gly Asp Phe Ile
    210                 215                 220
Pro Val Thr Asp Gly Arg Ala Gly Pro
225                 230
```

<210> 35220
<211> 186
<212> PRT
<213> A.fumigatus

<400> 35220

```
Ala Cys Leu Thr Ser Thr Glu Pro Ser Thr Arg Thr Pro Pro Thr Ser
1               5                   10                  15
Ile Tyr Leu Gly Ala Asp Gly His His Phe Ser Leu Arg Ile Ala Leu
            20                  25                  30
Thr Lys Met Glu Thr Asp Trp Trp Ile Glu Leu Glu Ser Thr Tyr Lys
        35                  40                  45
Thr Arg Ile Ala Gln Arg Lys Glu Leu Tyr Ala Lys His Gly Ser Ser
    50                  55                  60
Val Leu Gly Tyr Leu Pro Gly Ser Glu Leu Ala Cys Lys Glu Leu Met
65                  70                  75                  80
Glu Met Val Leu Gln Phe Leu Cys Ala Arg Tyr Pro Gln Tyr Phe Ser
                85                  90                  95
Leu Glu Ser Lys Arg Ile Phe Lys Asn Lys Ile Leu Asp Thr Glu Gln
            100                 105                 110
Asp Ile Lys Ala Lys His Pro Leu Glu Val Leu Leu Asp Asn Val Pro
        115                 120                 125
Glu Asp Phe Ala Ile Met Leu Arg Asp Glu Glu Thr Gly Phe Tyr Phe
    130                 135                 140
Leu Arg Ala Ala Val Ile Cys Ser Ala Leu Gly Trp Asn Val Gly Leu
145                 150                 155                 160
Lys Ile Gly Leu Gln Leu His Gln Ile His Gly Pro Ile Pro Asp Tyr
                165                 170                 175
Lys Glu Lys Met Gln Phe Ser Met Asp Arg
            180                 185
```

<210> 35221
<211> 73

<212> PRT
<213> A.fumigatus

<400> 35221
Arg Thr Ser Gly Gly Val Gly Ile Arg Arg Ser Ile Met Asn His Gly
1 5 10 15
Ser Ala Ile Arg Val Asp Leu Thr Lys Ile Cys Thr Phe Val Asn Gly
20 25 30
Gly Leu Asp Ala Val Gln Thr Ala Thr Thr Cys Lys Ala Ser Glu Gly
35 40 45
Gly Asp Val Ala Gly Asp Val Asn Thr Gly Tyr Asp Glu Asp Phe Asp
50 55 60
Glu Phe Arg Pro Ala Phe Ile Asp Gly
65 70

<210> 35222
<211> 203
<212> PRT
<213> A.fumigatus

<400> 35222
Asp Phe Ser Ser Ile Lys Ser Met Gly Arg Ser Arg Thr Ile Arg Lys
1 5 10 15
Arg Cys Ser Ser Leu Trp Ile Gly Arg Ser Arg Lys Leu Arg Glu Trp
20 25 30
Gln Ala Gln Glu Val Thr Asp Lys Ser Ser Ser Arg Phe Phe Ala Lys
35 40 45
Met Pro Thr Asp Lys Pro Ile Gln Arg Gly Ser Trp Gly Leu Glu Val
50 55 60
Gly Gln Pro Leu Tyr Met Pro Pro Gly Asp Pro His Glu Lys Leu Arg
65 70 75 80
Leu Ser Gln Asp Pro Ser Leu Gln Leu Ala Asp Cys Asn Leu Arg Val
85 90 95
Asp Trp Gln Thr Leu Arg Arg Leu Pro Leu Ser Ala Ala Val Val Phe
100 105 110
Asn Phe Lys Ala Leu Phe Thr Pro Val Ser Glu Phe Arg Asp Glu Pro
115 120 125
Cys Ile Pro Ala Leu Val Ala Lys Ile Leu Lys Glu Gly Lys Glu Asn
130 135 140
Leu Met Lys Tyr Lys Asn Thr Trp His Val Glu His Val Val Leu Pro
145 150 155 160
Lys Leu Glu Glu Trp Ala Lys Glu Gln Glu Asp Lys Gly Leu Val Asp
165 170 175
Lys Asn Trp Gln Val Ala Thr Leu Asp Glu Ser Pro Trp Phe Arg Asn
180 185 190
Trp Glu Asp Lys Trp His Arg Gln Gln Gly Phe
195 200

<210> 35223
<211> 426
<212> PRT
<213> A.fumigatus

<400> 35223
His Ala Ser Arg Asn Asn Val Ser Lys Asn Leu Cys Gln Val Ser Gln
1 5 10 15

```
Asn Pro Leu Leu Phe Ala Gln Ser Tyr Cys Leu Asn Ser Arg Ala Glu
            20                  25                  30
Ser Arg Glu Tyr Ile Arg Met Ser Tyr Trp Glu Thr Ile Lys Gln Val
        35                  40                  45
Arg Lys Ser Thr Asp Val Pro Tyr Leu Phe Gln Pro Thr Tyr Pro Ser
    50                  55                  60
Thr Leu Gln Pro Ser Tyr Ser His Pro Lys Ile Val Cys Thr Ile Ser
65                  70                  75                  80
Ala Val Asp Tyr Leu Tyr Cys Arg Ile Ser Ser Glu Gln Gln Arg Pro
                85                  90                  95
Gly Lys Met Ser Gln Leu Glu Gln Leu Pro Met Glu Leu Leu Leu Gly
            100                 105                 110
Ile Ser Asp Tyr Leu Asp Pro Leu Ser Val Ala Ser Leu Gly Gln Thr
        115                 120                 125
Ser Arg Arg Leu Asn Gly Thr Leu Gln Arg Pro Leu Ala Arg Ala Ala
    130                 135                 140
Arg Gln His Ala Leu Ala Asp Glu Ala Glu Tyr Lys Lys Arg Ile Arg
145                 150                 155                 160
Phe Arg Glu Asp Gly Lys Gly Ile Leu Thr Arg Lys Arg Thr His Gly
                165                 170                 175
Val Pro Ser Gln Pro Leu Val Gln Ala Ile Lys Arg Gly Gln Leu Asn
            180                 185                 190
Lys Val Arg Asn Tyr Leu Glu Ala Gly Val Asp Pro Asn Ala Tyr Asp
        195                 200                 205
Leu Asp Gly Cys Arg Met Leu Ser Leu Ala Val Arg Ala Asn Asp Glu
    210                 215                 220
Pro Ile Val Asp Leu Leu Leu Glu His Gly Ala Asn Pro Ala Leu Asn
225                 230                 235                 240
Asp Val Cys Ala Pro Tyr Ala Ser Pro Val Cys Asp Ala Thr Lys Met
                245                 250                 255
Ser Asn Glu Met Val Lys Lys Leu Ile Ser Ile Gly Ala Asp Tyr Thr
            260                 265                 270
Gln Val Ser Val Ile His Asp Leu Ala Gly Arg Cys Ser Leu Asp Val
        275                 280                 285
Ile Lys Leu Ala Val Asp Lys Gly Ala Asp Phe Gly Gln Thr Arg Thr
    290                 295                 300
Tyr Gly Met Thr Ala Ile His Gln Ala Ala Lys Asn Thr Asp His Pro
305                 310                 315                 320
Asp Val Leu Gln Phe Leu Val Gly Arg Tyr Pro Glu Leu Ile Ser Ser
                325                 330                 335
Gln Ser Ala Gly Thr Phe Phe Trp Ser Ala Ile Tyr Lys Gly Arg Pro
            340                 345                 350
Glu Leu Val Lys Ile Leu Ile Ile Ala Gly Val Asp Ile Ala Gly Asp
        355                 360                 365
Ile Thr Ala Leu Ala Ser Leu Ala Ser Arg Cys Ser Leu Asp Ser Val
    370                 375                 380
Gln Ala Ala Ile Asp Lys Gly Ala Asp Phe Ser Gln Ile Asn Pro Asp
385                 390                 395                 400
Gly Arg Thr Met Ile His Tyr Ala Ala Thr Asn Thr Asp Pro Pro Arg
                405                 410                 415
Gly Pro Ser Ile Pro Tyr Trp Lys Val Pro
            420                 425
```

<210> 35224
<211> 588
<212> PRT

<213> A.fumigatus

<400> 35224

```
Asn Trp Pro Cys Lys Glu Phe Pro Ile Asn His Ala Gly Ile Arg Met
1               5                  10                  15
Pro Arg Lys Lys Ala Ala Asp Arg Val Gly Pro Val Lys Thr Arg Thr
            20                  25                  30
Arg Ser Gly Cys Lys Glu Cys Arg Ala Ser Arg Val Arg Cys Asp Thr
        35                  40                  45
Gln Lys Pro Ile Cys Ser Arg Cys Arg Asp Arg Gly Leu Val Cys Ser
    50                  55                  60
Thr Glu Leu Val Leu Lys Trp Glu Ser Glu Phe Leu Ser Arg Gly Leu
65                  70                  75                  80
Ala Phe Gly Arg Ala Gly Val Trp Ser Lys Ser Arg Pro Ala Gly Thr
                85                  90                  95
Gly Ser Arg Ala Ser Ala Ser Leu Ser Val Lys Glu Asn Glu Trp Cys
            100                 105                 110
Glu Tyr Pro Pro Val Glu Ser Trp Gly Phe Val Asn Ser Gly Val Ser
        115                 120                 125
Thr Phe Glu Asn Pro His Gln Val Asn Val Ala Cys Asp Glu Leu Asn
    130                 135                 140
Gly Leu Val Val Arg Ala Arg Asp Arg Glu Leu Val Tyr Gly Gly Val
145                 150                 155                 160
Ala Ser Pro Ser Ser Val Val Val Ala Asp Asp Gly Trp Ile Ala Arg
                165                 170                 175
Glu Val Ser Ser Pro Pro Ala Ser Leu Ser Leu Phe Pro Asn Ile Pro
            180                 185                 190
Glu Ser Lys Ser His Leu Phe Asp Tyr Tyr Leu Gln Gln Val Cys Pro
        195                 200                 205
Arg Thr Thr Ala Ser Ser Lys Leu Ala Ser Pro Phe Ala Ser Val Ile
    210                 215                 220
Leu Pro Phe Cys Leu Ser Ala Ser Pro Thr Leu Phe Lys Ala Ile Gln
225                 230                 235                 240
Ala Leu Gly Ala Cys His Trp Ser Arg Phe Asp Pro Ser Tyr Ser Val
                245                 250                 255
Val Gly Leu Arg Leu Lys Ser Glu Ala Leu Arg Gly Leu Arg His Arg
            260                 265                 270
Leu Ala Thr Glu Gly Ser Ser Thr Cys Ser Gly Asp Pro Glu Val Leu
        275                 280                 285
Val Ile Met Met Met Leu Cys Leu Tyr Glu Ile Val Asp Asn Cys Asp
    290                 295                 300
Gln Arg Trp Thr Ile His Leu Lys Gly Ala Lys Glu Leu Ile Arg Ala
305                 310                 315                 320
Arg Arg Gln Glu Gln Gly Ala Leu Ala Arg Ser Arg Lys Ala Gln Asp
                325                 330                 335
Pro Val Ser Ala Phe Ala Glu Leu Phe Phe Ala Phe Gln Asp Val Met
            340                 345                 350
Gly Arg Thr Ala Cys Gly Glu Glu Val Leu Phe Gly Thr Asp Tyr Trp
        355                 360                 365
Glu Asp Ser Glu Gln Lys Ile Asp Leu Trp Met Gly Cys Ser Pro Glu
    370                 375                 380
Leu Val Ser Ile Leu Ser Ser Ile Thr Glu Leu Ser Arg Thr Arg Arg
385                 390                 395                 400
Gln Leu Thr Ser Asp Ser Ala Arg Ala Ala Phe Ala Leu Arg Ala Ala
                405                 410                 415
Ser Leu Gly Arg Arg Leu Glu Thr Leu Val Gln Glu Ile Asp Asp Glu
```

```
            420                 425                 430
Glu Asp Glu Met Leu Lys Ser Ala Ala Glu Leu Lys Arg Leu Ala Ala
        435                 440                 445
Val Leu Tyr Leu His Cys Ala Leu Tyr Gly Ser Ser Pro Ser Thr Pro
    450                 455                 460
Leu Val Ile Gly Tyr Val Lys Arg Ile Leu Arg Leu Val Ser Glu Leu
465                 470                 475                 480
Leu Asp Ser Arg Ser Leu Val Ser Met Thr Trp Pro Val Phe Val Ala
                485                 490                 495
Ala Val Glu Leu Asp Pro Ala Arg Asp Glu Leu Trp Ser Asp Pro Thr
            500                 505                 510
Thr Lys Thr Val Val Tyr Gly Arg Ser Leu Val Leu Arg Ala Leu Ala
        515                 520                 525
Ala Met Ala Glu Ser Ser Val Ser Asn Val Ala Arg Thr Arg Ala Val
    530                 535                 540
Ile Ile Lys Val Trp Gln Ala Arg Asp Ser Asp Met Leu Lys Gly Ser
545                 550                 555                 560
Pro Val Asp Ala Ala Asp Asn His Ala Ser Cys Asn Asp Trp Glu Trp
                565                 570                 575
Tyr Val Ala Pro Val Ser Thr Ala Met Ser Leu Ala
            580                 585
```

Sequence Listing

<210> 35225
<211> 293
<212> PRT
<213> A.fumigatus

<400> 35225

```
Tyr Thr Asp Phe Gly Asp Ser Arg Thr Tyr Leu His Leu Ala Ala Gln
1               5                   10                  15
Trp Ser Gly Asn Asp Thr Pro Gln Ala Asn Lys His Lys Thr Asp Ser
            20                  25                  30
Val Thr Phe Tyr Tyr Arg Arg Phe Lys Leu His Asp Val Ser Ser Asn
        35                  40                  45
Leu Ile Ile Glu Arg Asp Leu Glu Ser Arg Arg Ala Phe Lys Ser Thr
    50                  55                  60
Ser Met Ser Asn Leu Thr Ser Ser Thr Pro Pro Ser Thr Leu Ser His
65                  70                  75                  80
Ser Leu Pro Ala Pro Pro Tyr Ala Ser Arg Leu Ser Glu Gln Leu Ser
                85                  90                  95
Gln Ser Lys Glu Gln Ser Glu Pro Ser Thr Asp Thr Asp Ser Thr Gly
            100                 105                 110
Asp Lys Ala Ser Cys Leu Gly Thr Pro Leu Arg Pro Ser Gln Lys Ser
        115                 120                 125
Arg Ser Leu Ser Asp Ala Pro Lys Pro Val Ser Ala Ser Pro Ser Ile
    130                 135                 140
Ser Gly Asp Thr Arg Pro Ser Ser Lys Asp Asp Asn Ser Ile Thr Ser
145                 150                 155                 160
Thr Pro Glu Thr Pro Arg Arg Ser Ser Met His Cys Pro Asn Leu Ser
                165                 170                 175
Leu Asn Leu Pro Ser Lys Leu Ala Gly Ser Thr Ser Val Pro Asn Arg
            180                 185                 190
Ala Pro Leu Ser Pro Lys Leu Asp Ser Ser His Ile Tyr Gly Ser Pro
        195                 200                 205
Gly Ser Val Leu Pro Arg Arg Ser Arg Gly Leu Asp Phe Ser Arg Ala
    210                 215                 220
```

```
Cys Thr Asn Leu His His Ser Ile Ile Ala Glu Ser Ser Leu Asp Ser
225                 230                 235                 240
Ser Pro Thr Val Gly Gly Arg Gly Val Thr Ile Pro Gln Arg Arg Gly
                245                 250                 255
Ser Pro Gly Ser Thr Ser Met Gly Pro Phe Leu Asn Ile Arg Pro Cys
            260                 265                 270
Arg Pro Asn Arg Asp Phe Glu Leu Arg Val Gln Arg Glu His Asp Gly
        275                 280                 285
Val Gly Tyr Lys Gln
    290
```

<210> 35226
<211> 158
<212> PRT
<213> A.fumigatus

<400> 35226

```
Leu Ser Ser Pro Ala Ser Ser Ser Ser Ala Ser Pro Gln Pro Gly Val
1               5                   10                  15
Leu Ser Ser Gly Pro Ser Ala Val Ser Cys Thr Pro Pro Ala Thr Val
            20                  25                  30
Pro Ser Ala Leu Val Ser Gln Pro Pro Leu Ile Gly Pro Gly Thr Ser
        35                  40                  45
Ser Ser Pro Ser Ser Leu Pro Ser Ser Pro Ala Pro Ser Thr Leu Leu
    50                  55                  60
Met Val Met Tyr Ser Pro Pro Ala Ala Ser Pro Pro Ser Leu Leu Ser
65                  70                  75                  80
Ser Ser Leu Ser Thr Arg Leu Arg Ala Ala Leu Ser Arg Arg Ser Thr
                85                  90                  95
Arg Cys Thr Ser Cys Thr Ser Ser Arg Gly Arg Ala Ala Ala Gly Cys
            100                 105                 110
Arg Pro Arg Val Ser Ser Glu Ile Cys Thr Pro Leu Pro Arg Arg Ile
        115                 120                 125
Arg Ser Arg Thr Val Arg Val Arg Ser Ser Thr Thr Ser Pro Leu Arg
    130                 135                 140
Ser Gly Ser Lys His Leu Val Ser Thr His Val Gln Tyr Phe
145                 150                 155
```

<210> 35227
<211> 256
<212> PRT
<213> A.fumigatus

<400> 35227

```
Ser Ala Pro Arg Gln Val Arg Gly Ala Met Val Ser Ala Phe Gln Leu
1               5                   10                  15
Phe Val Ala Phe Gly Ile Phe Ile Ser Tyr Leu Ile Asn Tyr Gly Thr
            20                  25                  30
Glu Thr Ile Glu Ser Thr Ala Ser Trp Arg Ile Thr Met Gly Ile Gly
        35                  40                  45
Phe Thr Trp Pro Leu Ile Leu Gly Leu Gly Thr Leu Phe Leu Pro Glu
    50                  55                  60
Ser Pro Arg Phe Ala Tyr Arg His Gly Arg Ile Asp Glu Ala Arg Lys
65                  70                  75                  80
Thr Met Ser Lys Leu Tyr Gly Val Gly Pro Asn His Arg Val Val Val
                85                  90                  95
```

```
Gln Glu Met Lys Glu Met Lys Asp Lys Leu Asp Glu Glu Lys Ala Ala
            100                 105                 110
Gly Val Ala Ala Trp His Glu Ile Phe Thr Gly Pro Arg Met Phe Tyr
        115                 120                 125
Arg Thr Val Leu Gly Ile Ala Leu Gln Ser Leu Gln Gln Leu Thr Gly
    130                 135                 140
Ala Asn Phe Ile Phe Tyr Tyr Gly Asn Ser Ile Phe Thr Ser Thr Gly
145                 150                 155                 160
Leu Asn Asn Ser Tyr Val Thr Gln Ile Ile Leu Gly Ala Val Asn Phe
                165                 170                 175
Gly Met Thr Leu Ala Gly Ser Val Arg Cys Arg Ala Leu Trp Pro Pro
            180                 185                 190
Glu His Ser Asp Gly Arg Cys Trp Leu Asp Val His Leu Phe His Asp
        195                 200                 205
Leu Gly Leu Ser Arg Pro Leu Cys Ser Arg Pro Gly Gly Ser Leu Pro
    210                 215                 220
His Ser Pro Gly Arg Cys Cys Tyr Asp Cys Leu His Leu Leu Leu His
225                 230                 235                 240
Arg Arg Leu Arg His Asn Leu Gly Ser Tyr Arg Leu Gly His Leu Arg
                245                 250                 255
```

Sequence Listing - 14405

<210> 35228
<211> 201
<212> PRT
<213> A.fumigatus

<400> 35228

```
Pro Leu Pro Gly Leu Tyr Val Val Glu His Phe Gly Arg Arg Asn Ile
1               5                   10                  15
Leu Met Val Gly Ala Gly Trp Met Phe Ile Cys Phe Met Ile Trp Ala
            20                  25                  30
Ser Val Gly His Phe Ala Leu Asp Leu Ala Asp Pro Ser His Thr Pro
        35                  40                  45
Gln Ala Gly Ala Ala Met Ile Val Phe Thr Cys Phe Phe Ile Val Gly
    50                  55                  60
Phe Ala Thr Thr Trp Gly Pro Ile Val Trp Ala Ile Cys Gly Glu Leu
65                  70                  75                  80
Tyr Pro Ala Arg Tyr Arg Ala Ile Cys Ile Gly Ile Ala Thr Ala Ser
                85                  90                  95
Asn Trp Thr Trp Asn Phe Leu Ile Ser Phe Phe Thr Pro Phe Ile Ser
            100                 105                 110
Ser Ser Ile Asp Phe Ala Tyr Gly Tyr Val Phe Ala Ala Cys Cys Phe
        115                 120                 125
Ala Ala Val Leu Val Val Phe Phe Phe Val Asn Glu Thr Gln Gly Arg
    130                 135                 140
Thr Leu Glu Glu Val Asp Thr Met Tyr Val Leu His Val Lys Pro Trp
145                 150                 155                 160
Gln Ser Ser Ser Trp Val Pro Pro Glu Gly Ile Ile Arg Asp Leu His
                165                 170                 175
Pro Ala Pro Glu Glu Asn Gln Lys Gln Asp Gly Gln Gly Gln Val Glu
            180                 185                 190
His Asn Glu Pro Thr Glu Ile Arg Glu
        195                 200
```

<210> 35229
<211> 298

<212> PRT
<213> A.fumigatus

<400> 35229
Arg Leu Ala Arg Ile His Val Ala Gln Pro Val Gly Gly Val Arg Glu
1 5 10 15
Ala Phe Ile Pro Glu Ala Val Lys Asn Leu Lys Lys Tyr Asp Lys Asn
20 25 30
Asp Pro Asn Arg Lys Lys Leu Glu Arg Asp Ile Glu Glu Glu Asn Gly
35 40 45
Gly Ala Gly Val Tyr Asn Ile Asp Leu Lys Lys Asn Tyr Thr Leu Ala
50 55 60
Asp Asp Glu Trp Lys His Asp Lys Ile Pro Glu Val Trp Asn Gly Lys
65 70 75 80
Asn Ile Tyr Asp Phe Val Asp Pro Asp Ile Glu Gln Lys Leu Ala Ala
85 90 95
Leu Glu Glu Glu Glu Glu Lys Leu Glu Ala Glu Gly Phe Tyr Asp Ser
100 105 110
Asp Glu Ser Val Glu Asp Ala Glu Asp Ala Asp Thr Arg Met Lys Ala
115 120 125
Asp Leu Ile Arg Glu Lys Arg Ala Leu Met Arg Asn Glu Ala Lys Leu
130 135 140
Arg Lys Ser Leu Lys Asn Arg Ala Ala Ile Pro Arg Ser Ala Lys Ala
145 150 155 160
Lys Lys Leu Ser Gln Met Glu Gln Ala Leu Asp Ala Ala Gly Tyr Asp
165 170 175
Val Asp Ala Ala Ala Ala Arg Ala Arg Ser Gln Ser Gln Ala Arg Gly
180 185 190
Arg Thr Thr Thr Arg Ser Glu Ile Asp Thr Gly Asp Ala Met Glu Ile
195 200 205
Asp Gly Leu Asp Pro Arg Gln Ala Ile Ala Arg Ala Lys Ser Arg Ala
210 215 220
Arg Ser Gln Ala Ala Thr Asn Arg Leu Val Asp Gly Val Thr Asp Thr
225 230 235 240
Thr Ala Arg Ser Lys Ala Glu Arg Leu Leu Lys Leu Gly Gln Lys Lys
245 250 255
Met Asn Arg Met Ala Arg Ala Gly Glu Ala Asp Arg His Thr Thr Ala
260 265 270
Ser Leu Pro Lys His Leu Val Arg Leu Thr Pro Pro Phe Leu Ser Ser
275 280 285
Phe Leu Leu Ser Val Ile Pro Arg Ile Tyr
290 295

<210> 35230
<211> 66
<212> PRT
<213> A.fumigatus

<400> 35230
Gln Arg Arg Lys Thr Met Gln Gln Met Ile Tyr Gly Tyr Lys Gly Asp
1 5 10 15
Thr Leu Ile Ile Ala Gln Tyr Glu Ile His Lys Val Phe Arg Lys Ser
20 25 30
Asn Cys Gln Asp Trp Lys Thr Arg Ala Lys Ser Lys Leu Ser Ser Gly
35 40 45
Ser Lys His Ala Ala Lys Val Asn Arg Lys Asp Glu Gly Thr Gly Thr

```
    50                  55                  60
Gln Leu
65

<210> 35231
<211> 133
<212> PRT
<213> A.fumigatus

<400> 35231
His Val Phe His Arg Leu Cys Ala Leu Thr Glu Ile Met Phe Leu Arg
1               5                  10                  15
Ser Val Ser Arg Ala Ala Ala Arg Ser Ser Val Met Pro Ala Thr Thr
            20                  25                  30
Thr Arg Ser Tyr Arg Thr Val Pro Ser Pro Ile Ala Cys Leu Asn Ala
        35                  40                  45
Arg Pro Gln Pro Gln Gln Lys Ser Ile Ala Ser Gln Gln Thr Arg Ala
    50                  55                  60
Ser Ser Glu His Ala Ile Ser Asn Pro Thr Leu Ala Gly Ile Glu Lys
65                  70                  75                  80
Arg Trp Glu Ala Met Pro Pro Gln Glu Gln Ala Glu Leu Trp Met Gln
                85                  90                  95
Leu Arg Asp Arg Met Lys Val Asp Trp His Gln Met Thr Leu Gln Glu
            100                 105                 110
Lys Lys Ala Gly Met Tyr Leu Ser Leu Ala Arg Met Pro Asp Ile Pro
        115                 120                 125
Gln Trp Pro Glu Phe
    130

<210> 35232
<211> 146
<212> PRT
<213> A.fumigatus

<400> 35232
Ser Glu Thr Leu Ala Tyr Trp Ile Ala Phe Gly Pro His Gly Pro Arg
1               5                  10                  15
Ala Val Pro Pro Lys Gly Glu Ser Met Arg Ile Phe Phe Lys Val Ala
            20                  25                  30
Gln Leu Asn Leu Val Ser Leu Ala Leu Phe Tyr Val Ile His Leu Phe
        35                  40                  45
Ala Lys Pro Lys Pro Lys Thr Met Thr Lys Glu Trp Gln Glu Ala Thr
    50                  55                  60
Asn Glu Tyr Ala Lys Val Arg Ile Tyr Ser Cys Tyr Gly Lys Pro Leu
65                  70                  75                  80
Arg Gly Ser Phe Leu Asn Ser Cys Val Val Lys Tyr Leu Leu Thr Trp
                85                  90                  95
Phe Tyr Asn Ser Val Arg Lys Ser Thr Leu Ser Thr Val Ser Ala Val
            100                 105                 110
Arg Ala Thr Arg Ala Arg Ala Ser Phe Arg Ala Leu Leu Pro Arg Ser
        115                 120                 125
Lys Leu Gly Asp Lys Tyr Leu Gly Gly Thr Gly Ala Ala Phe Arg His
    130                 135                 140
Ala Gly
145
```

<210> 35233
<211> 139
<212> PRT
<213> A.fumigatus

<400> 35233
Pro Asn Arg Leu Arg Ile His Thr Asp Gly Arg Leu Phe Cys Tyr Ser
1 5 10 15
Val Ser Ile Ala Asp Glu Cys Ile Thr Ala Phe Asn Asp Phe Arg Met
20 25 30
Ser Gly Asn Lys Ala Asn Lys Thr Lys Phe Ile Ile Phe Lys Ile Ala
35 40 45
Asp Asn Lys Lys Glu Val Val Ile Asp Glu Val Ser Gln Glu Glu Asp
50 55 60
Tyr Glu Val Phe Arg Ser Arg Leu Glu Ala Ala Lys Asp Ser Lys Gly
65 70 75 80
Asn Pro Ala Pro Arg Tyr Ala Val Tyr Asp Val Glu Tyr Asp Leu Gly
85 90 95
Gly Gly Glu Gly Lys Arg Tyr Asp Cys Leu Leu Arg Ser Glu Ile Arg
100 105 110
Trp Ala Ser Val Ala Asp Arg Ile Cys Arg Ser Lys Ile Val Phe Ile
115 120 125
Ser Trp Val Pro Ser Asp Thr Pro Thr Leu Val
130 135

<210> 35234
<211> 64
<212> PRT
<213> A.fumigatus

<400> 35234
Glu Thr Arg Ser Val Leu His Phe Leu Arg Lys Thr Asp Ser Asp Ile
1 5 10 15
Ser Val Ala Asp Tyr Gln His Arg Gln Glu Glu Leu Ser Cys Thr Ser
20 25 30
Ile Gly Gly Asn Leu Met His Gly Thr Cys Lys Ser Pro Cys Cys Arg
35 40 45
Pro Gln Ile Asn Ser Lys Met Glu Ser Leu Val Leu Cys Ser Phe Asp
50 55 60

<210> 35235
<211> 203
<212> PRT
<213> A.fumigatus

<400> 35235
Thr Ser Thr Pro Asp Lys Glu Gln His Tyr Ser Gly Gly Ala Asp Pro
1 5 10 15
Ala Asn Arg Glu Ala Val Trp Leu Ser Gly Tyr Ser Thr Ser Ala Thr
20 25 30
Leu Tyr Ser Trp Ile Ala Ser Thr Asn Lys Ile Arg Lys Leu Ala Ile
35 40 45
Ser Lys Asp Ser Ala Tyr Ile Thr Ser Lys Val Phe Pro Val Thr Ser
50 55 60
Ser His Ser Thr Ala Asn Ile Asp Arg Thr Thr Arg Ser Thr Met Ile
65 70 75 80

```
Pro Ile Leu Ser Leu Cys Ala Arg Ala Gln Ser Leu Ala Leu Lys Ser
                85                  90                  95
Leu Pro Ser Ser Val Thr Arg Asp Pro Arg Ala Val Pro Thr Pro Ser
            100                 105                 110
Leu Ser Ala Ala Arg Ala Thr Pro Pro Ala Pro Pro Leu Ser Arg Cys
        115                 120                 125
Ile Leu Ala Leu Leu Ser Pro Trp Thr Arg Ala Glu Ile Ser Pro Cys
    130                 135                 140
Gln Trp Tyr Pro Ala Cys Pro Glu Phe Ser Cys Pro Arg His Gly Ser
145                 150                 155                 160
Val Gly Val Ala Ser Ala Ala Thr Leu Ser Pro Pro Arg Arg Pro Pro
                165                 170                 175
Pro Val Pro Pro Arg Ala Gln Gln Arg Gln Glu Gln His Ala Gln Leu
            180                 185                 190
Pro Gln Pro Phe Arg Phe Ser Ser Arg Ser Ser
        195                 200
```

<210> 35236
<211> 224
<212> PRT
<213> A.fumigatus

<400> 35236

```
Asn Asn Pro Phe Tyr Tyr Asp Ser Asn Thr Leu Ala Met Arg Lys Gly
1               5                   10                  15
Ser Val Ala Gly Ser Gln Val Ile Thr Val Leu Ser Asn Lys Gly Ser
            20                  25                  30
Ser Gly Ser Ser Tyr Thr Leu Ser Leu Ser Gly Thr Gly Tyr Ser Ala
        35                  40                  45
Gly Ala Thr Leu Val Glu Met Tyr Thr Cys Thr Thr Leu Thr Val Asp
    50                  55                  60
Ser Ser Gly Asn Leu Ala Val Pro Met Val Ser Gly Leu Pro Arg Val
65                  70                  75                  80
Phe Val Pro Ser Ser Trp Val Ser Gly Ser Gly Leu Cys Gly Asp Ser
                85                  90                  95
Ile Ser Thr Thr Ala Thr Ala Pro Ser Ala Thr Thr Ser Ala Thr Ala
            100                 105                 110
Thr Arg Thr Ala Cys Ala Ala Ala Thr Ala Ile Pro Ile Leu Phe Glu
        115                 120                 125
Glu Leu Val Thr Thr Thr Tyr Gly Glu Ser Ile Tyr Leu Thr Gly Ser
    130                 135                 140
Ile Ser Gln Leu Gly Asn Trp Asp Thr Ser Ser Ala Ile Ala Leu Ser
145                 150                 155                 160
Ala Ser Lys Tyr Thr Ser Ser Asn Pro Glu Trp Tyr Val Thr Val Thr
                165                 170                 175
Leu Pro Val Gly Thr Ser Phe Glu Tyr Lys Phe Val Lys Lys Gly Ser
            180                 185                 190
Asp Gly Ser Ile Ala Trp Glu Ser Asp Pro Asn Arg Ser Tyr Thr Val
        195                 200                 205
Pro Thr Gly Cys Ala Gly Thr Thr Val Thr Val Ser Asp Thr Trp Arg
    210                 215                 220
```

<210> 35237
<211> 109
<212> PRT
<213> A.fumigatus

<400> 35237
Ser Gly His Ser Ser Gly Ile Arg Ala Gly Phe Thr Val Lys Val Val
1 5 10 15
Leu Val Trp Leu Glu Ile Leu Met Arg Ala Glu Tyr Glu Ile Gln Lys
20 25 30
Leu Ser Leu Cys Asp Ile Gln Ile Asp Ile Met Tyr Cys Leu Met Ala
35 40 45
Val Thr Ala Cys Leu Ser Ser Ser Asn Leu Arg Ser Ser Ser Met Pro
50 55 60
Phe Ile Cys Met Leu Pro Gly Gly Arg Ser Thr His Val Leu Asn Lys
65 70 75 80
Thr Leu Thr Ile His Ile Ser Phe Ile Asp Ile Leu Ile Gly His Tyr
85 90 95
Leu Leu Gly Tyr Gly Glu Gln Ala Cys Pro Arg Ile Arg
100 105

<210> 35238
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35238
Ala Gln Pro Ser Trp Ser Phe Arg Glu Ile Ile Leu Ala Ser Ser Leu
1 5 10 15
Gln Lys His Leu Leu Leu Ala Glu Asp Gln Ala Ile Thr Ala Leu Asp
20 25 30
Phe Ser Ala Ile His Lys Ala Val Thr Ser Ala Leu Leu Gly Cys Glu
35 40 45
Val Arg Tyr Gly Glu Pro Tyr Ala Gly Asp Met Val
50 55 60

<210> 35239
<211> 96
<212> PRT
<213> A.fumigatus

<400> 35239
Ala Val Ala Ile Asp Arg Asn Thr Gly Phe Gln Gly Cys Ile Asp Val
1 5 10 15
Leu Val Lys Asn Ile Tyr Val Leu Met Ile Arg Met Asn Tyr Leu Val
20 25 30
Ser Pro Lys Leu Phe Arg Thr Pro Ile Ser Thr Lys Cys Ile Gln Asn
35 40 45
Gln Val Tyr Asn Tyr Leu Ser Lys Arg Gly Leu Ala Ala Ser Ser Leu
50 55 60
Leu Gly Leu Tyr Tyr Ser Lys His Ile Thr Thr Thr Pro Pro Pro Ser
65 70 75 80
Glu Arg Phe Ile Pro Asn Tyr Thr Asn Pro Lys Val Ala Ile Lys Asp
85 90 95

<210> 35240
<211> 76
<212> PRT
<213> A.fumigatus

<400> 35240
Pro Gly Phe Gly Ala Pro Leu Cys Phe Pro His Arg Val Arg Glu Asp
1 5 10 15
Asp Trp Tyr Arg Gly Met Leu Ile Pro Lys Asp Ser Ile Ile Ile Ile
20 25 30
Pro Thr Trp Ala Leu His Arg Asp Glu Asn Val Tyr Pro Asp Pro Glu
35 40 45
Thr Tyr Asn Pro Asp Arg Phe Leu Gln His Pro Gly Leu Ala Ala Asp
50 55 60
Tyr Ala Gly Lys Gly Asp Pro Met Lys Arg Asp Glu
65 70 75

<210> 35241
<211> 71
<212> PRT
<213> A.fumigatus

<400> 35241
Pro Ser Val Asp Trp Ile Phe Leu Glu Gln Leu Leu Tyr Met Phe Ser
1 5 10 15
Ile Ser Asn Leu Leu Cys Ile Leu Ser Leu Leu Asp His Val Leu Leu
20 25 30
Phe Leu Phe Leu Ser Ser Phe Ile Ala Phe Asp Leu Asn Ala Pro Ile
35 40 45
Val Ser Ser Leu Val Glu Trp Lys Tyr Tyr Thr Leu Gln Pro Tyr Thr
50 55 60
Cys Tyr Ile Val Thr Ile Ser
65 70

<210> 35242
<211> 508
<212> PRT
<213> A.fumigatus

<400> 35242
Pro Leu Ile Ala Leu Ala Glu Val Ala Asp Phe Ser Pro Trp Met Gly
1 5 10 15
Asn His Pro Glu Asp Val Leu Asn Glu Gln Thr Ala Lys Gln Gly Tyr
20 25 30
Tyr Asp Arg Thr Gln Val Ser Gln Asn Glu Ser Asn Thr Ala Arg Pro
35 40 45
Ser Leu Tyr Ala Gln Leu Lys His Arg Ser Gly Leu Gln Ile Leu Ser
50 55 60
Ser Val Phe Ala Ala Ala Leu Glu Lys Arg Gln Gly His Asn Met Val
65 70 75 80
Thr Ala Pro Ser Thr Phe Lys Pro Pro Pro Arg Val Thr Leu Thr Asp
85 90 95
Asn Lys Arg Glu Ala Trp Leu Arg Asp Leu Ala Asn Pro Asn Val Pro
100 105 110
Leu Arg Lys Leu Ser Arg Thr Ile Pro His Gly Ile Arg Gly Arg Val
115 120 125
Leu Leu Asp Gln Cys Leu Thr Lys Trp Val Pro Val Gly Arg Ala Val
130 135 140
Trp Leu Ala Lys Cys Val Gly Ala Asn Glu Ile Arg Ala Phe Lys Arg
145 150 155 160
Lys Gly Thr Ser Gly Ala Leu Thr Ile Gly Leu Glu Ala Lys Trp Val

```
                165                 170                 175
Arg Asp Trp Thr Ala Asn Val Gln Gln Phe Leu Glu Gly Val Ile Thr
            180                 185                 190
Ser Cys Gly Val Ala Asp Trp Lys Met Lys Met Thr Tyr Ala Val Asn
        195                 200                 205
Leu Thr Ser Arg Leu Phe Phe Glu Gln Leu Leu Asp His Asp Gln Tyr
    210                 215                 220
Leu Glu Trp Phe Leu Thr Ser Leu Glu Ala Ala Pro Phe Asn Thr Leu
225                 230                 235                 240
Pro Val Trp Leu Leu Met Leu Gly Ile Tyr Trp Ser Asn Ile Leu Arg
                245                 250                 255
Tyr Arg Lys Arg Gly Arg Arg Leu Ala Glu Leu Leu Leu Asp Lys Leu
            260                 265                 270
Gln Leu Val Ile Lys Ser Asp Ser Ala Pro Ser Leu Arg Pro Leu Thr
        275                 280                 285
Asp Arg Leu Ser Leu His Ile Arg Lys Leu Thr Leu Glu His Thr Ser
    290                 295                 300
Ser Met Val Leu Pro Gln Ser Trp Glu Lys Tyr Lys Asp Leu Leu Ser
305                 310                 315                 320
Ser Cys Leu Asn Leu Asn Asp Asn Val His Arg Thr Val Phe Gln Asn
                325                 330                 335
Leu Ala Glu Arg Asn Ala Arg Val Gln Lys Pro Pro Lys Cys Glu Gly
            340                 345                 350
Thr Thr Gln Gln Pro Pro Gln Gln Arg Val Ile Gln Leu Phe Asp Ser
        355                 360                 365
Ile Cys Ser Ser His Asp Ile Thr Ser Val Ser Ala Ala Ser Leu Arg
    370                 375                 380
Ala Ile Asp Asp Lys Ala Ala Leu Val Leu Lys Leu Leu Glu Trp Ala
385                 390                 395                 400
Ala Thr Pro Phe Arg Tyr Gly Val Ser Arg Val Tyr Thr Gly Ala Arg
                405                 410                 415
Leu Leu Arg Lys Trp Lys Ile Ala Gly Val Asp Val Asp Thr Cys Ile
            420                 425                 430
Ile Ser Phe Leu Gly Glu Ser Gln Met Ser Asp Gln Leu Asn Met Asp
        435                 440                 445
Asn Val Tyr His Ile Val Ser Glu Leu Val Arg Ser Gln Thr Phe Ser
    450                 455                 460
Val Gly Lys Tyr Leu Gln Trp Leu Met Ala Lys Gly Val Ala Asp Phe
465                 470                 475                 480
Ser Arg Ser Ser Asp His Gln Pro Leu Ser Gly Asp Leu Ala Leu Leu
                485                 490                 495
Val Gln Leu Pro Val Ser Arg Leu Pro Glu His Val
            500                 505
```

<210> 35243
<211> 74
<212> PRT
<213> A.fumigatus

<400> 35243

```
Ser Ile Val Ile Thr Gln Phe Tyr Leu Ser Ser Gly Thr Trp Ile Ser
1               5                   10                  15
Val Ile Val Phe Pro Leu His Leu Tyr Gly Glu Ser Ala Cys Gln Leu
            20                  25                  30
Leu Ile Val Val Ser Ala Tyr Ser Ala Asn His Ser Thr Thr Gln His
        35                  40                  45
```

```
Phe Leu Lys Asn Ser Gly Tyr Gln Ala Ile Ala Leu Ala Pro Arg Phe
    50                  55                  60
Gln Val Pro Thr Arg Gln Trp Pro Asn Leu
65                  70

<210> 35244
<211> 94
<212> PRT
<213> A.fumigatus

<400> 35244
Ser Ile Ile Arg Val Ala Ser Gly Val Gly Glu Glu Arg Val Gly Trp
1               5                   10                  15
Trp Leu Val Pro Gly Asp Asp Phe Ala Gly Ser Cys Cys Ser Phe Phe
            20                  25                  30
Gly Gly Leu Leu Arg Val Thr Ser Cys Cys Arg Arg Met Leu Ile Leu
        35                  40                  45
Thr Val Ser Tyr Ile Asn Asn Ser Arg Lys Ile Ile Gly Val Ala Phe
    50                  55                  60
Ser Asp Ile Asn Asn Val Asp Asp Phe Tyr Phe Arg Ile Ala Ser Asp
65                  70                  75                  80
Ile Phe Lys Leu Ser Cys Leu Arg Ser Gly His Ile Gly Tyr
                85                  90

<210> 35245
<211> 562
<212> PRT
<213> A.fumigatus

<400> 35245
Lys Tyr Thr Met Ser Ala His Tyr Thr Thr Glu Pro Pro Pro Thr Ala
1               5                   10                  15
Ser Ala Asn Leu His Thr Thr Phe Gly Pro Ile His Ile Ala Leu Phe
            20                  25                  30
Ala Asn Gln Thr Pro Leu Thr Cys Lys Asn Phe Leu Gln His Cys Leu
        35                  40                  45
Asp Asn Tyr Tyr Ala Gly Thr Ile Phe His Arg Ile Val Pro Asp Phe
    50                  55                  60
Ile Val Gln Gly Gly Asp Pro Thr Gly Thr Gly Ser Gly Gly Thr Ser
65                  70                  75                  80
Ile Tyr Glu Tyr Pro Glu Phe Glu Tyr Asp Pro Glu Ala Arg Asp Pro
                85                  90                  95
Asn Glu Lys Val Val Leu Arg Asp Glu Leu His Ser Arg Leu Arg Phe
            100                 105                 110
Asn Arg Arg Gly Leu Val Gly Met Ala Lys Ser Glu Asp Gly Thr Tyr
        115                 120                 125
Gly Ser Gln Phe Phe Ile Thr Leu Ala Asn Ala Glu Arg Glu Leu Asn
    130                 135                 140
Gly Gln Cys Thr Leu Phe Gly Arg Val Glu Gly Asp Ser Ile Tyr Asn
145                 150                 155                 160
Val Leu Lys Ile Ala Glu Ala Glu Arg Val Glu Gly Thr Glu Arg Pro
                165                 170                 175
Val Tyr Pro Val Lys Val Val Ser Cys Glu Val Gly Glu Leu Gly Pro
            180                 185                 190
Phe Ala Gly Lys Leu Lys Arg Arg Glu Thr Ile Ala Thr Ala Pro Ala
        195                 200                 205
```

```
Ala Glu Glu Lys Pro Ala Ala Lys Lys Lys Lys Lys Ala Lys Gly Gly
    210                 215                 220
Lys Thr Leu Leu Ser Phe Gly Gly Asp Glu Gly Asp Glu Asp Val Leu
225                 230                 235                 240
Leu Arg Pro Ser Lys Pro Lys Phe Asn Pro Thr Leu Val Val Asp Ala
                245                 250                 255
Gly Ile Pro Pro Ala Asn Asp Ala Pro Lys Lys Thr Ser Pro Glu Ala
            260                 265                 270
Glu Gln Gln Thr Arg Lys Arg Leu Arg Ser Pro Ser Pro Arg Arg Ser
        275                 280                 285
Leu Ser Ala Glu Arg Lys His Arg Pro Lys Thr Pro Asp Pro Leu Thr
    290                 295                 300
Gln Leu Pro Leu Pro Asp Pro Glu Ser Pro Ala Arg Ser Pro Pro Gln
305                 310                 315                 320
Ser Pro Pro Ala Arg Gln Ser Ile Leu Ser Arg Thr Arg Ala Glu Ile
                325                 330                 335
Glu Asn Leu Lys Ala Ser Met Arg Arg Thr Val Ala Thr Gly Pro Ala
            340                 345                 350
Asp Thr Gly Arg Lys Lys Ser Ala Leu Glu Ala Met Ile Pro Glu Thr
        355                 360                 365
Ala Ile Arg Gly Arg Lys Arg Pro Pro Pro Gly Thr Val Asn Gly Ala
    370                 375                 380
Gly Arg Gly Ser Ser Thr Asn Gly Val Thr Gly Phe Ser Ser Ala Ala
385                 390                 395                 400
Glu Asp Glu Thr Leu Arg Met Phe Asn Ala Phe Lys Ala Lys Leu Glu
                405                 410                 415
Ser Ala Asp Ala Lys Ser Gly Pro His Gly Lys Thr Ser Ile Ser Ala
            420                 425                 430
Ser Asp Thr Thr Lys Tyr Thr Ser Gln Ala Lys Ser Asn Thr Glu Pro
        435                 440                 445
Glu Asp Glu Glu Ala Gln Leu Cys Asp Leu His Phe Ile Ala Asn Cys
    450                 455                 460
Gln Ser Cys Lys Ser Trp Asp Asp Thr Gly Thr Ala Glu Glu Ala Pro
465                 470                 475                 480
Asp Asp Asp Asp Arg Asp Trp Leu Thr His Glu Leu Arg Phe Gly Lys
                485                 490                 495
Asp Met Leu Gly Lys Asp Leu Gln Trp Lys Arg Glu His Pro Asp Asp
            500                 505                 510
Val Asp Ser Leu Val Val Ile Asp Pro Arg Glu Arg Glu Lys Glu Phe
        515                 520                 525
Val Gly Gly Lys Arg Arg Gly Leu Glu Arg Asp Arg Glu Arg Asp Arg
    530                 535                 540
Lys Arg Glu Arg Val Gly Asp Gln Glu Trp Asp Arg Arg Arg Arg Glu
545                 550                 555                 560
Lys Pro
```

<210> 35246
<211> 195
<212> PRT
<213> A.fumigatus

<400> 35246

```
Leu Ala Gly Ser Asp Ser Ile Tyr Phe Asn Trp Ala Arg Arg Phe Ile
1               5                   10                  15
Leu Ser Glu Ala Val Ala Ala Val Glu Leu Lys Pro Leu Ile Cys Val
```

```
            20                  25                  30
Arg Glu Leu Arg Ser Gln Lys Pro Thr Ser Ile Ser Leu Gln Thr Ser
        35                  40                  45
Ser Ile Tyr Pro Arg Asn Thr Pro Cys Gln Arg Ile Ile Pro Pro Ser
    50                  55                  60
Pro Arg Pro Pro His Pro Arg Thr Cys Thr Pro Pro Ser Ala Pro Ser
65                  70                  75                  80
Thr Ser Pro Ser Leu Pro Thr Lys Pro Leu Ser His Ala Arg Thr Ser
                85                  90                  95
Ser Asn Thr Ala Trp Thr Thr Thr Thr Pro Gly Gln Ser Ser Thr Ala
            100                 105                 110
Ser Ser Arg Thr Ser Ser Cys Arg Ala Ala Ile Pro Pro Ala Gln Ala
        115                 120                 125
Gln Ala Ala Pro Pro Ser Thr Ser Thr Pro Asn Ser Asn Thr Thr Arg
    130                 135                 140
Lys Arg Ala Thr Arg Thr Arg Arg Ser Cys Cys Gly Met Ser Cys Ile
145                 150                 155                 160
Ala Asp Cys Ala Ser Thr Ala Ala Gly Trp Trp Gly Trp Arg Arg Ala
                165                 170                 175
Arg Thr Gly His Thr Gly Ala Ser Ser Ser Ser Arg Trp Arg Thr Arg
            180                 185                 190
Ser Gly Ser
        195

<210> 35247
<211> 286
<212> PRT
<213> A.fumigatus

<400> 35247
Pro Gln Ala Asn Met Gln Leu Lys Ser Ser Ala Val Arg Leu Leu Phe
1               5                   10                  15
Cys Ser Leu Val Ser Ala Ala Pro Ser Gln Pro Ser Asn Ala Cys Lys
            20                  25                  30
Ala Pro Gly Gly Pro Pro Gln Ile Asn Ser Leu Ser Thr Leu Leu Val
        35                  40                  45
Leu Lys Tyr Asn Asn Leu Gly Ser Glu Asn Asn Gly Thr Ala Ala Val
    50                  55                  60
Leu Ile Tyr Asp Arg Val Asp Tyr Gly Gln Ala Gln Ala Gln Cys Ala
65                  70                  75                  80
Ala Ile Gly Ala Ser Leu Tyr Ser Leu Gln His Ala Thr Asp Thr Asn
                85                  90                  95
Arg Thr Glu Leu Gln His Gln Phe Asn Tyr Leu Ile Gln Asn Gly Asp
            100                 105                 110
Leu Gln Arg Ser Asp His Val Trp Val Ala Lys Leu Ser Ser Arg Asp
        115                 120                 125
Cys Ser Ala Tyr Ser Leu Ser Arg Lys Glu Thr Val Ser Ile Pro Cys
    130                 135                 140
His Leu Gln Leu Pro Ala Leu Cys Thr Ser Lys Val Pro Pro Thr Thr
145                 150                 155                 160
Asp Thr Asn Arg Ala Val Val Glu Ser Ser Lys Ile Ser Val Met Tyr
                165                 170                 175
Gln Gly Tyr Thr Leu Thr Gly Tyr Arg Asp Ala Arg Ser Phe Arg Phe
            180                 185                 190
Leu Gly Val Pro Phe Ala Asn Pro Pro Val Lys Asp Leu Arg Phe Ala
        195                 200                 205
```

```
Pro Pro Gln Pro Tyr Ser Gly Pro Lys Thr Leu Asp Ala Thr Lys Phe
    210                 215                 220
Ser Ala Ser Cys Val Gln Ser Val Ser Ser Phe Gly Thr Leu Gly Asn
225                 230                 235                 240
Ser Gly Gly Ile Ser Glu Asp Cys Leu Tyr Leu Asn Ile Tyr Thr Pro
                245                 250                 255
Val Leu Pro Ala His Gly Ala His Asn Ser Leu Arg Lys Pro Val Ala
            260                 265                 270
Val Tyr Phe Tyr Gly Ser Ala Phe Thr Lys Gly Val Arg Pro
        275                 280                 285
```

<210> 35248
<211> 614
<212> PRT
<213> A.fumigatus

<400> 35248

```
Gln Ser Ala Ala Gln Lys Met Gln Cys Tyr Thr Glu Leu Leu Ser Pro
1               5                   10                  15
Ser Gly Val Thr His Ala Leu Ala Ile Pro Phe Leu Ser Ala Ser Ala
            20                  25                  30
Glu Asn Leu Val Val Val Lys Thr Ser Val Leu Gln Ile Phe Ser Leu
        35                  40                  45
Leu Lys Val Gln His His Ser Arg Gly Glu Thr Ile Glu Thr Lys Ser
    50                  55                  60
Ala Arg Pro Asp Gln Val Glu Thr Thr Lys Leu Val Leu Glu Arg Glu
65                  70                  75                  80
Tyr Pro Leu Ser Gly Thr Val Val Asp Ile Cys Arg Val Lys Ile Leu
                85                  90                  95
Asn Ser Lys Ser Gly Gly Glu Ala Leu Leu Leu Ala Phe Arg Asn Ala
            100                 105                 110
Lys Leu Ser Leu Val Glu Trp Asp Pro Glu Arg His Gly Ile Ser Thr
        115                 120                 125
Ile Ser Ile His Tyr Tyr Glu Arg Asp Asp Leu Thr Arg Ser Pro Trp
    130                 135                 140
Val Pro Asp Leu Ser Ser Cys Gly Ser Ile Leu Ser Val Asp Pro Ser
145                 150                 155                 160
Ser Arg Cys Ala Val Phe Asn Phe Gly Ile Arg Asn Leu Ala Ile Leu
                165                 170                 175
Pro Phe His Gln Pro Gly Asp Asp Leu Ala Met Asp Asp Tyr Glu Phe
            180                 185                 190
His Leu His Gln Asp Asp Leu Asn Gln Val Ser Asp His Val Gly Asn
        195                 200                 205
Gly Leu Lys Ser Lys Asp Ser Thr Val Tyr Gln Thr Pro Tyr Ala Ser
    210                 215                 220
Ser Phe Val Leu Pro Leu Thr Ala Leu Asp Pro Ser Ile Leu His Pro
225                 230                 235                 240
Val Ser Leu Ala Phe Leu Tyr Glu Tyr Arg Glu Pro Thr Phe Gly Ile
                245                 250                 255
Leu Tyr Ser Gln Ile Ala Thr Ser His Ala Leu Leu Ser Glu Arg Lys
            260                 265                 270
Asp Ser Ile Phe Tyr Thr Val Phe Thr Leu Asp Leu Glu Gln Arg Ala
        275                 280                 285
Ser Thr Thr Leu Leu Ser Val Pro Lys Leu Pro Ser Asp Leu Phe Lys
    290                 295                 300
Val Val Ala Leu Pro Pro Pro Val Gly Gly Ala Leu Leu Ile Gly Ser
```

```
305                 310                 315                 320
Asn Glu Leu Val His Val Asp Gln Ala Gly Lys Thr Asn Ala Val Gly
                325                 330                 335
Val Asn Glu Phe Ala Arg Gln Val Ser Ala Phe Ser Met Val Asp Gln
            340                 345                 350
Ser Asp Leu Ala Leu Arg Leu Glu Gly Cys Val Val Glu His Ile Ser
        355                 360                 365
Asp Ser Thr Gly Asp Leu Leu Leu Val Leu Ser Ser Gly Asn Met Val
    370                 375                 380
Leu Val His Phe Gln Leu Asp Gly Arg Ser Val Ser Gly Ile Ser Leu
385                 390                 395                 400
Arg Pro Leu Pro Thr Gln Ala Gly Gly Thr Ile Met Lys Ser Ala Ala
                405                 410                 415
Ser Ser Ser Ala Phe Leu Gly Ser Gly Arg Val Phe Phe Gly Ser Glu
            420                 425                 430
Asp Ala Asp Ser Val Leu Leu Ser Trp Ser Ser Met Pro Asn Pro Lys
        435                 440                 445
Lys Ser Arg Pro Arg Met Ser Asn Val Ala Glu Asp Arg Glu Glu Ala
    450                 455                 460
Ser Asp Asp Ser Gln Ser Glu Glu Asp Ala Tyr Glu Asp Asp Leu Tyr
465                 470                 475                 480
Thr Ala Glu Pro Glu Thr Pro Ala Leu Gly Arg Arg Pro Ser Ala Glu
                485                 490                 495
Thr Thr Gly Val Gly Ala Tyr Ile Phe Gln Thr Leu Asp Arg Leu Pro
            500                 505                 510
Asn Ile Gly Pro Leu Arg Asp Ile Thr Leu Gly Lys Pro Ala Ser Thr
        515                 520                 525
Val Glu Asn Thr Gly Arg Leu Ile Lys Asn Ala Cys Ser Glu Leu Glu
    530                 535                 540
Leu Val Ala Ala Gln Gly Ser Gly Arg Asn Gly Gly Leu Val Leu Met
545                 550                 555                 560
Lys Arg Glu Ile Glu Pro Asp Val Thr Ala Ser Phe Asp Ala Gln Ser
                565                 570                 575
Val Gln Glu Val Trp Thr Ala Val Val Ala Leu Gly Ser Gly Ala Pro
            580                 585                 590
Leu Val Leu Asp Glu Gln Gln Ile Asn Gln Glu Tyr Arg Gln Tyr Val
        595                 600                 605
Ile Leu Ser Lys Pro Glu
    610
```

<210> 35249
<211> 74
<212> PRT
<213> A.fumigatus

<400> 35249

```
Thr Thr Leu Ala His Ala Trp Val Trp Leu Val Tyr Arg Thr Met Gly
1               5                   10                  15
Ile Ile Leu Arg Asn Tyr Ser Asn Ala Phe Arg Asp Ser Thr Leu Thr
            20                  25                  30
Ser Asn Ala Ala Gly Tyr Leu Gln Ser Thr Ile Ser Ser Arg Asp Phe
        35                  40                  45
Arg Ser Val Tyr Leu Asn Ser Leu Pro Asp Thr Arg Pro Asn Gln Val
    50                  55                  60
Thr Trp Pro Thr Glu Tyr Ile Arg Leu Arg
65                  70
```

<210> 35250
<211> 99
<212> PRT
<213> A.fumigatus

<400> 35250
Phe Leu Phe Gln Val Phe Ser Val Arg Ala Glu Phe Gly Phe Ser Ala
1 5 10 15
Gln His Gly Ile Gly Gly Cys Pro Lys Pro Ala Trp Met Gly Gly Pro
20 25 30
Arg Ser Ile Lys Thr Gly Val Met Ile His Lys Gly Ile Ser Glu Val
35 40 45
Asn Met Gly Lys Gln Ile Leu Val Gly Glu Ile Pro Phe Phe Lys Gly
50 55 60
Val Asp Gly Asp Leu His Ala Leu Glu Gln Lys Val His Glu Ile Glu
65 70 75 80
Trp Gly Val Val Ile Glu Gly Val Gln Leu Ala Ile Asn Glu Ile Arg
85 90 95
Ala Arg Gln

<210> 35251
<211> 240
<212> PRT
<213> A.fumigatus

<400> 35251
Arg Val Cys Asp Pro Ser Cys Arg Tyr Cys Ser Ala Phe Pro Asn Ala
1 5 10 15
Gly Glu Ser Pro Glu Lys Glu Arg Trp Val Ile Asp Pro Gly Val Leu
20 25 30
Phe Cys Phe Lys Val Ser Ser Gly Ala Phe Ala Glu Lys Gln Ser Asp
35 40 45
Pro Ser Pro Ala Asp Asp Gly Pro His Glu Glu Glu Asn Ser Pro Leu
50 55 60
Leu Arg Pro Asp Asn Asp Thr Ser Thr Ala Ser Arg Pro Val Ala Ala
65 70 75 80
Pro Glu Thr Val Asp Glu Lys Thr Gly Leu Glu Tyr Tyr Val Tyr Met
85 90 95
Phe Arg His Arg Arg Phe Val Thr Gly Val Leu Gly Tyr Phe Val Phe
100 105 110
Ala Ile Leu Ile Ser Ser Phe Asp Thr Thr Leu Pro Leu His Val Arg
115 120 125
Asp Ala Phe Asp Trp Asp Ser Met Pro Ala Gly Leu Met Phe Leu Ala
130 135 140
Leu Gln Gly Pro Gly Ile Ala Leu Ser Pro Leu Val Gly Trp Leu Lys
145 150 155 160
Asp Arg Val Gly Thr Gln Ile Pro Thr Thr Ile Gly Phe Leu Gly Leu
165 170 175
Ala Pro Leu Met Trp Leu Leu Gly Val Pro Gly Asp Glu Arg Phe Pro
180 185 190
Trp Ala Asn Gln Gly Gln Arg Gly Pro Ile Ile Tyr Ala Met Asp Val
195 200 205
Thr Ala Val Gly Ile Val Ser Val Leu Leu Asn Gly Val Gly Val Leu
210 215 220

```
Glu Ala Thr Gly Lys Ser Val Thr His Arg Ser Ala Val Cys Asn Ser
225                 230                 235                 240

<210> 35252
<211> 214
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (211)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35252
Ser Tyr Leu His Thr Met Pro Pro Arg Arg Ile Leu Ile Val Gly Ala
1               5                  10                  15
Gly Ile Ala Gly Ile Ala Ser Ala Leu Ala Ile Ser Lys Glu Leu Thr
            20                  25                  30
Pro Tyr Val Pro Asp Leu Lys Ile Thr Val Phe Glu Arg His Asp Val
        35                  40                  45
Leu Ser Thr Ser Gly Gly Ala Ile Asn Leu Thr Pro Val Ala Gln Arg
    50                  55                  60
His Leu Asp Gln Leu Gly Val Leu Ala Glu Leu Asp Arg Leu Gly Asp
65                  70                  75                  80
Glu Gly Gly Ala Asp Val Asp Ala Ile Gln Phe Phe Ser Cys Arg Ser
                85                  90                  95
Gly Lys Ser Leu Gly Ser Ile Asp Phe Thr Arg Asp Gln Gly Gln Gly
            100                 105                 110
Phe Ser Gly Tyr Lys Ala Arg Arg Val Met Arg Ile Ile Leu Ser Val
        115                 120                 125
Ala Met Leu Ala Val Val Glu Arg Thr Arg Asn Ile Glu Ile Val Phe
    130                 135                 140
Gly Lys Lys Leu Ala Arg Gly Arg Arg Asp Arg Arg Arg Ser His Pro
145                 150                 155                 160
Val Leu Ser Gly Arg His His Arg Arg Trp Glu Ile Ser Ser Trp Ala
                165                 170                 175
Ala Met Ala Cys Thr Pro Pro His Ala Arg Gly Gly Ile Ala Thr Arg
            180                 185                 190
Leu Ser Val Pro Ser Thr Arg Gly Phe Ser Phe Leu Ala Gly Ala Phe
        195                 200                 205
Leu Lys Xaa Lys Asp Ala
    210

<210> 35253
<211> 98
<212> PRT
<213> A.fumigatus

<400> 35253
Leu Arg Phe Ser Leu Ala Ile Val Tyr Lys Trp Trp Gln Asn Leu Gln
1               5                  10                  15
Leu Ile Ala Cys Phe Leu Cys Arg Ala Asp Phe Leu Pro Gly Gln Tyr
            20                  25                  30
Phe Asp Ile Arg Leu Glu Val His Ser Pro Ile Asn Gly Ser Glu Ala
        35                  40                  45
Arg Ala Gly Val Pro Asp Pro Asp Phe Lys Phe Thr Ile Ala Arg Lys
```

```
    50                  55                  60
Gly Arg Lys Pro Val Pro Val Thr Lys Tyr Phe Asp Ile Glu Glu Pro
65                  70                  75                  80
Glu Leu Glu Arg Trp Asn Phe Thr Trp Tyr Glu Gly Met Val Leu Thr
                85                  90                  95
Ser Cys
```

<210> 35254
<211> 364
<212> PRT
<213> A.fumigatus

<400> 35254

```
Leu Asp Leu Phe Ala Glu Asp Ala Asn Ala Pro Ser Leu Val Asn Val
1               5                  10                  15
Thr Ser Lys Ala Tyr Arg Arg Val Ala Leu Tyr Glu Pro Gly Glu Tyr
            20                  25                  30
Glu Ala Thr Leu Thr Tyr Tyr Gly Asn Gln Thr Thr Thr Ala Asn Trp
        35                  40                  45
Leu Val Arg Asp Leu Pro Lys Lys Arg Arg Ala Lys Asn Val Ile Leu
    50                  55                  60
Phe Val Gly Asp Gly Met Thr Thr Asn Met Ile Thr Ala Ala Arg Leu
65                  70                  75                  80
Ile Ala His Arg Ser Ile Asn Gly Lys Tyr Met Thr Lys Met Gln Leu
                85                  90                  95
Asp Lys Phe Pro Val Leu Gly His Gln Met Thr His Ser Met Asp Ser
            100                 105                 110
Phe Ile Thr Asp Ser Ala Asn Ser Ala Thr Ala Leu Tyr Ala Gly His
        115                 120                 125
Lys Thr Thr Val Asn Ala Leu Asn Val Tyr Val Asp Ser Ser Glu Asp
    130                 135                 140
Pro Phe Asp Asp Pro Lys Phe Glu Asn Ile Ala Glu Ile Ile Arg Arg
145                 150                 155                 160
Arg Tyr Pro Gly Ala Gly Ile Gly Ile Val Ser Thr Ala Phe Leu Ala
                165                 170                 175
Asp Ala Thr Pro Ala Ala Leu Ala Ala His Thr Ser Asp Arg Gly Glu
            180                 185                 190
Tyr Glu His Val Ile Asp Ala Tyr Tyr Glu Gly Leu Thr Lys Tyr Glu
        195                 200                 205
Trp Thr Ser Leu Glu Gly Pro Asp Val Ile Phe Gly Ala Gly Ala Glu
    210                 215                 220
Asn Phe Leu Lys Ser Lys Asp Ala Ser Arg Asp Tyr Tyr Gly Leu Phe
225                 230                 235                 240
Ala Glu Lys Gly Tyr Ser Ile Ser Trp Asn Asn Thr Ala Leu His Ala
                245                 250                 255
Ala Pro Asn Asp Thr Lys Ala Leu Gly Val Phe Gln Ile Ser Asn Leu
            260                 265                 270
Ala Thr Trp Leu Asp Arg Asn Val Tyr Gln Ser Asn Leu Gln Asn Lys
        275                 280                 285
Thr Asn Tyr Pro Asp Gly Ser Gly Arg Asp Ala Glu Asp Leu Pro Gly
    290                 295                 300
Leu Lys Asp Met Thr Leu Lys Ala Ile Asp Val Leu Asn Ala Arg His
305                 310                 315                 320
Arg Lys Asp Gly Trp Phe Leu Met Ser Glu Ala Ala Ser Ile Asp Lys
                325                 330                 335
```

```
Gln Met His Thr Leu Asp Tyr Asp Arg Ser Leu Gly Glu Leu Leu Glu
            340                 345                 350
Leu Asp Asp Thr Val Arg Ala Thr Ile Asp Lys Leu
        355                 360
```

<210> 35255
<211> 106
<212> PRT
<213> A.fumigatus

<400> 35255

```
Asn Asn Leu Gly Phe Phe Arg Ile Ile Asp Leu Cys Phe Ser Ser Gly
1               5                   10                  15
Asp Ser Ile Pro Phe Leu Thr Met Asp Gln Gln Pro Pro Val Gln Pro
            20                  25                  30
Gln Gln Arg Pro Pro Pro Ser Leu Thr Asn Pro Arg Phe Thr Leu Glu
        35                  40                  45
Leu Glu Phe Val Ser Ser Leu Ala Asn Pro Tyr Tyr Leu Ser His Leu
    50                  55                  60
Ala Val Thr Tyr Pro Asn Leu Leu Gly Ile Ser Lys Ser Ser Asp Asp
65                  70                  75                  80
Ser Asn Thr Ser Thr Glu Gly Pro Asp Pro Glu Ala Gln Ala Phe Ala
                85                  90                  95
Gly Leu His His Gly Ala Gly Ser Ile Arg
            100                 105
```

<210> 35256
<211> 333
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (255)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35256

```
Tyr Ala Tyr Arg Gly Ser Phe Asp Pro Arg Gly Glu Asp Glu Ser Met
1               5                   10                  15
Trp Asn Val Gln Leu Gln Thr Leu Trp Lys Thr Val Glu Gly Ser Gln
            20                  25                  30
Lys Phe Leu Pro Val Ala Pro Gly Arg His Ile Val Met Glu Thr Gly
        35                  40                  45
Gln Trp Val Glu Leu Asp Ser Ala Thr Trp Lys Pro Arg Arg Pro Val
    50                  55                  60
His Ile Val Leu Leu Asn Asp His Leu Leu Val Ala Ala Lys Lys Arg
65                  70                  75                  80
Lys Arg Val Asp Ala Ser Asn His Arg Gly Pro Val Pro Thr Lys Leu
                85                  90                  95
Val Ala Glu Glu Cys Trp Pro Leu Gln Asp Val Asp Met Ile Asp Leu
            100                 105                 110
Gly Ala Asn Met Gly Thr Gly Ala Ala Arg Glu Glu Ala Glu Glu Arg
        115                 120                 125
Gly Ile Ala Asn Ala Ile Asn Val Arg Val Gly Ser Lys Thr Phe Thr
    130                 135                 140
Tyr Arg His Asp Lys Arg Asp Ser Ser Asp Lys Gly Glu Leu Leu Ala
```

```
145                 150                 155                 160
Thr Phe Arg Lys Ala Val Glu Asp Leu Arg Arg Thr Leu Arg Ser Glu
                165                 170                 175
Ser Asp Thr Ala Ile Lys Pro Thr Asp Gly Phe Gly Tyr Ala Gly Val
            180                 185                 190
Lys His Ser Val Ser Gln Lys Leu Asp Leu Asn Ala Ser Asp Ala Ser
        195                 200                 205
Arg Asp Lys Pro Glu Val Arg Ile Asp Val Asp Gly Lys Gln Gln Asn
    210                 215                 220
Leu Arg Trp Val Asp Gly Gln Val Asp Glu Leu Asp Ile Asp Ile Ala
225                 230                 235                 240
Leu Gln Arg Phe Glu Glu Ala Val Ser Gly Ile Glu Arg Leu Xaa Lys
                245                 250                 255
Leu Ala Arg Gly Leu Lys Gly Asn Ser Tyr Ala Gln Gln Ile Ile Asn
            260                 265                 270
Ser Lys Val Asp Glu Arg Ala Ala Arg Leu Ala Ser Val Leu Ser Arg
        275                 280                 285
Ala Leu Ala Asp Thr His Ser Phe Leu Asn Ala Thr Lys Thr Asn Val
    290                 295                 300
Thr Trp Leu Thr Arg Leu Gly Phe Glu Asp Gln Ala Arg Glu Ala Tyr
305                 310                 315                 320
Leu Lys Ala Arg Ser Asp Val Ile Ser Lys Arg Val Arg
                325                 330
```

<210> 35257
<211> 63
<212> PRT
<213> A.fumigatus

<400> 35257

```
Asp Ala Val Phe His Pro Arg Arg Glu Asp Leu Arg Phe Val Gly Asn
1               5                   10                  15
Ala Ile Gln Tyr Ile Gly Phe Ile Gly Glu Gly Ser Glu Ala Ile Gly
            20                  25                  30
Gly Thr Arg Gly Ala Tyr Leu Asn Ala Arg Tyr Glu Ser Pro Gly Lys
        35                  40                  45
Lys Pro Thr Gly Arg Phe Ala Ser Ile Phe Gly Ala Lys Pro Leu
    50                  55                  60
```

<210> 35258
<211> 237
<212> PRT
<213> A.fumigatus

<400> 35258

```
Thr Tyr Gly Lys Gly Val Asp Ile Ser Leu Val Gly Leu Asp Pro Ala
1               5                   10                  15
Thr Val Arg Ser Ile Ser Gly Leu Leu Glu Arg Leu Ala Val Lys Ala
            20                  25                  30
Ser Pro Arg Leu Ile Leu Ala Leu Arg Pro Gln Asp Asn Leu Pro Asp
        35                  40                  45
Trp Ile Thr His Ile Leu Leu Leu Gly Asn Ser Asn Gln Ile Leu Phe
    50                  55                  60
Gln Gly Thr Arg Ser Glu Ala Asp Lys Val Met His Val Trp Lys His
65                  70                  75                  80
Leu Pro Lys Lys Ala Lys Arg Phe Ser Thr Leu Ser Glu Glu Glu His
```

```
                85                  90                  95
Lys Ile Leu Asp Asn Ala Arg Lys Asp Met Glu Ser Gly Ile Leu Asp
            100                 105                 110
Gln Gln Leu Leu Trp Asp Leu Asn Leu Ile Lys Thr Ser Ser Gly Arg
        115                 120                 125
Ser Thr Ala Val Ala Thr His Gly Gly Glu Pro Leu Ile Glu Met Glu
    130                 135                 140
Gly Val Arg Val Gln Tyr Gly Asp Lys Val Val Leu Gly Gly Trp Lys
145                 150                 155                 160
Gln Thr Val Ser Asp Gln Lys Lys Glu Gly Leu His Trp Thr Val Arg
                165                 170                 175
Arg Gly Gln Arg Trp Val Val Leu Gly Ala Asn Gly Ser Gly Lys Thr
            180                 185                 190
Thr Leu Leu Ser Leu Ile Thr Ser Asp His Pro Gln Thr Tyr Ala Leu
        195                 200                 205
Pro Ile Lys Val Phe Gly Arg Ser Arg Leu Pro Glu Ala Gly Lys Pro
    210                 215                 220
Gly Ile Ser Ile Phe Glu Leu Gln Ser Arg Leu Gly His
225                 230                 235
```

<210> 35259
<211> 284
<212> PRT
<213> A.fumigatus

<400> 35259

```
Ser His Glu Ile His Ala Phe Phe Pro Arg Gln Leu Ser Ile Arg Gln
1               5                   10                  15
Ala Ile Glu Ser Ala Phe Ala Glu Thr Phe Leu Ala Lys Pro Thr Leu
            20                  25                  30
Asp His Glu Arg Asp Leu Asp Val Ser Ala Ala Leu Arg Phe Phe Lys
        35                  40                  45
Ala Glu Leu Asp Pro Asp Ala Ala Val Thr Thr Gln Gln Glu Pro Pro
    50                  55                  60
Ala Val Asn Phe Arg Ala Met Asp Leu Phe Pro Lys Ile Glu Gln Leu
65                  70                  75                  80
Lys Phe Thr Lys Lys Asn Arg Asp Phe Val Pro Thr Asp Tyr Asp Val
                85                  90                  95
Glu Tyr Ala Asp Ser Val Arg Phe Gly Glu Leu Ser Thr Ala Gln Gln
            100                 105                 110
Arg Leu Val Leu Phe Ile Arg Ala Leu Ile His Lys Pro Asp Ile Ile
        115                 120                 125
Ile Leu Asp Glu Pro Phe Ser Asn Met Ser Ala Ser Leu Arg Asp Lys
    130                 135                 140
Cys Ile His Phe Leu Glu Ala Gly Glu Met Arg Gly Asn Leu Lys Ser
145                 150                 155                 160
Pro Ile Thr Lys Arg Ala Ala Asn Pro Glu Ala Thr Trp Leu Lys Gly
                165                 170                 175
Ser Asn Val Asn Pro Ser Glu Val Arg His Arg Gly Leu Ser Lys Asp
            180                 185                 190
Gln Ala Leu Ile Met Ile Ser His Val Lys Glu Glu Ile Pro Asp Ser
        195                 200                 205
Val Arg Tyr Tyr Met Arg Leu Pro Ser Asp Pro Gly Asp Gly Gly Glu
    210                 215                 220
Pro Leu Asp Phe Arg Phe Gly Val Leu Gln Arg Gly Ser Val Met Ser
225                 230                 235                 240
```

```
Asp Pro Lys Ile Trp Asp Leu Ala Trp Ser Pro Pro Ser Ala Phe Asp
                245                 250                 255
Lys Ala Ala Lys Gln Val Pro Gln Lys Leu Ser Ser Asp Lys Asn Arg
            260                 265                 270
Arg His Asp Glu Asn Ile Tyr Glu Trp Tyr Thr Ile
        275                 280
```

<210> 35260
<211> 102
<212> PRT
<213> A.fumigatus

<400> 35260

```
Glu Ser Arg Glu Glu Thr Asp Trp Thr Val Arg Gln Tyr Leu Arg Gly
1               5                   10                  15
Gln Thr Ser Leu Asn Pro Leu Glu Gly Glu Glu Gly Gly Thr Val Arg
            20                  25                  30
Asn Glu Glu Leu Leu Thr Gln Val Ile Thr Asp Leu Arg Leu Gly Glu
        35                  40                  45
Leu Leu Asp Met Pro Val Ala Asn Leu Ser Asn Gly Gln Thr Arg Arg
    50                  55                  60
Ala Arg Ile Ala Lys Ala Leu Leu Ser Glu Pro Glu Leu Leu Leu Leu
65                  70                  75                  80
Asp Glu Pro Phe Ser Lys Ser Leu Ser Thr Ala Ser Glu His Met Gly
                85                  90                  95
Arg Ala Leu Thr Ser Pro
            100
```

<210> 35261
<211> 172
<212> PRT
<213> A.fumigatus

<400> 35261

```
Leu Glu Leu Pro Ile Leu Leu Ser Lys Ser Met Val Pro Cys Ser Ile
1               5                   10                  15
Cys Gln Pro Arg Asn Glu Arg Leu Arg Pro Ser His Leu Trp Leu Leu
            20                  25                  30
Ala Thr Ile Ile Met Gln Ile Gln Thr Leu Gly Asn Lys Val Asn Glu
        35                  40                  45
Ile Tyr Thr Asp Phe Gly Gln Arg Val Gly Met Leu Val Tyr Asn Ile
    50                  55                  60
Asp Ala Phe Leu Pro Asp Ser Arg Ala Ser Leu Tyr Ala Ala Glu Leu
65                  70                  75                  80
Pro Gly Glu Lys Gly Ile Glu Ser Ile Gln Met Val Phe Gly Pro Leu
                85                  90                  95
Asp Ala Gly Thr Cys Gln Asn Ser Arg Glu Ala Leu Leu Val Asp Val
            100                 105                 110
Asp Cys Val Phe Asp Gln Ser Glu Ile Asp Val Gly Asn Leu Glu Tyr
        115                 120                 125
Ile Glu Gly Lys Ile Ala Leu Glu Asp Thr Cys Pro Ile Ser Val Ser
    130                 135                 140
Val Ser Pro Lys Phe Lys Leu Gly Val Leu Ala Met Lys Thr Tyr Arg
145                 150                 155                 160
Thr Arg Leu Glu Ile Thr Ser Asp Arg Ala Phe Lys
                165                 170
```

<210> 35262
<211> 137
<212> PRT
<213> A.fumigatus

<400> 35262
Leu Thr Arg His Leu Leu Gln Val Glu Thr Gly Leu Pro Ala Gly Trp
1 5 10 15
Glu Val Arg His Ser Asn Ser Lys Asn Leu Pro Tyr Tyr Phe Asn Pro
20 25 30
Ser Thr Lys Glu Ser Arg Trp Glu Pro Pro Ser Gly Thr Asp Thr Glu
35 40 45
Leu Leu Lys Val Tyr Met Ala Asn Tyr His Ser Ala Pro Ala Gly Arg
50 55 60
Pro Asp Gly Thr Ala Gln Gly Glu Gly Lys Ile Arg Cys Ser His Leu
65 70 75 80
Leu Ile Lys His Arg Asp Ser Arg Arg Pro Ser Ser Trp Arg Glu Ala
85 90 95
Glu Ile Thr Arg Ser Lys Glu Glu Ala Ile Glu Ile Leu Arg Gly His
100 105 110
Glu Gln Arg Ile Arg Ser Gly Glu Val Ser Leu Gly Asp Ile Ala Val
115 120 125
Ser Glu Ser Asp Cys Ser Ser Ala Arg
130 135

<210> 35263
<211> 97
<212> PRT
<213> A.fumigatus

<400> 35263
Ile Ser Ser Asn Leu Leu Tyr Pro Lys Glu Asp Arg Val Asn Asn Arg
1 5 10 15
Leu Met Phe Thr Cys Arg Thr Cys His Val Gly Glu Pro Ala Thr Ser
20 25 30
Tyr Cys Val Tyr Gln Asn Lys Leu Asn Ser Gln Val Gly Asp Thr Ala
35 40 45
Gly Val Thr Gln Asp Val Gly Ser Asp Pro Thr Val Cys Leu Pro Gly
50 55 60
Phe Cys Ala His Cys Gly Glu Glu Ile Thr Cys Phe Thr Cys Gly Gln
65 70 75 80
Leu Pro Glu Asp Thr Leu Ser Asp Trp Asp Ser Glu Asp Ser Met Asn
85 90 95
Ile

<210> 35264
<211> 72
<212> PRT
<213> A.fumigatus

<400> 35264
Tyr Val Val Tyr Ile Leu Thr Met Lys Met Gln Gly Thr Met Phe Val
1 5 10 15
Tyr Pro Ser Glu Gly Ser Ala Ser Ser Met Met Leu Met Arg Asn Arg

```
            20                  25                  30
Phe Ile Glu Glu Asn Asn Leu Tyr Lys Ile Gln Gln Lys Gln Ile Gln
        35                  40                  45
Glu Asn Gln Arg Met Pro Pro Gly Met Ala Ser Gln Asp Leu Met Ala
    50                  55                  60
Tyr Trp Gly Thr Val Thr Ala Pro
65                  70
```

<210> 35265
<211> 67
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35265
Asn Ala Asn Ser Gly Tyr Lys Phe Glu Thr Leu Cys Leu Xaa Gln Gln
1 5 10 15
Pro Trp Asp Pro Thr Pro Arg Ala Glu Ile Glu Ser Arg Glu Asp Leu
 20 25 30
Val Val Asn Asn Asn Ala Gln Tyr Cys Ser Val Val Arg Thr Gly Ile
 35 40 45
Gly Ser Thr Arg Leu Ile Ile Gly Gly Glu Val Asp Ala Gly Met Leu
 50 55 60
Ser Ser Leu
65

<210> 35266
<211> 133
<212> PRT
<213> A.fumigatus

<400> 35266
His Pro Ala Asn Trp Pro Leu Leu Trp Leu Lys Tyr His Asn Pro Thr
1 5 10 15
Ser Lys Gly Met Ser Phe Ser Val Leu Ile Arg Asp Lys Asn Leu Arg
 20 25 30
Asn Asn Pro Lys Gln Glu Ile Thr Cys Phe Ser Tyr Asp Ala Glu His
 35 40 45
Lys Phe His Leu Gly Asp Ser Ser Leu Arg Tyr Tyr Tyr Thr Pro Arg
 50 55 60
Leu Pro Ala Asp Leu Asn Arg Gly Phe Asp Thr Phe Gln Lys Leu Asp
65 70 75 80
Asp Thr Ala Asp Glu His Leu Asp Ala Leu Leu Glu Thr Ile Met Ala
 85 90 95
Leu Glu Lys Glu Thr Gly Lys Arg Cys Glu Ala Asp Ile Ile Thr Trp
 100 105 110
Arg Gly Met Met Thr Lys Val Ser Ser Ser Arg Leu Leu Phe Tyr Pro
 115 120 125
Glu Gly Gly Asp Asp
 130

<210> 35267

<211> 204
<212> PRT
<213> A.fumigatus

<400> 35267
Leu Leu Val Val Lys Leu Met Leu Val Cys Ser Pro His Ser Ser Arg
1 5 10 15
Met Leu Leu Ala Ile Leu Arg Gly Arg Thr Lys Ala Cys Ala Asp Ala
20 25 30
Gly Val Leu Val Trp Asp Cys Lys Pro Asp Arg Lys Glu Asp Pro Ile
35 40 45
Asn Trp Val Glu Leu Lys Thr Ser Ala Glu Ile Arg Asn Asp Arg Asp
50 55 60
Met Ile Lys Tyr Glu Arg Lys Leu Leu Lys Phe Trp Ala Gln Ser Phe
65 70 75 80
Leu Leu Gly Val Pro Lys Ile Ile Val Gly Phe Arg Asp Asn His Gly
85 90 95
Ile Val His Arg Leu Glu Glu Leu Glu Thr Ala Ser Ile Pro Asn Lys
100 105 110
Val Lys Lys Leu Gly Arg Gly Thr Trp Asp Gly Asn Ile Cys Ile Asn
115 120 125
Phe Ala Ala Ala Phe Leu Glu Cys Lys Ser Glu Lys Asn Glu Leu Glu
130 135 140
Cys Pro Phe Tyr Val Pro Ser Ala Asn Gly Phe Lys Gly Leu Lys Ser
145 150 155 160
Thr Ile Lys Glu Gly Gly Thr Trp Arg Ile Arg Lys Leu Glu Lys Ser
165 170 175
Ser Leu Ile Gln Val Phe Lys Ile Glu Glu Thr Gly Thr Gly Asp Ile
180 185 190
Ile Ser Arg Ser Phe Leu Asp Trp Arg Ser Arg Ser
195 200

<210> 35268
<211> 77
<212> PRT
<213> A.fumigatus

<400> 35268
Arg Asp Ile Glu Gly Ala Phe Glu Phe Val Phe Phe Arg Leu Thr Phe
1 5 10 15
Glu Glu Cys Ser Arg Glu Val Asp Ala Asn Val Ala Ile Pro Arg Thr
20 25 30
Pro Ser Lys Leu Leu Tyr Leu Ile Gly Tyr Thr Gly Arg Phe Lys Leu
35 40 45
Phe Gln Thr Met Asp Tyr Pro Met Ile Val Ala Lys Thr Asn Asn Asn
50 55 60
Leu Gly Asn Ala Lys Glu Glu Arg Leu Arg Pro Glu Leu
65 70 75

<210> 35269
<211> 152
<212> PRT
<213> A.fumigatus

<400> 35269
Leu Met Gln Asp Leu Ser Phe Ala Gly Glu Leu Arg Thr Phe Leu Leu

```
1               5                   10                  15
Ala Cys Arg Ala Ser Tyr Asn Ser Phe Val Leu Tyr His Asn Phe Arg
            20                  25                  30
His Ala Ile Asp Val Leu Gln Ser Val Phe Cys Phe Leu Val His Ile
        35                  40                  45
Gly Ala Leu Pro Pro Tyr Gly Ser Val Gly Pro Asn Thr Asp Ser Pro
    50                  55                  60
Ser Ser Ile Ala Ser Leu Leu Thr Pro Phe Asp Thr Leu Thr Leu Leu
65                  70                  75                  80
Ile Ser Ala Ile Gly His Asp Val Gly His Pro Gly Val Asn Asn Phe
                85                  90                  95
Phe Leu Val Lys Leu Asn Ala Pro Leu Ala Gln Leu Tyr Asn Asp Asn
            100                 105                 110
Ser Val Leu Glu Ala Phe His Cys Ala Ala Phe Ser Gln Ile Leu Arg
        115                 120                 125
Arg His Trp Pro Ala Ala Phe Lys Asp Arg Pro Leu Arg Ile Phe Thr
    130                 135                 140
Thr Gly Pro Ala Thr Ala His Ala
145                 150
```

<210> 35270
<211> 61
<212> PRT
<213> A.fumigatus

```
<400> 35270
His Thr Tyr Phe Asn His Leu Leu Thr Ala Thr Ile Gly Asp Asn Asp
1               5                   10                  15
Gly Thr Thr Asp Arg Val His Asn Ile Thr Tyr Asn Val Gly Ile Cys
            20                  25                  30
Met Pro Gly Gln Thr Asn Phe Thr Gly Phe Arg Asn His Phe Arg Met
        35                  40                  45
Pro Ser Ala Gln Ser Gly Gly Val Glu Asn Phe Trp Tyr
    50                  55                  60
```

<210> 35271
<211> 127
<212> PRT
<213> A.fumigatus

```
<400> 35271
Leu Pro Ser Gln Gly Arg Thr Leu Phe Thr Gly Phe Ile Val Thr Pro
1               5                   10                  15
Thr Thr Gln Lys Asn Gly Thr Tyr Pro Met Gln Leu Arg Leu Ala Tyr
            20                  25                  30
Gly Gly Pro His Gly Met Thr Val Ser Trp Asn Thr Tyr Ser Gln Leu
        35                  40                  45
Pro His Pro Thr Val Cys Phe Gly Arg Ser Pro Lys Leu Leu Asn Arg
    50                  55                  60
Cys Val Ser Ser Ser Ala Ser Ile Ile Tyr Thr Thr Ser Met Ile Asn
65                  70                  75                  80
Ser Asn His Val Ser Ile Ala Glu Leu Glu Ala Asp Thr Leu Tyr Tyr
                85                  90                  95
Tyr Leu Pro Gln His Ser Asn Ala Thr Ser Pro Tyr Thr Phe Lys Thr
            100                 105                 110
Ser Arg Gln Ala Gly Asp Gln Thr Pro His Thr Val Ala Thr Val
```

115 120 125

<210> 35272
<211> 61
<212> PRT
<213> A.fumigatus

<400> 35272
Leu Lys Glu Glu Ile Gln Gly Phe Leu Pro Asn Ile Thr Ile Ala Asp
1 5 10 15
Gly Ala Lys Val Tyr Glu Ser Leu Leu Asn Gln Asn Tyr Val Glu Leu
20 25 30
Ala Val Ile Thr Ala Gln Glu Pro Tyr Met Phe Gly Pro Gly Asn His
35 40 45
Glu Ser Asn Cys Met Tyr Leu Pro Leu Ala Tyr Ile Phe
50 55 60

<210> 35273
<211> 65
<212> PRT
<213> A.fumigatus

<400> 35273
Arg Ile Cys Glu Asn Cys Arg Glu Val Trp Glu Pro Leu Phe Trp Lys
1 5 10 15
Tyr Asn Val Asp Leu Val Leu Ser Gly His Ala Asn Tyr Tyr Glu Arg
20 25 30
Asn Ala Pro Ile Ala Asn Phe Asn Val His Pro Asn Glu Leu Asn Asn
35 40 45
Arg Met Pro His Gly Pro Leu Pro Thr Glu Leu Gln Val Ile Ile Met
50 55 60
Asp
65

<210> 35274
<211> 103
<212> PRT
<213> A.fumigatus

<400> 35274
Leu Phe Val Ala Lys Asn Cys Ala Phe Val Glu Phe Ala Glu Pro Ala
1 5 10 15
Gly Tyr Ala Ala Ala Val Ala Ala Asn Pro His Gln Ile Gly Ser Glu
20 25 30
Gln Ile Phe Val Glu Glu Arg Arg Pro Arg Gly Asn Ala Tyr Gly Gly
35 40 45
Asn Ala Asn Tyr Gly Ala Gly Arg Gly Gly Ala Gly Arg Gly Arg Gly
50 55 60
Asp Arg Ala Gly Asn Gln Gly Arg Gly Gly Phe Gln Arg Asp Gly Arg
65 70 75 80
Gly Gly Phe Ala Pro Arg Gly Arg Gly Gly Asn Val Asn Gly Lys Pro
85 90 95
Arg Asn Gln Pro Gln Ala Ala
100

<210> 35275

<211> 112
<212> PRT
<213> A.fumigatus

<400> 35275
Asp Leu Ile Asn Asn Leu Gly Thr Ile Ala Arg Ser Gly Thr Lys Gln
1 5 10 15
Phe Met Glu Ala Leu Ser Ala Gly Ala Asp Ile Ser Met Ile Gly Gln
20 25 30
Phe Gly Val Gly Phe Tyr Ser Ala Tyr Leu Val Ala Asp Arg Val Thr
35 40 45
Val Val Ser Lys Asn Asn Asp Asp Glu Gln Tyr Ile Trp Glu Ser Ala
50 55 60
Ala Gly Gly Thr Phe Thr Leu Thr Gln Asp Thr Glu Gly Glu Gln Leu
65 70 75 80
Gly Arg Gly Thr Lys Ile Ile Leu His Leu Lys Asp Glu Gln Thr Asp
85 90 95
Tyr Leu Asn Glu Ser Arg Ile Lys Glu Val Val Arg Lys His Cys Leu
100 105 110

<210> 35276
<211> 132
<212> PRT
<213> A.fumigatus

<400> 35276
Ser Ile Ala Asp Ala Leu Ala Val Val Lys Thr Ser Gly Ala Ala Ala
1 5 10 15
Pro Val Val Pro Ala Ile Pro Val Ala Pro Pro Lys Pro Thr Pro Ala
20 25 30
Pro Ala Ala Ser Gln Pro Ser Pro Ala Pro Ala Pro Ser Gln Pro Ala
35 40 45
Pro Ser Ser Ala Ser Thr Pro Thr Ala Ala Ala Ser Glu Ile Thr Pro
50 55 60
Glu Gln Pro Thr Ser Thr Asp Ser Ala Gly Trp Gln Thr Ala Gly His
65 70 75 80
Asp His Lys Lys Thr Gln Ser Arg Ala Ala Glu Glu Gln Asn Val Leu
85 90 95
Ala Tyr Ile Lys Asn Val Asn Glu Lys Val Asp Ala Ser Leu Leu Lys
100 105 110
Gln Thr Leu Ser Arg Phe Gly Lys Leu Lys Tyr Phe Asp Val Ser Arg
115 120 125
Gln Lys Val Cys
130

<210> 35277
<211> 116
<212> PRT
<213> A.fumigatus

<400> 35277
Gln Ser Val Lys Gln Ser Glu Ser Ile Phe Leu Ile Ser Arg Ser Pro
1 5 10 15
Ser Ala Ile Met Ser Ser Glu Thr Phe Glu Phe Gln Ala Glu Ile Ser
20 25 30
Gln Leu Leu Ser Leu Ile Ile Asn Thr Val Tyr Ser Asn Lys Glu Ile

```
        35                  40                  45
Phe Leu Arg Glu Leu Ile Ser Asn Ala Ser Asp Ala Leu Asp Lys Ile
    50                  55                  60
Arg Tyr Gln Ser Leu Ser Asp Pro Thr Lys Leu Asp Thr Gly Lys Asp
65                  70                  75                  80
Leu Arg Ile Asp Ile Ile Pro Asp Lys Glu Asn Lys Thr Leu Thr Ile
                85                  90                  95
Arg Asp Thr Gly Ile Gly Met Thr Lys Ala Val Ser Leu Leu Arg Lys
            100                 105                 110
Pro Arg Leu Gln
        115
```

<210> 35278
<211> 138
<212> PRT
<213> A.fumigatus

<400> 35278

```
Lys Glu Asn Leu Arg Gln Thr Leu Leu Ser Ser Leu Arg Leu Val Ala
1               5                   10                  15
Gly Leu Ala Val His Val Ser Ser Thr Ala Thr Gly Ser Lys Ala Ala
            20                  25                  30
Thr Ser Val Ala Leu Glu Ala Thr Thr Ala Leu Val Ala Ser Thr Val
        35                  40                  45
Thr Ala Ala Thr Thr Arg Ala Thr Thr Ala Ser Thr Val Val Ser Ile
    50                  55                  60
Ala Ala Ile Ser Val Thr Ala Arg Thr Thr Phe Leu Asn Glu Tyr Leu
65                  70                  75                  80
Phe Gly Ser Asp Leu Val Arg Val Cys Ser His Gly Ser Gly Ile Thr
                85                  90                  95
Gly Arg Leu Arg Lys Leu Asn Glu Gly Ala Val Leu Cys Asp Lys Gln
            100                 105                 110
Ser Gly Gln Phe Glu Leu Ser Ser Lys Arg Ser Lys Ser Thr Val Asn
        115                 120                 125
Ile Pro Ser Gly Gly Ser Arg Gln Asn Thr
    130                 135
```

<210> 35279
<211> 102
<212> PRT
<213> A.fumigatus

<400> 35279

```
Thr Tyr Ser Leu Gly His Thr Asn Thr Gly Ile Thr Asn Ser Glu Gly
1               5                   10                  15
Leu Val Leu Leu Val Gly Asp Asp Val Asp Ala Glu Val Leu Ala Arg
            20                  25                  30
Val Glu Leu Gly Arg Ile Arg Gln Gly Leu Val Ala Asp Leu Val Glu
        35                  40                  45
Ser Ile Gly Gly Val Arg Asp Glu Phe Ser Gln Glu Asp Leu Leu Val
    50                  55                  60
Gly Val Asp Ser Val Asp Asp Gln Arg Glu Lys Leu Arg Asp Leu Ser
65                  70                  75                  80
Leu Glu Phe Lys Gly Phe Gly Arg His Asp Gly Gly Gly Arg Ala Arg
                85                  90                  95
Tyr Glu Lys Asp Gly Phe
```

100

<210> 35280
<211> 102
<212> PRT
<213> A.fumigatus

<400> 35280
Pro Val Arg Ser Thr Arg His Leu Lys Tyr Ser Ser Val Leu Ala Tyr
1 5 10 15
Gly Val Gln Pro Ser Asp Ile Ser Ser Thr Trp Arg Ser Phe Asp Asp
20 25 30
His Leu Lys Arg Gly Ile Val Phe Tyr Leu Val Lys Ala Ser Thr Phe
35 40 45
Ser Ile Ser Ser Asn Asn Gly Glu Ile Ser Ile Ile Asn Ile Thr His
50 55 60
Pro Ala Asn Ala Ala Arg Ser Glu Ser Thr Leu Gly Leu Leu Ser Thr
65 70 75 80
Arg Lys Leu Cys Ser Pro Arg Pro Phe Leu Thr Gly Lys Pro Ala Arg
85 90 95
His Leu Leu Gln Pro Gln
100

<210> 35281
<211> 844
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (839)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35281
Ile Asp Gly Gly Cys Ser Leu Leu Pro Ser Ile Ile Val Phe Phe Pro
1 5 10 15
His Ser Phe Gly Phe Ser Arg Tyr Gln Leu Ala Ala Met Asp Val Leu
20 25 30
Asp Arg Leu Gln Ser Gly Leu Phe Phe Arg Pro Asp Val Ala Asp Ile
35 40 45
Thr Ser Thr Val Ile Gln Pro Tyr Ile Leu Ser Asn Gln Val Gln Pro
50 55 60
Thr Ser His Tyr Gln Lys Asn Ala Ser Ser Ser Ile Pro Ala Ala Thr
65 70 75 80
Leu Thr Ser Ile His Ser Ser Thr Pro Glu Val Ser Leu Pro Leu Leu
85 90 95
Ser Val Ser Ala Asp Val Asp Ile His Gly Arg Leu Cys Thr Thr Lys
100 105 110
Val Thr Gln Gln Phe Ser Asn Ala Ser Ser Ser Thr Thr Gln Asn Ala
115 120 125
Arg Tyr Val Phe Pro Ile Tyr Asp Gly Ser Val Val Thr Ser Phe Arg
130 135 140
Cys Trp Ile Gly Asn Asp Arg Leu Leu Glu Gly Val Val Lys Ala Lys
145 150 155 160
Glu Ala Ala Arg Ala Glu Phe Lys His Ala Val Ser Gln Arg Lys Val
165 170 175

```
Ala Val Leu Val Glu Glu Leu Val Pro Glu Ile Phe Glu Thr Ser Val
            180                 185                 190
Gly Asn Ile Ser Ala Gln Thr Thr Val Lys Ile Glu Ile Thr Tyr Thr
        195                 200                 205
Asn Leu Leu Lys Val Asp Asn Ser Thr Gly Gly Leu Val Leu Thr Ile
    210                 215                 220
Pro Thr Ser Ile Ala Pro Arg Tyr Gly Ala Val Pro Lys Gly Tyr Ser
225                 230                 235                 240
Gly Asn Glu Ser Leu Leu Thr Glu Gly Leu Arg Ile Asn Val Gln Ala
                245                 250                 255
Ser Met Pro Thr Ala Ile Arg Lys Met Glu Ser Arg Ser His Pro Ile
            260                 265                 270
Ser Val Glu Met Gly Ala Val Ser His Lys Arg Phe Thr Asp Phe Ala
        275                 280                 285
Ala Ser Ala Ser Ser Asp Thr Leu Asp Tyr Ser Lys Gly Arg Ala Thr
    290                 295                 300
Leu Ser Gly Arg Lys Ala Val Leu Gly Gln Asp Phe Val Leu His Ile
305                 310                 315                 320
Leu Cys Ser Ser Arg Glu Phe Ser Arg Ser Gln Ala Ile Ala Ala Ser
                325                 330                 335
Gln Pro Gly Gln Pro Arg Leu Ser Thr Ile Ala Val Thr Leu His Pro
            340                 345                 350
Ser Asp Leu Phe Gly Gln Asn Val His Met Glu Asp Phe Val Gly Glu
        355                 360                 365
Ile Ile Phe Met Ala Asp Arg Ser Gly Ser Met Ser Ser Lys Ile Pro
    370                 375                 380
Ser Leu Ile Asn Val Met Asn Ile Phe Leu Arg Ser Leu Pro Glu Ala
385                 390                 395                 400
Cys Ser Phe Asn Ile Ala Ser Phe Gly Ser Gln Val Thr Trp Leu Trp
                405                 410                 415
Pro Ser Ser Met Arg Tyr Ser Gln Thr Asn Leu Asn Val Ala Ala Lys
            420                 425                 430
His Val Glu Ser Phe Gln Ala Asn Tyr Gly Gly Thr Glu Ile Tyr Asp
        435                 440                 445
Ala Leu His Ser Val Leu Asp His Tyr Asn Glu Arg Asn Asp Val Pro
    450                 455                 460
Thr Asn Val Ile Leu Leu Thr Asp Gly Glu Val Trp Asp Val Asp Asn
465                 470                 475                 480
Val Ile Gln Leu Val His Arg Thr Ala Ser Asn Gly Asn Ser Asn Ile
                485                 490                 495
Arg Phe Phe Ser Leu Gly Ile Gly Asp Gln Val Ser His Arg Leu Val
            500                 505                 510
Glu Gly Ile Gly Gln Gln Gly Gly Gly Tyr Ala Glu Val Val Pro Glu
        515                 520                 525
Ser Ser Met Gly Ser Trp Gln Glu Arg Val Ile Gln Met Leu Lys Ala
    530                 535                 540
Ala Leu Thr Pro Ser Arg Leu Gln Cys Asn Val Asp Leu Gly Glu Glu
545                 550                 555                 560
Leu Ala Arg Lys Thr Ser Glu Arg Gln Ile Ala Gly Tyr Thr Val Gln
                565                 570                 575
Tyr Pro Gln Trp Val Gln Ala Pro His Gln Ile Pro Val Leu Ser Thr
            580                 585                 590
Phe Ser His Leu Ser Leu Tyr Tyr Ile Val Glu Ser Gly Leu Asp Ser
        595                 600                 605
Leu Pro Lys Thr Ile Asn Ile Thr Thr Thr Asn Glu Arg Gly Glu Lys
    610                 615                 620
```

```
Leu Ser Ala Gln Leu Pro Ile Gln Thr Val Ala Glu Gln Pro Ala Ile
625                 630                 635                 640
His His Leu Ala Ala Lys Ala Leu Met Asn Asp Phe Glu Thr Gly Gln
                645                 650                 655
Ser Trp Leu His Ser Leu Asn Pro Ile Leu Lys Ser Thr Asn Pro Thr
            660                 665                 670
Gly Phe Glu Lys Val Leu Glu Gln Glu Ala Gln His Val Gly Gln Thr
        675                 680                 685
Trp Ser Ile Pro Ser Lys Trp Thr Ser Tyr Val Ala Ile Asp Arg Thr
    690                 695                 700
Thr Ala Gln Gln His Ala Ile Ser Val His Lys Ala Asp Ala Ile Glu
705                 710                 715                 720
Phe Ser Gln Leu Thr Arg Pro Arg His Thr Ser Ile Phe Pro Asp Pro
                725                 730                 735
Arg Ile Ser Asn Lys Gly Asp Pro Phe Ala Arg Gly Cys Leu Leu Ser
            740                 745                 750
Tyr Pro Arg Arg Glu Phe Leu Ala Ser Thr Ser Arg Leu Ser Gly Glu
        755                 760                 765
Asp Thr Gln Pro Leu Ser Pro Ser Ala Pro Pro Ala Ala Gly Pro Tyr
    770                 775                 780
Ala Leu Asp Thr Phe Phe Glu Pro Thr Tyr Ala Ala Ser Pro Ser Ser
785                 790                 795                 800
Phe Leu Ala Gly Phe Asp Tyr His His Asn Gln Pro Ser Gln Tyr Gln
                805                 810                 815
Gly Gln Pro Pro Ala Ser Pro Val Thr Ser Gln Thr Ala Glu Val Cys
            820                 825                 830
Pro Arg Ser Lys Asn Ala Xaa Val Val Trp Tyr Val
        835                 840
```

<210> 35282
<211> 74
<212> PRT
<213> A.fumigatus

<400> 35282

```
Arg Asp Thr Arg Ala Asn Gln Thr Leu Asn Leu Ser Leu Pro Tyr Phe
1               5                   10                  15
Pro Thr Ala Gln Ile Asn Val Pro Arg Trp Leu Phe Tyr Cys Glu Ser
            20                  25                  30
Gly Thr Pro Trp Thr Pro Pro Gln Asp Gly Leu Gly Cys Leu Gly Arg
        35                  40                  45
Pro His His Val Gly Thr Ala Ile Tyr Gln Ser Lys Asn Ala Glu Arg
    50                  55                  60
Thr Ile Ser Phe Val Pro Tyr Gly Glu Met
65                  70
```

<210> 35283
<211> 70
<212> PRT
<213> A.fumigatus

<400> 35283

```
His Leu Ser Phe Arg Arg Pro His Leu Trp Val Leu Gly Ile Trp Asp
1               5                   10                  15
Ala Trp Gln Trp Pro Gln Thr Thr Gly Gln Lys Gly Leu Pro Leu Ala
            20                  25                  30
```

```
Gly Glu Cys Ile Lys Trp Pro Arg Gln Arg Val Leu Val Gly Leu Tyr
        35                  40                  45
Lys Val Pro Gln Ile Ala Arg Gly Lys Pro Leu Thr Leu Leu Pro Phe
    50                  55                  60
Tyr Ser Thr His Arg Tyr
65                  70
```

<210> 35284
<211> 129
<212> PRT
<213> A.fumigatus

<400> 35284

```
Arg Ser Val Leu His Pro Ser Pro Arg Ser Phe Ser Gly Val Ile Gly
1               5                   10                  15
Glu Leu Thr Glu Ser Cys Gln Asp Ala Asp Gly Lys Glu Ile Ile Asp
            20                  25                  30
Phe Ile Cys Met Leu Ser Ala Thr Asn Leu Gly Gln Cys His Pro Lys
        35                  40                  45
Leu Leu Gln Ala Met Thr Thr Ser Met Gln Thr Ser Lys Tyr Arg Pro
    50                  55                  60
His Glu Pro Arg Arg Phe Thr Leu Glu Val Pro Gln Phe Asp Pro Val
65                  70                  75                  80
Gly Ala Cys Lys Leu Thr Ala Ser Thr Thr Ser His Ser His Gln His
                85                  90                  95
Arg His Gln Ser Gly Arg Leu Gly Gly Ile His Ala Gly His Val Arg
            100                 105                 110
Pro Val Arg Leu Arg Gln Asp Gly Arg Asp Gly Leu Arg His Arg Arg
        115                 120                 125
Arg
```

<210> 35285
<211> 263
<212> PRT
<213> A.fumigatus

<400> 35285

```
Ser Trp Ser Val Ser Thr Gly Lys Asn Gly Lys Leu Leu Gly Glu Leu
1               5                   10                  15
Leu Ser Arg Pro Trp Pro Ile Leu Thr Thr Met Gly His Leu Tyr Asn
            20                  25                  30
Leu Thr Ser Arg Gly Ala Ser Ser Cys Gln Glu Glu Leu Ser Phe Ala
        35                  40                  45
Ile Gly Val Arg Gln Leu Cys Lys Arg Tyr Asn Ile Leu Ile Ile Ala
    50                  55                  60
Asp Glu Val Arg Met Gly Ser Gly Lys Thr Gly Lys Phe Leu Cys Ser
65                  70                  75                  80
Asp Trp Met Gly Pro Glu Asn Lys Pro Asp Met Val Val Met Gly Lys
                85                  90                  95
Ser Ile Thr Gly Gly Ala Tyr Pro Ala Ser Tyr Ile Phe Gly Asn His
            100                 105                 110
Glu Val Met Asp Leu Ile Gly Gly Tyr Glu Pro Val Ala Thr Phe Gly
        115                 120                 125
Met Ala Pro Ala Ala Ile Ala Ala Thr Arg Ala Thr Leu Glu Ile Ile
    130                 135                 140
```

```
Asp Glu Glu Lys Leu Val Asp Arg Ala Thr Trp Ile Gly Gln Val Trp
145                 150                 155                 160
Lys Lys Glu Thr Ala Gly Trp Ser Met Pro Trp Leu Asp Tyr Thr Thr
                165                 170                 175
Asn Arg Gly Ala Asp Leu Gly Leu Tyr Leu Lys Arg Thr Gly Asn Pro
            180                 185                 190
Arg Leu Thr Thr Arg Arg Leu Ser Met Leu Cys Leu His Lys Gly Ile
        195                 200                 205
Leu Thr Tyr Pro Asp Gly Asp Arg Val Arg Met Gly Val Ala Leu Asn
    210                 215                 220
Ile Pro Glu Ala Asp Leu Leu Arg Gly Met Ala Ile Leu Lys Glu Ala
225                 230                 235                 240
Leu Leu Glu Leu Asp Asp Tyr Asp Glu Ile Glu Thr Gly Pro Pro Met
                245                 250                 255
Lys Gly Val Ile Pro Glu Met
            260
```

<210> 35286
<211> 117
<212> PRT
<213> A.fumigatus

<400> 35286

```
Arg His Gln Pro Gln Ala Thr Leu Thr Asn Ile Ala Thr Lys Val Gly
1                 5                  10                  15
Asp Trp Ala Glu Phe Thr Arg Asp Met Cys Ala Arg Phe Gly Tyr Asp
            20                  25                  30
Lys Met Val Gly Met Val Ser Gly Thr Glu Gly Ala Asp Ala Ala Val
        35                  40                  45
Lys Phe Ala Arg Lys Trp Gly Ile Lys Arg Lys Gly Ile Pro Pro Arg
    50                  55                  60
Asp Val Leu Val Leu Gly Val Ser Asp Asn Tyr His Gly Val Gly Ser
65                  70                  75                  80
Gly Ile Trp Pro Ile Met Asn Asp Met Gly Gln Ala Ser Gly Lys Tyr
                85                  90                  95
Ile Ala Phe Ser Val Leu Thr Cys Ser Leu Thr Pro Ala Leu Ser Leu
            100                 105                 110
Pro Thr Asp Gln Phe
        115
```

<210> 35287
<211> 121
<212> PRT
<213> A.fumigatus

<400> 35287

```
Ser Pro Ser Asp Cys Pro Arg Lys Ala Ser Tyr Ser Phe Ala Ile Leu
1                 5                  10                  15
Phe Tyr Pro Pro Leu Leu Ile Thr Leu His Ser Cys Leu His Ala Ser
            20                  25                  30
Arg Val Pro Val Asn Arg Phe Ile Ser Tyr Pro Thr Ser Ala Thr Ile
        35                  40                  45
Met Thr Arg Glu Asp Gln Arg Glu Gly Lys Val Val Arg Leu Ser Ser
    50                  55                  60
Lys Thr Lys Glu Leu Leu Glu Ile Asp Ser Lys His Ser Ala Gly Gly
65                  70                  75                  80
```

```
Ile Phe Pro Leu Pro Val Phe Ile Lys Ser Gly Lys Asp Ser Ile Leu
                85                  90                  95
Lys Val Cys Ala Ser Ser Leu Ala Pro Phe Leu Phe Arg Cys Tyr Trp
            100                 105                 110
Arg Ala Asp Gly Glu Leu Ser Gly Cys
        115                 120
```

<210> 35288
<211> 442
<212> PRT
<213> A.fumigatus

<400> 35288

```
Pro Ser Tyr Ile Asp Arg Val Arg Val Thr Ile Ile His Arg Arg Glu
1               5                  10                  15
Ser Thr Met Thr Gly Asn Leu Gln Trp Leu Thr Asn Tyr Gly His Asp
            20                  25                  30
Ser Leu Ala Ala Gly Val Ser Phe Gly Met Pro Trp Pro Lys Gly Leu
        35                  40                  45
Tyr Gln Pro Gly Gln Ser Phe Val Ile Glu Glu Asn Gly Arg Glu Tyr
    50                  55                  60
Ala Ile Asp Ser Arg Glu Ile Ala Tyr Trp Ala Asp Gly Ser Leu Lys
65                  70                  75                  80
Trp Thr Ala His Ser Val Ser Gly His Val Gly Tyr Ser Glu Gly Tyr
                85                  90                  95
Thr Val Lys Gly Thr Ser Glu Ser Lys Asp Thr Asp Ala Gly Val Phe
            100                 105                 110
Ile Glu Glu Gly Asp Ser Leu Thr Val Thr Thr Arg Arg Gly Leu Gln
        115                 120                 125
Val Thr Phe Ala Arg Glu Gly Thr Ser Ser Leu Phe Gly Ser Leu Ser
    130                 135                 140
Leu Arg Gly His Ala Leu Cys Ser Gly Ala Thr Leu Val Ala Ser Ile
145                 150                 155                 160
Asn Asp Thr Glu Tyr Ser Ala Ile Val Lys Lys Val Glu Val Glu Asn
                165                 170                 175
Ala Ser Tyr Ser Arg Ala Val Ile Lys Ile Ser Gly Thr Met Ala Ala
            180                 185                 190
Ser Asp Ser Glu His Leu Pro Phe Asp Val Arg Val Cys Ile Tyr Ser
        195                 200                 205
Asp Ala Ile Pro Ile Lys Ile Leu His Ser Phe Val His Asp Leu Asp
    210                 215                 220
Ala Asp Glu Pro Leu Ala Ser Leu Gly Ile Arg Phe Ser Val Pro Leu
225                 230                 235                 240
Glu Asn Thr Glu Leu Tyr Asn Arg His Ile Arg Phe Ala Gly Ser Asn
                245                 250                 255
Gly Gly Ile Leu Lys Glu Glu Val Gln Gly Leu Ser Gly Leu Arg His
            260                 265                 270
Gly Pro Thr Val Lys Asn Arg Ile Asp Gln Ser Ala Gly Arg Ala Val
        275                 280                 285
Thr Leu Lys Gln Glu Glu Trp Ser Lys Thr Asp Leu Arg Gln Gly Leu
    290                 295                 300
Ser Tyr Ile Pro Ser Phe Asp Ser Tyr Thr Leu Ser Gln Leu Ser Ser
305                 310                 315                 320
Asp Gly Phe Thr Ile Lys Lys Arg Thr Lys Gln Gly Cys Ser Trp Val
                325                 330                 335
Lys Val Thr Gly Gly Gly Arg Ala Asp Gly Thr Val Tyr Leu Gly Ser
```

```
            340                 345                 350
Ala Arg His Gly Gly Ile Ala Val Gly Met Ser Asp Phe Trp Glu Arg
        355                 360                 365
Tyr Pro Thr Gln Leu Asp Leu Thr Gly Leu Ala Gln Arg Glu Gly Ala
    370                 375                 380
Ile Thr Val Trp Leu Tyr Ser Pro Leu Ala Glu Pro Leu Asp Thr Ala
385                 390                 395                 400
Pro Tyr His Asp Gly Leu Gly Leu Asp Ser Tyr Glu Lys Gln Leu His
                405                 410                 415
Ala Leu Asp Val Thr Tyr Glu Asp Tyr Glu Pro Gly Phe Ala Ser Ser
            420                 425                 430
Pro Arg Arg Met Glu Arg Gln Arg Leu Asn
        435                 440
```

<210> 35289
<211> 108
<212> PRT
<213> A.fumigatus

<400> 35289

```
Ser Pro Cys Gly Gly Gly Arg Arg Pro Gly Thr Asn Pro Ser Thr Ser
1               5                   10                  15
Trp Thr Arg Ser Ser Arg Pro Arg Ser Ser Pro Cys Ala Ala Ser Trp
            20                  25                  30
Pro Ala Cys Arg Leu Ser Leu Leu Arg Trp Arg Arg Trp Tyr Ala Ala
        35                  40                  45
Gly Gly Gly Thr Gly Gln Arg Pro Arg Cys Gly Pro Cys Gly Ser Ala
    50                  55                  60
Thr Met Ala Ile Pro Gly Arg Gly Lys Cys Arg Trp Pro Ala Gly Trp
65                  70                  75                  80
Val Glu Pro Thr Ala Ala Gln Arg Gly Cys Gly Arg Pro Ile Arg Pro
                85                  90                  95
Thr Cys Ser Gly Thr His Gly Gly His Arg Ser Pro
            100                 105
```

<210> 35290
<211> 61
<212> PRT
<213> A.fumigatus

<400> 35290

```
Leu His Phe Pro Gly Phe Ser Thr Thr Glu Lys Asp Gly His Pro His
1               5                   10                  15
Gly Met Gly Ala Glu Lys Asn His Lys Leu Leu Leu Gly Glu Ala Tyr
            20                  25                  30
Lys Asp Trp Pro Ser Leu Ala Ser Trp Arg Lys Gly His Ala Thr Ser
        35                  40                  45
Ile Ser Ser Arg Thr Lys Trp Pro Leu Thr Arg Lys Thr
    50                  55                  60
```

<210> 35291
<211> 283
<212> PRT
<213> A.fumigatus

<400> 35291

```
Trp Ala Ser Pro Trp Gly Val Phe Gln Thr Ile Thr Thr Thr Tyr Ala
1               5                  10                  15
Ala Glu Val Cys Pro Asn Val Leu Arg Pro Tyr Leu Thr Met Leu Val
            20                  25                  30
Ser Leu Ala Trp Ser Ile Gly Tyr Leu Thr Gly Thr Cys Val Leu Arg
        35                  40                  45
Gly Phe Leu Ser Met Ser Gly Glu Trp Ala Tyr Arg Thr Pro Phe Ala
    50                  55                  60
Leu Gln Trp Ala Leu Pro Ile Pro Leu Ala Ile Gly Ile Tyr Leu Ala
65                  70                  75                  80
Pro Glu Ser Pro Trp Trp Leu Ile Arg Lys Gly Arg Thr Glu Asp Ala
                85                  90                  95
Ala Gln Ser Leu Arg Arg Leu Arg Thr Asn Ala Ala Ser Glu Glu Glu
            100                 105                 110
Ile Ala Asp Thr Leu Ala Met Met Leu His Thr Val Lys Ile Glu Asp
        115                 120                 125
Ala Met Asn Ala Ser Ser Ser Tyr Trp Asp Leu Phe Arg Gly Val Asp
    130                 135                 140
Arg Arg Arg Thr Glu Ile Thr Val Phe Thr Tyr Leu Ile Gln Glu Leu
145                 150                 155                 160
Cys Ala Pro Leu Val Ala Tyr Ile Val Tyr Phe Leu Glu Gln Ser Gly
                165                 170                 175
Leu Asp Pro Ser Ser Ser Phe Asp Phe Gly Ile Gly Glu Tyr Ala Leu
            180                 185                 190
Ala Ile Val Gly Val Phe Val Ala Trp Cys Leu Val Pro Arg Val Gly
        195                 200                 205
Arg Arg Thr Leu Leu Leu Ser Gly Thr Cys Phe Met Thr Ala Thr Thr
    210                 215                 220
Ile Leu Ile Gly Phe Leu Gly Ile Val Ser Arg Lys Thr His Pro Lys
225                 230                 235                 240
Ile Gly Tyr Gly Ile Gly Thr Ile Leu Leu Ile Glu Tyr Phe Val Phe
                245                 250                 255
Phe Ile Thr Ile Gly Pro Ile Ile Tyr Thr Ile Val Thr Glu Ile Pro
            260                 265                 270
Ser Tyr Ala Leu Arg Ala Gln Ser Val Gly Phe
        275                 280
```

<210> 35292
<211> 471
<212> PRT
<213> A.fumigatus

<400> 35292

```
Arg Leu Ala Val Leu Gly Phe Leu Glu Lys Arg Ser Cys Asp Ile Tyr
1               5                  10                  15
Leu Phe Ala Asp Lys Met Ala Ala His Gln Glu Asp Val Thr Asp Pro
            20                  25                  30
Thr Thr Val Thr Val Ile Arg Glu Lys Asp Glu Glu His Tyr Val Val
        35                  40                  45
Ala Glu Asp Ile Ala Lys Gly Ala Gln Lys Ala Thr Asp Asp Glu His
    50                  55                  60
Ala Met Gly Leu Arg Glu Gly Leu Arg Lys Tyr Pro Lys Ala Val Phe
65                  70                  75                  80
Trp Ser Ile Trp Phe Ser Ser Ala Leu Ile Met Glu Gly Phe Asp His
                85                  90                  95
Ser Phe Val Ser Gly Phe Met Ala Phe Pro Ala Phe Gln Arg Arg Tyr
```

```
            100                 105                 110
Gly Val Leu Thr Thr Asn Gly Ser Tyr Gln Ile Pro Ala Asn Leu Gln
        115                 120                 125
Ala Ala Val Ser Asn Gly Val Asn Ala Gly Glu Ile Val Gly Leu Leu
    130                 135                 140
Leu Asn Gly Leu Leu Cys Asp Trp Phe Gly Tyr Arg Trp Leu Met Met
145                 150                 155                 160
Gly Ser Leu Phe Leu Met Gly Cys Cys Ile Phe Leu Gln Phe Phe Ala
                165                 170                 175
Thr Asp Ile Tyr Met Tyr Ile Gly Ala Glu Val Met Met Gly Leu Pro
            180                 185                 190
Leu Gly Cys Leu Pro Asp Asp His His His Ile Cys Arg Arg Gly Met
        195                 200                 205
Pro Gln Arg Ala Ala Ala Leu Pro Asp Tyr Ala Gly Leu Ala Gly Leu
    210                 215                 220
Glu Tyr Arg Val Pro His Gly Asp Leu Cys Pro Pro Trp Val Pro Glu
225                 230                 235                 240
His Val Gly Arg Met Gly Leu Pro His Pro Leu Cys Ala Ala Val Gly
                245                 250                 255
Ser Thr His Pro Ala Gly His Arg His Leu Pro Arg Pro Gly Ile Ala
            260                 265                 270
Met Val Ala Asp Pro Gln Gly Pro His Arg Gly Arg Cys Pro Val Pro
        275                 280                 285
Pro Pro Ala Ala Tyr Gln Arg Arg Gln Arg Arg Arg Asp Ser Arg His
    290                 295                 300
Ala Gly His Asp Ala Ala His Gly Glu Asp Arg Gly Arg Asp Glu Arg
305                 310                 315                 320
Val Gln Leu Val Leu Gly Phe Val Pro Gly Arg Arg Pro Pro Pro His
                325                 330                 335
Gly Asp His Arg Leu His Leu Pro His Pro Gly Thr Val Arg Pro Ala
            340                 345                 350
Gly Gly Val His Ser Leu Phe Ser Arg Ala Val Arg Pro Arg Ser Leu
        355                 360                 365
Val Val Leu Arg Leu Trp Tyr Trp Arg Val Cys Thr Arg His Arg Gly
    370                 375                 380
Gly Val Cys Arg Val Val Ser Gly Pro Ala Gly Gly Ser Pro His Pro
385                 390                 395                 400
Pro Pro Val Arg Asn Leu Leu His Asp Gly Asp Asp Tyr Pro Asp Arg
                405                 410                 415
Leu Pro Gly Asp Arg Gln Pro Gln Asp Pro Ser Gln Asp Arg Val Arg
            420                 425                 430
Asp Trp His Asn Pro Ala Asp Arg Val Leu Cys Val Phe His Asn Asp
        435                 440                 445
Arg Ser Asp His Leu His His Cys His Arg Asn Pro Val Ile Arg Ser
    450                 455                 460
Ala Gly Ala Glu Arg Arg Val
465                 470
```

<210> 35293
<211> 427
<212> PRT
<213> A.fumigatus

<400> 35293

```
Ser Phe Phe Ser Ser Pro Thr Lys Thr Ile Asp Ile Thr Lys His Asn
1               5                   10                  15
```

```
Lys Pro Asp Ile Lys Ala Phe Ile Val Glu Glu Leu Lys Arg Lys Gly
            20                  25                  30
Ile Phe Gln Gly Ala Asp Glu Asp Ser Gln Arg Arg Lys Thr Met Val
        35                  40                  45
Glu Glu Arg Leu Trp Val Arg Ser Asn Asn Ser Tyr Leu Thr Ile Gln
    50                  55                  60
Gln Asp Leu Arg Lys Val Glu Glu Ile Ile Thr Ser Gly Gly Thr Glu
65                  70                  75                  80
Glu Glu Leu His Arg Val Leu His Glu Ser Ser Thr Asp Pro Lys Glu
                85                  90                  95
Leu Val Arg Ala Glu Ile Glu Gly Leu Glu Ala Met Leu Lys Ala Arg
            100                 105                 110
Glu Ile Glu Glu Ile Asn Glu Leu Leu Val Trp Val Ile Ala Ser Asp
        115                 120                 125
Lys Ser Met Leu Leu Val Glu Leu Glu Ala Ala Leu Phe Leu Arg Phe
    130                 135                 140
Lys Thr Val Ser Leu Gln Pro Leu Asp Lys Lys Ile Thr Gly Lys Tyr
145                 150                 155                 160
Ser Lys Ile Phe Thr Leu Ile Tyr Gly Lys Tyr Leu Ala Leu Lys Asp
                165                 170                 175
His Val Arg Asp Cys Val Val Ala Gln Arg Asp Arg Pro Arg Gln Ser
            180                 185                 190
Ala Asp Asp Pro Lys Ile Thr Ala Thr Ile Ser Ile Thr Asn Gly Asp
        195                 200                 205
Leu Lys Leu Val Gln Arg Phe Phe Trp Asp Leu Asn His Tyr Ser Phe
    210                 215                 220
Leu Gly Gly Phe Ala Phe Glu Pro Thr Ser Asp Gln Thr Asn Val Gly
225                 230                 235                 240
Gln Arg Lys Ile Gln Val Tyr Glu Ala Asp Ala His Leu Glu Ile Val
                245                 250                 255
Lys Arg Thr Phe Asp Ile Leu Ser Gln Pro Val Val Asp Glu Arg Gly
            260                 265                 270
Lys Ala Leu Val Pro Tyr Leu Met Arg Ser Leu Thr Thr His Leu Lys
        275                 280                 285
Ala Leu Ser Glu Val Thr Gly Leu Asp Glu Leu Gln Pro Ala Asp Lys
    290                 295                 300
Gln Phe Ile Gly Ser His Val Tyr Glu Met Phe Asn Glu Gly Asp Val
305                 310                 315                 320
Ile Glu Arg Asn Trp Asp Phe Cys Tyr Ala Val Arg Trp Tyr Glu Arg
                325                 330                 335
Asp Asp Glu Met Asp Ile Phe Trp Glu Trp Leu Asp Asp Pro Val Ala
            340                 345                 350
Ile Ala Gly Leu Gly Pro Arg Asp Lys Arg Trp Leu Ala Glu Leu Lys
        355                 360                 365
Lys Asp Lys Lys His Arg Asn Ser Gly Leu Leu Thr Pro Ala Met Thr
    370                 375                 380
Met Val Ala Arg Asn Trp Leu Gln Asp Thr Lys Trp Ser Thr Phe Arg
385                 390                 395                 400
Val Phe Arg Trp Ile Arg Gly Phe Leu Arg Leu Val Cys Ser Pro Cys
                405                 410                 415
Ile Leu Leu Phe Ala Pro Gly Leu Asp Leu Cys
            420                 425
```

<210> 35294
<211> 98
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (86)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35294

```
Arg Cys Glu Arg Ala Val Gln Glu Gly Ala Lys Val Ser Arg Ser Ala
1               5                  10                  15
Gln Asn Gln Leu Cys Ser Asn Leu Gly Arg Gln Ala Ala Glu Ile Leu
            20                  25                  30
Gln Ala Gln Asp Pro Ile Asp Lys Glu Gln Leu Arg Asp Val Phe Lys
        35                  40                  45
Thr Leu Ala Glu Phe Ala Thr Asp Pro Asp Tyr Ala Leu Glu Tyr Leu
    50                  55                  60
Lys Glu Ala Ala Arg Leu Asp Ala Glu Asp Val Glu Ile Pro Cys Ala
65                  70                  75                  80
Met Leu Arg Gln Cys Xaa Thr Ser Lys Asn Glu Asp Glu Ala Arg Ser
                85                  90                  95
Met Ile
```

<210> 35295
<211> 138
<212> PRT
<213> A.fumigatus

<400> 35295

```
Met Gln Gly Ala Glu Pro Gln Gln Glu Asp Arg Thr Thr Val Ala Glu
1               5                  10                  15
Gln Thr Gly Lys Ser Asp Thr Gly Ser Gly Arg Ile Ile Ile Tyr Asp
            20                  25                  30
Asn Asp Ser Asn Val Arg Lys Ile Leu Lys Ala Glu Gln Trp Cys Lys
        35                  40                  45
Gln Leu Leu Gly Val Thr Glu Leu Asp Tyr Thr Trp Cys Ile Arg Leu
    50                  55                  60
Gly Asp Thr Tyr Ala Asp Val Arg Glu Tyr Asp Ala Ala Ser Glu Gln
65                  70                  75                  80
Tyr Lys Lys Val Arg Lys Phe Leu Ala Pro Arg Arg Ile Asn Cys Val
                85                  90                  95
Leu Thr Trp Asp Asp Arg Leu Pro Lys Phe Ser Arg Leu Lys Thr Pro
            100                 105                 110
Ser Thr Arg Ser Ser Cys Glu Thr Cys Ser Lys Pro Ser Leu Asn Leu
        115                 120                 125
Gln Pro Thr Pro Ile Met Pro Trp Asn Ile
    130                 135
```

<210> 35296
<211> 183
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (176),(179),(180)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35296

```
Pro Asp Met Gly Ser Phe Val Glu Asp Leu Trp Ser Ser Ile Phe Thr
1               5                  10                  15
Pro Gly Pro Thr Pro Ser Leu Leu Ile Ala Thr Asn Val Thr Phe Ala
            20                  25                  30
Ala Leu Gln Val Leu Leu Leu Ala Leu Leu Leu Ala Thr Tyr Ser Ile
        35                  40                  45
His Phe Val Val Leu Ser Ile Leu Ser Ala Ala Leu Trp Trp Ser Ile
    50                  55                  60
Asn Trp Phe Ala Gln Glu Leu Ser Gln Ile Gln Ala Gln Glu Ala Pro
65                  70                  75                  80
Lys Glu Leu His Glu Asp Lys Glu Arg Arg Gly Gly Ser Thr Lys Pro
                85                  90                  95
Pro Gly Ser Leu Glu Ser Ser Asp Ser Asp Thr Glu Thr Glu Val Ala
            100                 105                 110
Lys Glu Lys Ser Lys Val Thr Ala Ala Thr Gly Val Phe Thr Ser Ala
        115                 120                 125
Ala Pro Thr Ala Ala Ala Ser Thr Ser Ala Thr Leu Gln Pro Pro Thr
    130                 135                 140
Glu Pro His Ala Arg Lys Arg Leu Ser Val Ser Gly Glu Ser Ser Gly
145                 150                 155                 160
Tyr Val Phe Thr Thr Gly Leu Glu Gly Ser Asp Ala Gly Ser Val Xaa
                165                 170                 175
Phe His Xaa Xaa Phe Asn Pro
            180
```

<210> 35297
<211> 235
<212> PRT
<213> A.fumigatus

<400> 35297

```
Thr Asp Leu Tyr Lys Ser Cys Phe Gly Ser Val Thr Phe Ser Cys Pro
1               5                  10                  15
Phe Pro Ser Arg Pro Ala Thr Ser Leu Val Leu Arg His Asn Leu Ile
            20                  25                  30
Val Leu Pro Ser Cys Pro Leu Cys Pro Tyr Thr Gln Tyr Lys Pro Gly
        35                  40                  45
Met Ala Asn Gln Asp Thr Ala Leu Ala Lys Asp Val Thr Pro Gly Gly
    50                  55                  60
Arg Val Gly Phe Ser His His Glu Glu Asp Ile Met Ile Asp Arg Glu
65                  70                  75                  80
Pro Tyr Gly Pro Pro Gly Leu Arg Gly Leu Ile Ser Asn Pro Phe Val
                85                  90                  95
Phe Leu Cys Ala Ala Cys Ser Thr Leu Gly Gly Leu Val Phe Gly Tyr
            100                 105                 110
Asp Gln Gly Val Val Ser Val Ile Leu Val Met Asp Gln Phe Leu Glu
        115                 120                 125
Arg Phe Pro Glu Val Ala Pro Asn Ala Ala Gly Ala Gly Phe Trp Lys
    130                 135                 140
Gly Leu Met Thr Ala Met Ile Glu Leu Gly Ala Leu Leu Gly Ala Leu
145                 150                 155                 160
Asn Gln Gly Trp Ile Ala Asp Lys Ile Ser Arg Arg Tyr Ser Ile Val
                165                 170                 175
```

```
Val Ala Val Ile Ile Phe Thr Ile Gly Ser Ile Leu Gln Thr Ala Ala
            180                 185                 190
Val Asp Tyr Ala Met Leu Thr Val Ala Arg Phe Ile Gly Gly Val Gly
        195                 200                 205
Ile Gly Met Leu Ser Met Val Ala Pro Leu Tyr Ile Ser Glu Ile Ser
    210                 215                 220
Lys Trp Pro Gly His Thr His Ser Arg Gln Arg
225                 230                 235
```

<210> 35298
<211> 552
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11),(12)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35298

```
Leu Ser Asn Thr Arg Asn Leu Pro Gly Phe Xaa Xaa Tyr Pro Pro Arg
1               5                   10                  15
Arg Pro Asp Leu Gln Arg Asn Val Leu Glu Met Ala Asp Cys Leu Pro
            20                  25                  30
Leu Val Ser Pro Ala Thr Thr Ser Pro Met Tyr Gly Ser His Asn Gly
        35                  40                  45
Ser Ala Leu Ser Ser Pro Val Ser Ile Thr Pro Ser His Lys Arg Lys
    50                  55                  60
Val Ser Asp Gly His Ser Arg Ser Gly Ser Val Ser Ser Ile Asp Glu
65                  70                  75                  80
Ala Thr Leu Ser Arg Tyr Gly Tyr Pro Thr Tyr Arg His Leu Pro Lys
                85                  90                  95
Tyr Thr Thr Gln Ala His Pro Ser Pro Ser Ala Pro Ala Thr Pro Val
            100                 105                 110
Thr Pro Asn Ile Val Val His Arg Pro Tyr Ser Gln Thr Ser Pro Asn
        115                 120                 125
Asp Gly Thr Pro Ser Pro Ile Gln Cys Gln Thr Gln Met Pro Leu Val
    130                 135                 140
Leu Pro Pro Ser Pro Phe Gly Gly Tyr Ala Arg Val Ser Ser Ala Gln
145                 150                 155                 160
Pro Ser Pro Val Gly Leu Ala Pro His Ala Ala Val Met Val Pro Gln
                165                 170                 175
Ser Thr Thr Leu Leu Ser Tyr Leu Thr Ser Pro Thr Gln Ala Ile Asn
            180                 185                 190
Leu Val Arg Asn Val Ser Val Ile Pro Thr Arg Gly Met His Asp Tyr
        195                 200                 205
Phe Trp Trp Asp Ile Arg Asn Leu Arg Ser Trp Thr Ser Phe Thr Leu
    210                 215                 220
Gln Thr Phe Asn Ser Ile Asn Gly Leu Thr Lys Leu Leu Arg Thr Ala
225                 230                 235                 240
Ile Ser Ser Asp Leu Thr Pro Pro Val Ala Val Ala Pro Ser Arg Leu
                245                 250                 255
Ser Pro Asp Ser Glu Ala Glu Leu Val Asn Leu Ile Arg Asp Ile Tyr
            260                 265                 270
Gly Pro Arg Val Asn Ala Ala Leu Ala Val Ser Gln Gly Pro Glu His
        275                 280                 285
```

```
Leu Lys Leu Tyr Leu Ala Pro His Leu Arg Ala Ser Asn Ser Lys Asn
    290                 295                 300
Thr Gly Gly Pro His Phe Leu Ala Asn Tyr Ala Ser Asp Thr Glu Gln
305                 310                 315                 320
Thr Ser Ser Gly Met Pro Arg Gly Arg Leu Val Gly Ile Val Lys Ser
                325                 330                 335
Phe Asp Arg Trp Asn Thr Gly Met Arg Asn Glu Ala Pro His Arg Arg
            340                 345                 350
Val Glu Tyr Leu Asn Gly Leu Ala His Leu Gln Arg Cys Met Arg Glu
        355                 360                 365
His Ser Cys Arg Tyr Gly Phe Ile Ile Thr Glu Ile Glu Leu Val Cys
    370                 375                 380
Val Arg Ala Gly Cys Asp Glu Gly Asp Asp Val Pro Tyr Phe Gly Phe
385                 390                 395                 400
Leu Glu Val Ser Ala Pro Ile Pro Thr Asn Ile Ala Val Asn Pro Glu
                405                 410                 415
Glu Arg Gly Leu Gln Pro Thr Ser Phe Ala Gln Ala Gln Ser Pro Glu
            420                 425                 430
Ala Ser His Asp Cys Arg Leu Ala Ala Glu Glu Cys Asp Pro Thr Cys
        435                 440                 445
Thr Phe Ala Asp Gly Leu Asn Val Pro Met Thr Ala Ser Leu Ala Leu
    450                 455                 460
Tyr Phe Leu Leu Met Leu Ser Lys Ser Val Pro Leu Pro Ser Gln Pro
465                 470                 475                 480
Ser Ala His Leu Asn Val Gly Gly Pro Gly Ala Leu Thr Arg Gln Arg
                485                 490                 495
Ile Leu Pro Glu Gly Lys Asp Lys Trp Ile Pro Glu Pro Gln Ile Gly
            500                 505                 510
Glu Arg Arg Asp Ala Lys Arg Val Arg Gly Trp Val Trp Pro Gln Asp
        515                 520                 525
Ala Trp His Arg Arg Glu Gly Gly Gly Val Pro Arg Gly Asn Arg Ser
    530                 535                 540
Arg Lys Asn Gly Pro Ser Asn Val
545                 550
```

<210> 35299
<211> 96
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (89)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 35299
Ile Leu Ser Lys Val Leu Asn His Phe Gly Ser Thr Gln Asp His Pro
1               5                   10                  15
Gly Met Ser Gly Phe Asp Pro Leu Leu Tyr Ser Arg Arg Ala Ile Pro
            20                  25                  30
Asn Ala Asp Arg Pro Asn Val Val Glu Trp Val Cys Gly Gln Val Ala
        35                  40                  45
Arg Gln Val Ser Glu Pro Cys Gly Arg Gln Cys Thr Lys Arg Glu Lys
    50                  55                  60
Ile His Met Asp Leu Ile Lys Val Val Asn His Asn Gly Lys Pro Tyr
65                  70                  75                  80
```

```
Trp Trp Arg Ile Arg Thr Ile Tyr Xaa Ser Pro Tyr Val Thr Val Ser
                85                  90                  95

<210> 35300
<211> 98
<212> PRT
<213> A.fumigatus

<400> 35300
His Ile Leu Val Pro Val Ile Gly Ile Pro Ile Gln Ala Leu Val Asn
1               5                   10                  15
Gln Lys Cys Lys Gln Asn Ile Ala Cys Cys Gln Asn Ser Pro Ser Asp
            20                  25                  30
Ala Val Ser Val Pro Leu Tyr Ile Cys Ser Ser Leu Leu Thr Ser Ile
        35                  40                  45
Arg Ala Val Pro Ser Leu Asp Trp Val Phe Leu Ala Leu Pro Leu Val
    50                  55                  60
Leu Ser Cys Lys Leu Leu Val Ala Ser Ala Val Gly Ala Leu Ser Gln
65                  70                  75                  80
His Leu Glu Ile Pro Tyr Gly Ser Trp Gly Arg Glu Gln Gly Pro Gly
                85                  90                  95
Ser Leu


<210> 35301
<211> 883
<212> PRT
<213> A.fumigatus

<400> 35301
Val Thr Trp Ala Lys Phe Leu Asn Ala His Gly Leu Glu Lys Arg Phe
1               5                   10                  15
Phe Phe Ala Lys Leu Ala Ile Thr His Leu Glu Arg Thr Ser Arg Pro
            20                  25                  30
Ile Arg Ile Ala Val Asp Ile Ser Ile Trp Leu Phe Gln Val Gln Ala
        35                  40                  45
Gly Arg Gly Gly Arg Asn Pro Glu Leu Arg Thr Leu Phe Tyr Arg Leu
    50                  55                  60
Leu Lys Phe Leu Ala Leu Pro Ile His Pro Leu Phe Val Tyr Asp Gly
65                  70                  75                  80
Lys Asp Lys Pro Pro Phe Lys Arg Gly Lys Ala Val Ser Gly Arg Ser
                85                  90                  95
Tyr Gly Asn Ala Pro Ile Ile Arg Leu Ser Lys Val Leu Ile Asp Leu
            100                 105                 110
Phe Lys Phe Pro Arg His Asp Ala Pro Gly Glu Ala Glu Ala Glu Cys
        115                 120                 125
Ala Arg Leu Gln Arg Ala Gly Val Val Asp Ala Val Met Ser Asn Asp
    130                 135                 140
Val Asp Ala Leu Met Phe Gly Ser Thr Leu Thr Val Met Asn Phe Ser
145                 150                 155                 160
Lys Glu Ser Gly Ser Gly Thr Ser Ala Ala Thr His Ile Thr Cys Tyr
                165                 170                 175
Arg Met Cys Gly Asp Gly His His Pro Ser Asn Val Pro Leu Asp Arg
            180                 185                 190
Ala Gly Met Ile Leu Phe Ala Met Leu Ser Gly Gly Asp Tyr Leu Pro
        195                 200                 205
```

```
Ser Gly Val Pro Lys Cys Gly Ser Lys Leu Ala Ala Glu Ile Ala Arg
    210                 215                 220
Ala Gly Phe Gly Gly Asp Leu Leu Asp Ala Ile Lys Ser Asp Gly Pro
225                 230                 235                 240
Glu Leu Asp Met Lys Leu Glu Glu Trp Lys Glu Arg Leu Gln Tyr Glu
                245                 250                 255
Leu Asp Glu Asn Glu Ser Gly Tyr Phe Gln Thr Lys His Lys Ala Val
            260                 265                 270
Arg Ile Pro Glu Ser Phe Pro Asp Arg Thr Val Leu Ser Tyr Tyr Ala
        275                 280                 285
Lys Pro Val Val Ser Ser Pro Gln Asp Ile Glu Val Leu Lys Thr Arg
    290                 295                 300
Leu Met Asn Ala Trp Asp Gln Glu Ile Asp Val Leu Glu Leu Arg Arg
305                 310                 315                 320
Phe Thr Ala Asp Ala Phe Glu Trp Asn Tyr Arg Ser Gly Ala Arg Lys
                325                 330                 335
Val Ile Lys Leu Leu Ala Glu Pro Leu Val Ser Tyr Arg Leu Arg Leu
            340                 345                 350
Gln Lys Ser Pro Ser Pro Leu Ala Gly Thr Thr Ser Leu Ser Gly Ser
        355                 360                 365
Asp Val Gln Met Leu Gln Arg Ile Tyr Lys Ser Arg Thr Ser Tyr Ser
    370                 375                 380
Thr Asp Gly Leu Thr Glu Leu Gln Leu Glu Ile Val Pro Ile Asp Val
385                 390                 395                 400
Val Gly Leu Asp Leu Leu Ala Glu Glu Pro Asn Pro Pro Ile Pro Ser
                405                 410                 415
Gln Glu Thr Thr Ile Val Ser Gly Asp Glu Asp Glu Asp Ala Glu Val
            420                 425                 430
Tyr Thr Glu Ala Thr Gly Gln Pro Pro Thr Lys Asn Arg Thr Gly Lys
        435                 440                 445
Arg Phe Asp Pro Tyr Ala Ala Glu Lys Val Trp Ile Phe Glu Thr Ile
    450                 455                 460
Ala Thr Ile Gly Val Pro Glu Val Val Arg Thr Trp Lys Lys Glu Gln
465                 470                 475                 480
Ala Glu Lys Ala Ser Ala Pro Lys Lys Ser Ser Asn Arg Lys Thr Gly
                485                 490                 495
Pro Lys Lys Lys Gly Pro Ile Asp Pro Gly Met Lys Arg Gly Ser Ile
            500                 505                 510
Leu Lys Tyr Gly Thr Leu Thr Lys Gln Arg Ser Asp Ile Ser Glu Phe
        515                 520                 525
Lys Gly Ala Gln Leu Phe Glu Ala Ala Met Ser Ala Thr Pro Pro Ser
    530                 535                 540
Lys Leu Arg Ala Pro Glu Leu Leu Arg Ala Glu Ser Ser Pro Asp Ala
545                 550                 555                 560
Leu Met Arg Ser Thr Pro Val Tyr Gly Pro Tyr Ser His Lys Arg Arg
                565                 570                 575
Leu Asp Ile Gln Pro Gln Lys His Gln Ile Val Asp Asp Leu Val Asp
            580                 585                 590
Ser Phe Thr Ser Ser Cys Thr Ile Ser Ser Met Pro Asp Val Lys Arg
        595                 600                 605
His Pro Met Ala Thr Leu Ser Arg Met Gly Ser Arg Leu Ala Val Val
    610                 615                 620
Arg Ser Gly Asn Val Glu Val Gln Thr Leu Asp Phe Ser Ser Ala Glu
625                 630                 635                 640
Pro Val Phe Asn Ser Ser Pro Ser Cys Ala Ser Pro Gly Arg Ile Lys
                645                 650                 655
```

```
Ile Ser Tyr Ser Asn Val Arg Tyr Gly Asp Thr Ala Asp Ser Asp Leu
            660                 665                 670
Ser Ser His Thr Lys Ser Val Val Ser Pro Ser Ser Pro Gly Ser Glu
        675                 680                 685
Ser His Gln Gln Lys Lys Ser Arg Pro Val Lys Ala Ser Val Glu Pro
    690                 695                 700
Arg Arg Gly Val Glu Val Gln Glu Leu Glu Asp Ile Met Ser Ala Val
705                 710                 715                 720
Thr Leu Ser Asp Gly Ser Pro Tyr Glu Gln Phe Asp Arg Leu Ala Gln
                725                 730                 735
Thr Pro Thr Gly Leu Lys Val Arg Ser Leu Ser Gly Leu Lys Ile His
            740                 745                 750
Glu Val His Ala Leu Ala Ala Glu Ala Gln Ile Ala Arg Ser Ser Arg
        755                 760                 765
Thr Lys Glu Leu Val Ser Pro Thr Ala Glu Arg Ser Ile Val Lys Ala
    770                 775                 780
Pro Gly Val Arg Leu Pro Pro Ser Ala Pro Lys Thr Leu Ala Met Asp
785                 790                 795                 800
Ala Gly Val Asp Asp Ala Leu Glu Pro Thr Thr Lys Glu Glu Lys Arg
                805                 810                 815
Val Glu Ser Ser Ser Lys Val Ser Arg Pro Arg Gln Thr Ser Ser His
            820                 825                 830
Leu Glu Ser Val Ile Val Cys Gly Gly Phe Trp Thr Thr Glu Ala Lys
        835                 840                 845
Ser Gln Ser Glu Leu Ala Ser Glu Glu Thr Glu Arg Asp Ser Ser Asn
    850                 855                 860
Asn Asp Glu Lys Arg Lys Lys Lys Arg Ile Pro Arg Val Ser Ile Leu
865                 870                 875                 880
Asp Leu Ser
```

<210> 35302
<211> 90
<212> PRT
<213> A.fumigatus

<400> 35302

```
Leu Ala Ala Asp Glu Phe Ser Ser Phe Ala Asp Leu Asp Val Val Ala
1               5                  10                  15
Lys Arg Lys Thr Leu Phe Asp Asp Arg Pro Val Glu Ile Ser Glu Leu
            20                  25                  30
Thr Tyr Val Ile Lys Gln Asp Leu Ala Ser Leu Asn Gln Gln Ile Ala
        35                  40                  45
Ser Leu Gln Ala Leu Thr Leu Ser Gln His Pro Lys Thr Asn Arg Ser
    50                  55                  60
Lys Ala Asp Gln Glu Gly Glu His Asn Asp Asn Val Arg Glu Leu Arg
65                  70                  75                  80
Val Ala Gly Leu Arg Asn Ala Asn Ala Thr
                85                  90
```

<210> 35303
<211> 202
<212> PRT
<213> A.fumigatus

<400> 35303

```
Val Val Val Met Leu Gln Gly Lys Leu Ala Asp Val Gly Ala Asn Phe
1               5                  10                  15
Lys Glu Val Leu Glu Val Arg Thr Lys Asn Ile Gln Ala Ser Arg Ser
            20                  25                  30
Arg Thr Glu Asn Phe Val Ser Ser Val Ser Ser Lys Ser Gln Val Leu
        35                  40                  45
Asp Pro Gln Arg Ser Asp Ser Pro Leu Tyr Ile Pro Ser Gly Arg Arg
    50                  55                  60
Thr Pro Gln Pro Gly Phe Gln Gly Gly Ser Ser Asp Leu Leu Thr Leu
65                  70                  75                  80
Asp Pro Ser Asn Pro Ser Pro Leu Gly Arg Pro Ser Phe Gln Thr Asp
                85                  90                  95
Gln Gln Leu Leu Val Met Glu Glu Ala Gln Thr Asn Asn Thr Tyr Ile
            100                 105                 110
Gln Ala Arg Gly Glu Ala Ile Asp Ala Ile Glu Arg Thr Ile Ser Glu
        115                 120                 125
Leu Gly Gly Ile Phe Gly Gln Leu Ala Gln Met Val Ser Glu Gln Ser
    130                 135                 140
Glu Met Ile Gln Arg Ile Asp Ala Asn Thr Glu Asp Val Val Asp Asn
145                 150                 155                 160
Val Glu Gly Ala Gln Arg Glu Leu Met Lys Tyr Trp Asn Arg Val Ser
                165                 170                 175
Gly Asn Arg Trp Leu Ile Ala Lys Met Phe Gly Val Leu Met Val Arg
            180                 185                 190
Phe Leu Ser Ser Arg Cys His Cys Gly Ser
        195                 200
```

<210> 35304
<211> 882
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (639)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35304

```
Ser Val Ala Cys Ser Gln Trp Ser Leu Ser Val Asp Phe Trp Thr Thr
1               5                  10                  15
Asp Glu Glu Asp Ala Arg Arg Pro Leu Tyr His Leu Thr Phe Ser Phe
            20                  25                  30
Ser Gly Leu Met Arg Pro Ala Leu Leu Arg Leu Leu Lys Arg Pro Ser
        35                  40                  45
Ala Val Ser Val Leu Asp Ser Leu Ile Ser Lys Ser Ile Ser Ile Asp
    50                  55                  60
Gln Leu Glu Ser Lys Asn Lys Cys Leu Arg Cys Ser Leu Arg Arg Val
65                  70                  75                  80
His Gln Asn Ala Ser Ala Arg His Trp Glu Val Asp Glu Pro Arg Asn
                85                  90                  95
Glu Thr Ser Thr His Leu Asn Gln Ser Pro Thr Ser Arg Pro Tyr Ser
            100                 105                 110
Phe His Val Tyr Asn Ile Gln Ser Pro Gln Asn Thr Gly His Asp Cys
        115                 120                 125
Thr Met Arg Gln Asp Asn Ala Pro Thr Ser Ser Met Ala Asn Asn Asp
    130                 135                 140
```

```
Ala Ser Leu Arg Leu Asp Leu Gln Pro Asp Lys Leu Glu Phe Glu Ser
145                 150                 155                 160
Asp Ile Gly His Thr Gln Asp Met Gly Ser Arg Leu Val Asp Asp Pro
                165                 170                 175
Ala Tyr Arg Gln Arg Met Asp Leu Trp Glu Gln Leu Leu Arg Tyr Arg
            180                 185                 190
Gln Arg His Tyr Gly Asp Arg Gly Thr Leu Asp Ile Trp Ile Ala Leu
        195                 200                 205
Thr Asp Arg Val Asp Gly Val Asp Leu Pro Val Val Gly Glu Gln Ala
    210                 215                 220
Asp Phe Phe Trp His Ser Phe Val Asp Leu Gly Leu Lys Arg Glu Val
225                 230                 235                 240
Ile Met Gly Glu Ile Met Ala Tyr Ala Met Glu Leu Trp Lys Glu Thr
                245                 250                 255
Gly Ser Arg Trp Asp Lys Phe Tyr Glu Val Val Val Gly Gly Tyr Leu
            260                 265                 270
Glu Arg Gly Met Ile Gln His Ala Ile Arg Trp His Lys Lys Leu Gln
        275                 280                 285
Tyr Pro His Leu Ser Cys Pro Asn Asp Ile Met Arg Val Phe Glu Pro
    290                 295                 300
Ala Leu Thr Met Ile Asn Gly Ser Thr Lys Ile Val Leu Pro Thr Thr
305                 310                 315                 320
Thr Thr Arg Arg Ser Val Ser Pro Gly Ile Ser Ala Phe Lys Ser Ile
                325                 330                 335
Cys Arg Leu Thr Asp Gly His Gln Ile Tyr Gly Arg Val Ile Ser Gln
            340                 345                 350
Leu Leu Asn Leu Gly Arg Val Glu Asp Ala Phe Ser Leu His Ser Phe
        355                 360                 365
Leu Val Glu Arg His Asp His Pro Gln Thr Tyr Glu Glu Ile Leu Pro
    370                 375                 380
Leu Leu Glu Cys Ala Lys Glu Leu Asn Pro Arg Lys Phe Tyr Glu Leu
385                 390                 395                 400
Gln Ala Tyr Ser Lys Asp Arg Phe Pro Asp Arg Met Thr Ser Ala Glu
                405                 410                 415
Gly Ser Ala Pro Ala Glu Glu Asp Asp Lys Arg Glu Pro Ser Gly Ile
            420                 425                 430
Ala Trp Leu Gln Glu Lys Pro Phe Lys Asp Glu Leu Gly Ala Arg Leu
        435                 440                 445
Phe Ala Thr Lys Ala Leu Ala Phe Glu Thr Thr Val Ala Gly Leu Arg
    450                 455                 460
Met Phe Gly Val Gln Ala Ile Gly Pro Gln Ser Leu Arg Glu Met Ala
465                 470                 475                 480
Val Arg Ala Gln Gly Ser Gln Asp Ile Ile Ala Arg Leu Arg Glu Leu
                485                 490                 495
His Arg Ala Gly Ile Ser Ile Gly Asp Ser Val Phe Ala Arg Leu Ile
            500                 505                 510
Arg Lys Leu Ala Ser Glu Asn Arg Asn Ile Leu Leu Ser Asp Leu Leu
        515                 520                 525
His Ser Asp Gln His Pro Asp Val Leu Glu Asp Ala Val Met Gln Glu
    530                 535                 540
Ser Leu Leu Ile Ser Tyr Tyr Ile Ala Arg Asp Trp Arg Pro Tyr Asn
545                 550                 555                 560
Met Thr Leu Ala Ile Leu Thr Glu Ile Leu Asp Asp Gly Ser Lys Leu
                565                 570                 575
Ser Asn Ile His Phe Arg Lys Phe Ile Ala Ser Gly Glu Trp Ala Ser
            580                 585                 590
```

```
Ala Ser Lys Ile Val Asp Glu Met Thr Leu Asn Gly Gln Lys Leu Thr
        595                 600                 605
Gln Glu Ser Val Asp Phe Met Val Lys His Thr Leu Thr Pro Arg Arg
    610                 615                 620
Pro Gly Val Gly Pro Ile Gln Gly Thr Asp Val Pro Ser Ser Xaa Glu
625                 630                 635                 640
Val Ser Phe Val Phe Arg Val Leu Gln Arg Val Val Pro Met Gly Thr
                645                 650                 655
Ser Val Ser Pro Asp Leu Trp Ile Glu Met Leu Lys Arg Leu Gly Met
            660                 665                 670
Thr Asn His Trp Asp Glu Leu Arg Arg Cys Cys Leu Trp Leu Ala Arg
        675                 680                 685
Gln Tyr Ser Ala Gly Pro Lys Pro Ser Asp Ala Val Ser Phe Ile Ile
    690                 695                 700
Asn Ser Thr Asp Gln Pro Arg Arg Glu Ala Asp Gly Val Ala Arg Asn
705                 710                 715                 720
Asp Gly Asp Arg Met Leu Gln Ala Val Phe Ser Lys Asn Val Gln Ala
                725                 730                 735
Ala Ile Val Ala Trp Gly Phe Lys Met Arg Val Ser Pro Asn Pro Asp
            740                 745                 750
His Lys Ser Tyr Ser Ala Leu Gly Val Glu Asn Leu Val Pro Trp Val
        755                 760                 765
Arg Gly Leu Val Leu Leu Arg Glu Leu Glu His Asn Gly Ile Arg Leu
    770                 775                 780
Trp His Ser Trp Ile Arg Arg Ala Cys Arg His Arg Leu Ala Val Leu
785                 790                 795                 800
Phe Gly His Ser Arg Gln Ser Ser Arg His Met Asn Arg Met Leu Arg
                805                 810                 815
Arg Glu Cys Pro Tyr Ser Pro Glu Arg Val Ile Ala Asp Ile Asp Arg
            820                 825                 830
Val Trp Gly His Pro Pro Leu Phe Ser Gly Gln Gln Asp Asp Leu Ser
        835                 840                 845
Gln Leu Val Asn Pro Pro Ser Ser Asn Met Ser Gln Arg Arg Thr Gly
    850                 855                 860
Arg Thr Leu Trp Arg Glu Ala Arg Leu Lys Gly Ala Ala Phe Val Lys
865                 870                 875                 880
Thr Lys
```

<210> 35305
<211> 969
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (23),(29),(32),(38)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35305

```
Pro Ile Leu Leu Val Pro Gly Gly Ser Ile Gly Pro Arg Met Tyr Ser
1               5                   10                  15
Ser Met Val Gln Gly Arg Xaa Leu Leu Ser Phe Ala Xaa Pro Cys Xaa
            20                  25                  30
Ile Val Ala His Arg Xaa Tyr Pro Pro Thr Leu Ala Leu Phe Ala Arg
        35                  40                  45
```

```
Arg Phe His Leu Thr Pro Lys Trp Leu Ser Ser Ala Pro Ser Asp Pro
    50                  55                  60
Ser Asp Phe Arg Asn Ser Pro Pro Glu Ser Val Ala His Asp Ile Pro
65                  70                  75                  80
Ser Leu Asn Ser Glu His Thr Pro Ser Lys Asp Ala Pro Leu Thr Ser
                85                  90                  95
Pro Val Ala Pro Thr Glu Gln Val Val Lys Lys Asp Pro Gly Pro Tyr
            100                 105                 110
Gly Ser Gly Val Arg Arg Ala Leu Arg Asn Arg Arg Gln Gly Lys Asp
        115                 120                 125
Leu Ile Ala Pro Ile Ala Thr Val Pro Gln Trp Phe Arg Glu Arg Asn
    130                 135                 140
Thr Val Leu His Gly Val Glu Gly Gln Ala Val Ala Gln Ser Gln Pro
145                 150                 155                 160
Gln Val Glu Ile Lys Arg Leu Glu Thr Asp Glu Lys Lys Ala Glu Val
                165                 170                 175
His Ala Gln Ser His Gly Gly Asp Gly Gly Asn Pro Leu Pro Ser Glu
            180                 185                 190
Thr Gln Ser Gly Thr Ser His Arg Tyr Val Leu Ser Glu Ala Leu Trp
        195                 200                 205
Glu Glu Leu Cys Ala Ser Ala Lys Ala Gly Leu Arg Leu Pro Pro Pro
    210                 215                 220
Lys Tyr Ala Gln Glu Pro Ser Ala Gln Lys Ser His Leu Val Leu Gln
225                 230                 235                 240
Tyr Pro Gly Ala Asp Gly Ile Leu Phe Leu Asp Ala Val Val Lys Arg
                245                 250                 255
Leu Ala Gln Glu Leu Gly Ala Asp Val Val Thr Leu Asp Ala Gln Asp
            260                 265                 270
Ile Ala Gln Leu Cys Ser Glu Gln Asp Met Val Asp Ser Gly Ala Thr
        275                 280                 285
Ser Pro Ile Arg Ser Leu Gly Tyr Glu Val Tyr Arg Pro Ser Ile Ala
    290                 295                 300
Glu Ser Trp Gln Glu Ser Gly Asp Asn Leu Asn Glu Ser Glu Ala Asp
305                 310                 315                 320
Asp Thr Asp Phe Ile Asp Ala Pro Val Pro Pro Arg Asn Phe Arg Pro
                325                 330                 335
Gly Leu Lys Gly Ala Lys Phe Ile Thr Ile Ser Ser Ala Ser Asn Asn
            340                 345                 350
Gly Asp Ile Pro Leu Pro Ser Ile Leu Gly Leu Lys Ser Leu Met Thr
        355                 360                 365
Ser Phe Asn Gly Pro Leu Asp Gly Thr Ala Thr Ala Gln Ser Pro Ser
    370                 375                 380
Asp Arg Val Glu Asp Arg Arg Leu Arg Leu Val His Glu Leu Ile Ser
385                 390                 395                 400
Ser Pro Ser Lys Arg Ser Lys Gln Val Ser Glu Thr Glu Ser Ser Ser
                405                 410                 415
Glu Ala Pro Ala Ala Ala Val Arg Asp Val Ile Val Gln Val Gln Asp
            420                 425                 430
Tyr Gly Glu Ile Gln Ala Thr Arg Glu Gly Ala Lys Phe Ile Thr Leu
        435                 440                 445
Leu Gln Lys Ala Ile Met Asp Arg Arg Lys Ala Gly Thr Arg Val Leu
    450                 455                 460
Phe Ile Gly Thr Ser Ala Gln Glu Val Ser Pro Asp Ser Asp Ser Ala
465                 470                 475                 480
Arg Leu Met Gln Asn Ala Phe Asp Asp His Phe Ser Gln Met Leu Val
                485                 490                 495
```

```
Ile Thr Pro Gly Met Glu Ser Lys Leu Val Glu Lys Thr Phe Thr Glu
            500                 505                 510
Asp Arg Lys Met Arg Thr Leu Gly Ile Asn Ile Arg His Met Gln Asp
        515                 520                 525
Met Leu Arg Thr Arg Leu Asn Glu Ser Ser Ser Ala Val Arg Asp Ser
    530                 535                 540
Ile Phe Glu Asn Arg Ser Trp Pro Leu Ser Pro Ser Leu Val Lys Glu
545                 550                 555                 560
Ser Gly Leu Asp Glu Arg Tyr Trp Pro Tyr Ser Gln Ile His Trp Ala
                565                 570                 575
Thr Thr Leu Ala Leu Gly Ser Val Gly Pro Asn Glu Pro Leu Gly Ile
            580                 585                 590
Glu His Ile Gln Arg Gly Ile Glu Met Met Leu Lys Thr Asp Gln Thr
        595                 600                 605
Lys Asn Ala Trp Leu Arg Glu Arg Ala Pro Arg Ser Thr Leu Glu Ala
    610                 615                 620
Gly Thr Asp Arg Glu Arg Leu Leu Asn Ser Leu Arg Lys Thr Cys Asn
625                 630                 635                 640
Ser His Glu Lys Lys Leu Leu Asn Gly Val Val Asp Ala Asn Asn Ile
                645                 650                 655
Arg Thr Thr Phe Ala Asp Val His Val Pro Pro Glu Thr Ile Asp Ala
            660                 665                 670
Leu Lys Thr Leu Thr Ser Leu Ser Leu Ile Arg Pro Glu Ala Phe Thr
        675                 680                 685
Tyr Gly Val Leu Ala Thr Asp Lys Ile Pro Gly Leu Leu Leu Tyr Gly
    690                 695                 700
Pro Pro Gly Thr Gly Lys Thr Leu Leu Ala Lys Ala Val Ala Arg Glu
705                 710                 715                 720
Ser Gly Ala Thr Val Leu Glu Val Ser Gly Ser Glu Val Tyr Asp Met
                725                 730                 735
Tyr Val Gly Glu Gly Glu Lys Asn Val Lys Ala Ile Phe Thr Leu Ala
            740                 745                 750
Lys Lys Leu Ser Pro Cys Val Val Phe Ile Asp Glu Ala Asp Ala Ile
        755                 760                 765
Phe Cys Ser Arg Thr Gly Thr Ser Ser Arg Thr Ser His Arg Glu Leu
    770                 775                 780
Ile Asn Gln Phe Leu Arg Glu Trp Asp Gly Met Asn Asp Met Ser Ala
785                 790                 795                 800
Phe Ile Met Val Ala Thr Asn Arg Pro Phe Asp Leu Asp Asp Ala Val
                805                 810                 815
Leu Arg Arg Leu Pro Arg Arg Leu Leu Val Asp Leu Pro Thr Glu Gln
            820                 825                 830
Asp Arg Leu Ala Ile Leu Lys Ile His Leu Lys Asp Glu Thr Leu Asp
        835                 840                 845
Gln Ser Val Asp Leu Ala Glu Leu Ala His Arg Thr Pro Leu Tyr Ser
    850                 855                 860
Gly Ser Asp Leu Lys Asn Leu Cys Val Ala Ala Ala Leu Ala Cys Val
865                 870                 875                 880
Arg Glu Glu Asn Asp Leu Ala Ala Lys His Gln Gly Pro Glu Pro Tyr
                885                 890                 895
Gln Tyr Pro Ala Arg Arg Ile Leu Thr Arg Ala His Phe Glu Arg Gly
            900                 905                 910
Met Glu Glu Ile Ser Ala Ser Ile Ser Glu Asp Met Ser Ser Leu Ser
        915                 920                 925
Ala Ile Arg Lys Phe Asp Glu Gln Tyr Gly Asp Arg Lys Gly Arg Arg
    930                 935                 940
```

```
Lys Lys Ser Ala Gly Trp Gly Phe Met Pro Leu Gly Thr Glu Gln Ala
945                 950                 955                 960
Glu Thr Asp Ala Ala Arg Val Arg Thr
                965
```

<210> 35306
<211> 290
<212> PRT
<213> A.fumigatus

<400> 35306

```
Gln Ala Ile Pro Gly Met Asn Pro Gly Asn Phe Ala Pro Ala Met Ala
1               5                  10                  15
Tyr Ser Ala Leu Leu Asn Leu Asp Gly Gln Gly Lys Arg Asp His Val
            20                  25                  30
Leu Ile Leu Cys Arg His Thr Phe Gly Thr Lys Tyr Pro Val Asp Thr
        35                  40                  45
Pro Arg Ser Arg Gln Val Leu Pro Ile Arg Pro Arg Ser Ala Ser Ser
    50                  55                  60
Leu Glu Gln Arg Thr Asn Ser Ala Asn Val Val Ala Gln Pro Arg Asn
65                  70                  75                  80
Ser Asp Asp Asp Gly Thr Leu Ala Val Asp Lys Gly Arg Glu Gly Ala
                85                  90                  95
Val Lys Val Met Ala Arg Phe Ser Glu Ser Gly Gly Gln Glu Ala Lys
            100                 105                 110
Thr Leu Glu Glu Tyr Gln Arg Leu Ala Ala Val Ala Asp Pro Gln Tyr
        115                 120                 125
Asn Cys Leu Leu Arg Pro Leu Glu Met Lys Arg Leu Pro Ser Arg Asp
    130                 135                 140
Pro Glu Arg Glu Pro Pro Leu Val Val Cys Ile Tyr Glu Ser Pro Gly
145                 150                 155                 160
Gln Asn Asp Leu Leu Lys Phe Ile Asp Cys Gly Leu Thr Trp His His
                165                 170                 175
Gly Ser Leu Asn Val Asp Gly His Asp Thr Ser Ser Pro Arg Cys Tyr
            180                 185                 190
Arg Asp Lys Pro Met Pro Leu Ser Thr Ile Leu Gly Phe Ala Ile Gly
        195                 200                 205
Ala Ala Glu Cys Ile Lys Ile Leu His Ser Gln Gln Ile Val His Gly
    210                 215                 220
Glu Ile Trp Ala Asp Ser Phe His Phe Ser Glu Glu Thr Gly Glu Val
225                 230                 235                 240
Lys Leu Ile His Leu Gly Ala Gly Leu Arg His Tyr His Ser Asp Leu
                245                 250                 255
Arg Asn Ala Thr Trp Ser Ala Leu Ala Asn Gln Asp Gly Ala Thr Ala
            260                 265                 270
Arg Ile Ser Tyr Glu Pro Gly Ala Asp Gly Pro Asp Ala His Ser Thr
        275                 280                 285
Arg Gln
    290
```

<210> 35307
<211> 399
<212> PRT
<213> A.fumigatus

<400> 35307

```
Leu Phe Val Leu Met Lys Val Val Phe Pro Phe Leu Ser Pro Phe Pro
1               5                  10                  15
Trp Pro Lys Pro Asn Pro Ile Lys Leu Ala Gly Phe Arg Lys Ala Arg
            20                  25                  30
Asp Val Gly Val Thr Ala Ile Thr Leu Ser Pro Leu Asn Glu Asp Ser
        35                  40                  45
Val Met Glu Tyr Val Ala Asn Thr Leu Tyr Pro Phe Val Pro Leu Ile
    50                  55                  60
Trp Pro Leu Gly Ala Leu Ile Gln Ser Leu Ala Gly Gly Asn Pro Phe
65                  70                  75                  80
Tyr Val Arg Glu Ile Leu Ser Val Cys Tyr Arg Gln Lys Phe Val Trp
                85                  90                  95
Tyr Asp Tyr Gln Asp Gly Ser Trp Ser Phe Asp Leu Arg Arg Ile Ser
            100                 105                 110
Asp Tyr Phe Lys Ala Asp Asp Tyr His Glu Ala Val Leu Asp Asp Phe
        115                 120                 125
Leu Val Ser Arg Leu Asn Ser Leu Pro Pro Val Thr Lys Ser Ile Leu
    130                 135                 140
Ala Trp Ala Ser Ser Val Gly Met Ser Phe Ser Phe Gln Leu Val Arg
145                 150                 155                 160
Arg Leu Leu Arg Gly Asp Lys Ala Thr Ser Lys Ala Gly Leu Pro Glu
                165                 170                 175
Val Ala Met Ile Gln Glu Leu Gln Pro Ala Met Glu Ala Tyr Val Ile
            180                 185                 190
Ala His Thr Lys Tyr His Asp Val Phe Ser Phe Thr Tyr Asn Arg Tyr
        195                 200                 205
Met His Ile Ala Ala Ser Phe His Thr Lys Ala Lys Asp His Val His
    210                 215                 220
Phe Ile Leu Ala Gln Val Leu Phe Gln Tyr Tyr Ser His Asp Asp Lys
225                 230                 235                 240
Tyr Arg Thr Met Leu Ala Ser Ser Ile Ile Glu Ser Ala Ala Val Ile
                245                 250                 255
Lys Arg Ser Leu Thr Arg Arg Gln Pro Phe Arg Lys Phe Leu Val Asp
            260                 265                 270
His Ala Lys Ala Ala Asn Glu Thr Gly Phe Arg Ser Thr Ala Val Asp
        275                 280                 285
Ser Tyr Ala Cys Cys Ile Val Leu Leu Gln Asp Asn Met Trp Asp Asp
    290                 295                 300
Asn Ala Glu Asp Val Ser Tyr Asp Glu Thr Leu His Ile Phe Thr Ala
305                 310                 315                 320
Ala Ala Glu Cys Tyr Leu Tyr Gln Gly Gln His Ala Lys Ala Gly Cys
                325                 330                 335
Leu Leu Gln Ser Ile Leu Ser His Thr Arg Ser Ala Val Asp Lys Ala
            340                 345                 350
Pro Ala Trp Ile Leu Gln Ser Arg Leu Leu Ala Gln Gln Gly Asn Leu
        355                 360                 365
Thr Asp Ala Phe Lys Ala Leu Lys Ala Cys Leu Gly Thr Leu Gly Leu
    370                 375                 380
Gly Ile Asp Asp Asp Leu Thr Phe Ala Lys Cys Asp Asn His Phe
385                 390                 395
```

<210> 35308
<211> 127
<212> PRT
<213> A.fumigatus

<400> 35308
Phe Thr Trp Glu Pro Val Tyr Gly Ile Ile Thr Pro Thr Ser Glu Met
1 5 10 15
Gln Leu Gly Pro Leu Trp Gln Thr Arg Met Ala Leu Arg Pro Gly Tyr
20 25 30
His Met Ser Pro Glu Gln Thr Gly Gln Thr Pro Ile Gln Pro Asp Ser
35 40 45
Arg Ala Asp Ile Tyr Ser Leu Gly Ile Leu Leu Trp Gly Val Leu Val
50 55 60
Gln Glu Ala Pro Phe Arg Gly Arg Thr Pro Met Glu Ile Ile Arg Ala
65 70 75 80
Val Leu Gly Glu Glu Leu Pro Leu Val Ser Ser Leu Arg Pro Asp Val
85 90 95
Pro Asp Ile Ile Ala Arg Val Ile Ala Lys Ala Thr Ala Lys Asn Ala
100 105 110
Trp Glu Arg Tyr His Ser Val Ser Gly Leu Arg His Asp Leu Val
115 120 125

<210> 35309
<211> 343
<212> PRT
<213> A.fumigatus

<400> 35309
Leu Arg Arg Leu Leu Ala Ala Arg Glu Pro Asp Gly Lys Asp Asn Asp
1 5 10 15
Glu Arg Ala Ala Ser Thr Ala Glu Glu Leu Glu Asn Trp Lys Ile Gly
20 25 30
Ser Lys Asp Val Ser Pro Phe Phe Thr Leu Pro Arg Ile Met Val Gly
35 40 45
Arg Thr Gln Glu Arg Asn Ala Ile Val Glu Ile Leu Asp Arg Met Tyr
50 55 60
Gln Met Tyr Gln Ala Arg Lys Gly Leu Gln Leu Ser Leu Leu Pro Glu
65 70 75 80
Gly Gln Phe Asp Thr Phe Asp Ala Leu Ala Phe Pro Ser Asp Thr Thr
85 90 95
Gly Glu Glu Asp Gly His His Ser Met Asp Val Phe Pro Arg Leu Leu
100 105 110
Ala Ser Thr Asn Gly Val Arg Arg Ser Tyr Thr Ala Asn Thr Thr Arg
115 120 125
Met Arg Ser Pro Ala Asp Ser Arg Tyr Ala Ser Phe Glu Ser Ile Glu
130 135 140
Ser Thr Ala Gly Ser Ser Asp Thr Lys Thr Ala Asp Lys Arg Leu Ser
145 150 155 160
Thr Pro Ser Ile Asp Ser Ala Ser Val Glu Gly Ser Ser Arg Ser Ser
165 170 175
Asp Ser Ala Gly Arg Thr Ala Ala His Cys Met Ile Val Pro Lys Gly
180 185 190
Arg Cys Glu Leu Ile Thr Ile Glu Gly Gly Ala Gly Leu Gly Lys Thr
195 200 205
Arg Leu Ile Thr Ser Val Gln Ile Glu Ala Arg Gln Arg Gly Phe Phe
210 215 220
Ala Ser Ser Arg Leu Asp Pro Ala Ala Lys Glu Arg Leu Arg Pro Val
225 230 235 240
Leu Gln Leu Phe Ser Ser Leu Phe Glu Gln Glu Phe Ser Glu Asn Thr
245 250 255

```
Ile Val Pro Ser Phe Leu Pro Met Leu Arg Asn His Ile Gly Phe Ala
            260                 265                 270
Trp Asn Thr Leu His Lys Val Leu Gly Leu Pro Lys Phe Leu Leu Gly
        275                 280                 285
Ser Gly Pro Asp Leu Pro Asp Gln Thr Ser Lys Arg Ala Ser Thr Thr
    290                 295                 300
Ser Pro Thr Ser Ser Arg His Thr Gly Thr Leu Arg Val Ser Ser Asp
305                 310                 315                 320
Arg Ile Val Tyr Gln Val Pro Ala Ala Arg Pro His Pro Ala Gly Tyr
                325                 330                 335
Ser Ala Ser Phe Leu Ala Ile
            340
```

<210> 35310
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (26),(54)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35310

```
Ala Arg Arg His Ala Asn Asp Leu Leu Pro Phe Val Ser Pro Leu Thr
1               5                   10                  15
Ile Gly Thr Trp Tyr Tyr Leu Arg Ile Xaa Tyr Ser Tyr Cys Lys Tyr
            20                  25                  30
Ile Gln Glu Ile Glu Gly Ser Ile Ser Tyr Tyr Asn Val Lys Asn Asn
        35                  40                  45
Arg Lys Gly Phe His Xaa Val Ser Ala Tyr Thr Val Ser Val
    50                  55                  60
```

<210> 35311
<211> 183
<212> PRT
<213> A.fumigatus

<400> 35311

```
Pro Val Cys Trp Thr Ser Asn Pro Asp Asn Thr Gly Leu Gly Val Thr
1               5                   10                  15
Lys Arg Cys Val His Pro Ala Thr Ile Thr Phe His Ala Ala Asn Ala
            20                  25                  30
Val Cys Leu Thr Glu Ser Ala Leu Asp Asp Ala Ile Ala Ala Arg Gln
        35                  40                  45
Asp Ala Arg Lys Gln His Arg Ala Glu Ala Arg Leu His Lys Ser Glu
    50                  55                  60
Met Arg Gln Ile Glu Asp Glu Ile Ala Pro Arg Ala Glu Pro Gly Thr
65                  70                  75                  80
Arg Glu Arg Arg Met Glu Lys Arg Arg Glu Ala Ala Leu Ala Asn Arg
                85                  90                  95
Ala Phe Ala Glu Ser Arg Arg Gly Gly Ser Pro Ile Glu Ala Ala Pro
            100                 105                 110
Asp Asp Glu Leu Met Gly Ser Gly Glu Asn Asp Leu Asp Ala Ile Lys
        115                 120                 125
Lys Ala Gln Ala Arg Glu Gln Arg Lys Lys Asn Glu Arg Glu Ile Arg
```

```
    130                 135                 140
Arg Glu Glu Ile Leu Arg Ala Arg Ala Ala Glu Arg Glu Glu Arg Leu
145                 150                 155                 160
Gln Gln Tyr Arg Lys Lys Glu Glu Glu Thr Ile Gly Trp Leu Lys Thr
                165                 170                 175
Leu Ala Lys Gln Arg Phe Gly
            180
```

<210> 35312
<211> 139
<212> PRT
<213> A.fumigatus

<400> 35312

```
Arg Trp Leu Ser Leu Tyr Leu Thr Thr Leu Lys Gly Ile Arg Ser Pro
1               5                   10                  15
Pro Glu Glu Leu His Thr Met Ser Thr Arg Asp Tyr Arg His Arg Glu
            20                  25                  30
Arg Ser His Arg Asp His Asp Ser Arg Ser Arg Ser Arg Ser Pro Asp
        35                  40                  45
Arg Ser Gly Arg His Lys Arg His His His His Arg Arg Arg His Ser
    50                  55                  60
His His Arg His Arg Asp Tyr Ser His Asp Arg Asp Arg His Ser Gln
65                  70                  75                  80
Ser Ala Ser Ser Ala Pro Ala Val Leu Pro Phe Lys Ala Arg Glu Leu
                85                  90                  95
Ser Lys Arg Asp Leu Thr Tyr Tyr Ala Pro Met Phe Ala Met Tyr Leu
            100                 105                 110
Asp Ile Gln Lys Gly Leu Ile Met Glu Asp Leu Ser Glu Glu Glu Ile
        115                 120                 125
Lys Gly Arg Trp Lys Ser Phe Ile Arg Lys Trp
    130                 135
```

<210> 35313
<211> 94
<212> PRT
<213> A.fumigatus

<400> 35313

```
His Phe Gln Pro Ser Ile Ser Thr Thr Pro Val Trp Gln Phe Asp Lys
1               5                   10                  15
Glu Thr Thr Asn Asn Met Ala Leu Arg Glu Ile Lys Gly Thr Pro Gly
            20                  25                  30
Asn His Ile Leu Ser Asp Val Ile Glu Asp Ile Leu Asn Tyr Lys Gln
        35                  40                  45
Ile Ser Ser Asp Gln Thr Arg Phe Gly Arg Trp Ser Arg Asp Val Asn
    50                  55                  60
Asp Ala Glu Thr Ile Lys Arg Ala Ser Val Pro Tyr Ser Leu Ile Leu
65                  70                  75                  80
Leu Leu Pro Val Ile Thr Cys Asn Leu Ile Val Asn Leu His
                85                  90
```

<210> 35314
<211> 553
<212> PRT
<213> A.fumigatus

<400> 35314

```
Pro Trp Leu Ile Val Phe Tyr Arg Gln Gly Val Asn Val Arg Val Ser
1               5                  10                  15
Asn Ile Tyr Lys Leu Asn Ser Glu Leu Leu Ala Val Leu Ser Ser Ser
            20                  25                  30
Pro Gln Ala Asp Ala Glu Pro Ile Ser Asp Lys Ser Ala His Thr Asn
        35                  40                  45
Gly Pro Leu Gln Ala Gln Ala Asn Val Asn Pro Ser Ser Asp Pro Phe
    50                  55                  60
Ala Ser Thr Thr Ser Arg Ser Asp Ser Gly Thr Ser His Gly Ser Ser
65                  70                  75                  80
Ala Leu Trp Glu Lys Leu Asn Gly Ser Thr Val Ser Val Ala Ser Ser
                85                  90                  95
Gly Val Pro Ala Ser Ile Val His Glu Gly Ala Glu Thr Pro Ser Gly
            100                 105                 110
Gln Ser Ser Gly Ser Asp Glu Phe Arg Leu Ala Asn Gly Met Asn Gly
        115                 120                 125
Ala Asp Ala Ser Trp Asp Pro Pro Leu Ala Pro Ala Arg Lys Asn Arg
    130                 135                 140
Thr Ile Gln Ala Ile Ser Gly Glu Tyr Pro Met Asp Pro Pro Pro Lys
145                 150                 155                 160
Met Lys Pro Thr Gly Ile Arg Pro Arg Thr Arg Thr Arg Thr Glu Pro
                165                 170                 175
Glu Asp Gln Ile Ser Ala Gln Ile Asp Arg Glu Ala Thr Asn Ala Pro
            180                 185                 190
Arg Val Gly Asp Arg Lys Arg Thr Val Ser Gly Gln Val Ala His Pro
        195                 200                 205
Pro Thr Ser Gln Pro Thr Glu Pro Gly Ala Pro Gln Arg Arg Ser Val
    210                 215                 220
Arg Leu Phe Asn Gln Ile Lys Pro Thr Thr Ser Lys Leu Ser Ala Ser
225                 230                 235                 240
Ala Leu Gly Val Lys Asp Ala Arg Glu Val Lys Lys Ala Lys Ala Thr
                245                 250                 255
Gly Thr Lys Gly Arg Thr Thr Thr Thr Thr Met Gly Arg Val Val Ser
            260                 265                 270
Gly Ser Arg Lys His Ala Ser Glu His His Asp Ala Asp Gly Lys Asp
        275                 280                 285
Gly Arg Ser Val Pro Ser Ala His Thr His Ala Ile Ser Lys Gly Ala
    290                 295                 300
Ala Gln Glu Arg Ser Lys Glu Ile Glu Ala Leu Thr Trp Leu Leu Glu
305                 310                 315                 320
Leu Phe Ser Lys Leu Ala Ser Gly Phe Phe Ala Leu Cys Arg Tyr Arg
                325                 330                 335
Cys Pro Glu Ser Ile Gln Ile Phe Asn Ser Leu Ser Gln Gly Gln Arg
            340                 345                 350
Glu Thr Pro Trp Val Leu Ala Gln Ile Gly Arg Ala Tyr Tyr Glu Gln
        355                 360                 365
Ala Met Tyr Ser Glu Ala Glu Lys Tyr Phe Tyr Arg Val Lys Thr Met
    370                 375                 380
Ala Pro Ser Arg Leu Glu Asp Met Glu Ile Tyr Ser Thr Val Leu Trp
385                 390                 395                 400
His Leu Lys Asn Asp Val Glu Leu Ala Tyr Leu Ala His Glu Leu Met
                405                 410                 415
Glu Thr Asp Arg Leu Ser Pro Gln Ala Trp Cys Ala Ile Gly Asn Ser
            420                 425                 430
```

```
Phe Ser His Gln Arg Asp His Asp Gln Ala Leu Lys Cys Phe Lys Arg
        435                 440                 445
Ala Thr Gln Leu Asp Pro Gln Phe Ala Tyr Gly Phe Thr Leu Gln Gly
    450                 455                 460
His Glu Tyr Val Ala Asn Glu Glu Tyr Asp Lys Ala Leu Asp Ala Tyr
465                 470                 475                 480
Arg His Gly Ile Ser Ala Asp Ser Arg His Tyr Asn Ala Trp Tyr Gly
                485                 490                 495
Leu Gly Thr Val Tyr Asp Lys Met Gly Lys Leu Asp Phe Ala Glu Gln
            500                 505                 510
His Phe Arg Asn Ala Ala Ser Ile Asn Pro Thr Asn Ala Val Leu Ile
        515                 520                 525
Cys Cys Ile Gly Leu Val Leu Glu Lys Met Asn Asn Pro Lys Ser Ser
    530                 535                 540
Pro Arg Gly Trp Lys Asp Pro Arg Ser
545                 550
```

<210> 35315
<211> 167
<212> PRT
<213> A.fumigatus

```
<400> 35315
Ser Ser Glu Lys Asn Gly Leu Arg Ser Arg Pro Thr Ser Cys Ser Pro
1               5                   10                  15
Ile Ala Arg Asp Tyr Pro Leu Thr Asp Ser Asp Pro Arg Thr Leu Ala
            20                  25                  30
Ser Gln His Gln His Phe Ser Ser Ser Phe Ala Tyr Leu Glu His Ala
        35                  40                  45
Asn Met Ser Pro Ser Ile Ser Tyr Ile Ser Gly Gln Leu Arg Gln Leu
    50                  55                  60
Ile Tyr Tyr His Leu Asp Asn Asn Leu Cys Arg Asn Ala Leu Phe Leu
65                  70                  75                  80
Ala Gly Arg Leu His Ala Tyr Glu Pro Arg Thr Ala Glu Ala Ser Tyr
                85                  90                  95
Leu Leu Ala Leu Cys His Leu Gln Asn Gly Gln Val Lys Ala Ala Tyr
            100                 105                 110
Asp Tyr Ser Arg Asn Phe Gly Ser Arg Ser Thr His Leu Gly Cys Ser
        115                 120                 125
Tyr Val Phe Ala Gln Ala Cys Leu Asp Leu Gly Lys Tyr Leu Glu Gly
    130                 135                 140
Ile Thr Thr Leu Glu Arg Ser Lys Gly Leu Trp Ala Ser Lys Asn His
145                 150                 155                 160
Trp Ser Lys Tyr Ser Met Arg
                165
```

<210> 35316
<211> 73
<212> PRT
<213> A.fumigatus

```
<400> 35316
Tyr Thr Ile Ile Ser Ile Thr Ile Cys Ala Val Met Arg Cys Ser Ser
1               5                   10                  15
Pro Val Val Tyr Met Leu Thr Ser Pro Glu Arg Arg Lys Arg Arg Ile
            20                  25                  30
```

```
Tyr Ser Leu Ser Ala Ile Phe Arg Thr Gly Lys Ser Lys Pro His Thr
        35                  40                  45
Ile Thr Ala Gly Ile Leu Asp Arg Glu Ala Pro Thr Ser Ala Ala Pro
    50                  55                  60
Met Ser Ser Arg Lys Arg Ala Trp Thr
65                  70
```

<210> 35317
<211> 134
<212> PRT
<213> A.fumigatus

<400> 35317

```
Ser Gly Val Lys Ala Phe Gly Leu Gln Arg Thr Thr Gly Val Ser Ile
1               5                   10                  15
Pro Cys Ala Asp Thr Cys Ser Arg Pro Ala Phe Ile Ser Leu Leu Ser
            20                  25                  30
Val Thr Asp Thr Phe Pro Pro Cys Ala Leu Asp Lys His Ser Glu Thr
        35                  40                  45
Arg Arg Gln His Leu Pro Asp Ala Pro Ala Val Phe Cys Leu Leu Gly
    50                  55                  60
Lys Leu Trp His Ala His Lys Asp Ile Asn Lys Ala Val Glu Cys Tyr
65                  70                  75                  80
Val Glu Ser Leu Lys Leu Asn Pro Phe Met Trp Asp Ala Phe Gln Gly
                85                  90                  95
Leu Cys Asp Thr Gly Lys Leu Trp Arg Ile Asn Leu Ile His Leu Ala
            100                 105                 110
Met Ala Asn Cys Val Leu Pro Pro Arg Ser Gln Cys Pro Arg Val Lys
        115                 120                 125
His Leu Gln Val Glu Phe
    130
```

<210> 35318
<211> 150
<212> PRT
<213> A.fumigatus

<400> 35318

```
Phe Gln Thr Ser Ser Cys Phe Ser Asn Leu Pro Asp Ser Arg Asn Pro
1               5                   10                  15
His Pro Arg Ile Gly Ala Leu Ile Asn Phe Lys Leu Asn Ile Pro Phe
            20                  25                  30
Tyr Arg Asp Cys Leu Trp Glu Ile Ile Lys Arg Leu Met Asp Lys Arg
        35                  40                  45
Lys Leu Leu Ala Phe Gly Arg Phe Phe Lys Tyr Lys Phe Phe Val Leu
    50                  55                  60
Glu Leu Pro Pro Gln Asn Arg Thr Gly Phe Thr Glu Glu Leu Ala Cys
65                  70                  75                  80
Ala Trp Ile His Ser Leu Arg Glu Asp Tyr Gly Gly Ser Leu Tyr Leu
                85                  90                  95
Val Gln Asp Val Val Gln Ser Leu Arg Lys Pro Glu Gly Gly Ser Cys
            100                 105                 110
Thr Gly Lys Gly Pro Ser Ser Asp Arg Tyr Lys Pro Ser Leu Cys Arg
        115                 120                 125
Glu Gly Ala Gly Thr Gly Met Lys Arg Leu His Trp Ile His Glu His
    130                 135                 140
```

Ser Val Arg Cys His Glu
145 150

<210> 35319
<211> 938
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (482)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35319
Ala Val Ile Arg Phe Gly Leu Pro Gly Met Asn Arg Val Gly Arg Pro
1 5 10 15
Lys Gly Thr Pro Asn Lys Pro Lys Leu Lys Lys Glu His Leu Ser Glu
20 25 30
Leu Asp Gly Asp Ala Ile Leu Glu Gln Asp His Leu Ala Ile Lys Arg
35 40 45
Leu Lys Lys Ala Gln Arg Asp Glu Glu Arg Phe Arg Gly Met Ser Glu
50 55 60
Lys Glu Lys Leu Glu Ala Leu Gly Leu Asp Glu Thr Trp Thr Glu Tyr
65 70 75 80
Ser Val Leu Leu Leu Glu Arg Thr Glu Pro Gly Val Tyr Ile Thr Pro
85 90 95
Arg Gly Arg Arg Arg Pro Ala Gly Lys Arg Gln Gly Arg Pro Arg Ile
100 105 110
Ser Arg Leu Ala Val Phe Arg Ser Pro Lys Leu Ala Ser Leu Pro Trp
115 120 125
Phe Thr Val Ser Pro Glu Gly Glu Leu Glu Asp Glu Ala Ala Ser Ala
130 135 140
Ser Arg Gln Val Ser Arg Ala Gln Ser Val Glu Thr Pro Ala Val Pro
145 150 155 160
Ser Phe Thr Ala Ile Asn Thr Pro Ala Thr Thr Ser Ala Ala Leu Asp
165 170 175
Thr Pro Ser Arg Gly Thr Lys Arg Thr Leu Arg Ser Arg Ile Pro Leu
180 185 190
Asp Ala Glu Ala Glu Pro Asp His Gln Arg Pro Ser Lys Leu Gln Arg
195 200 205
Leu Glu Asp Thr Glu Val Cys Arg Gln Val Ala Glu Ala Glu Thr Ser
210 215 220
Arg Ser Gln Glu Pro Leu Ser Asp Glu Gln Gln Thr Asp Glu Pro Ser
225 230 235 240
Val Asp Thr Val Pro Asn Ala Thr Ser Arg Ala Ser Lys Arg Arg Lys
245 250 255
Glu Leu Ser Pro Ile Ala Pro Glu Glu Asp Val Ala Val His Lys Ser
260 265 270
Leu Glu Gly Leu Val Ser Gln Lys Ala Gln Ala Pro Ser Pro Val Gly
275 280 285
Lys Arg Gln Val Gly Arg Ser Gln Pro Arg Gln Asn Leu Glu Thr Pro
290 295 300
His Lys Lys Arg Arg Tyr Glu Pro Gln Ala Glu Arg Gly Gly Glu Thr
305 310 315 320
Ala Ser Leu Leu Pro Pro Thr Ala Thr Ile Lys Asn Val Ala Glu Gln
325 330 335

```
Ala Ala Pro Ser Glu Ser Pro Lys Val Gly Asp Gly Glu His Arg Gln
            340                 345                 350
Val Glu Ala Glu Ala Ile Gly Arg Pro Leu Glu Val Thr Gly His Val
        355                 360                 365
Asn Val Val Ala Asp Glu Val Thr Pro Ala Ala Thr Ala Glu Leu Ser
    370                 375                 380
Ala Ala Ile His Asn Ile Gln Glu Ala Asn Asp Ile Asp Leu Lys Pro
385                 390                 395                 400
Thr Tyr Gly Thr Pro Asp Val Gln Gln Arg Asp Ala Ser Gln Thr Pro
                405                 410                 415
Glu Gly His Arg Pro Arg Thr Lys Arg Gln Asp Lys Leu Gly Ser Val
            420                 425                 430
Ala Val Leu Arg Arg Ser Ile Ile Met Asp Ile Ile Glu Lys Ala Gly
        435                 440                 445
Gly Ala Tyr Ser Met Gly Thr Glu Ile Trp Tyr Pro Phe Ala Thr Ala
    450                 455                 460
Trp Lys Arg Thr Lys Tyr Lys Glu Lys Pro Asp Met Arg Thr Val Lys
465                 470                 475                 480
Thr Xaa Ile Lys His Leu Ile Asp Ala Gly Lys Leu Arg Gln Phe Thr
                485                 490                 495
Phe Ser Gly Arg Asp Ser Lys Gly Val Met Val Thr Lys Ser Ile Val
            500                 505                 510
Ala Lys Pro Glu Leu Gln Pro Asp His Pro Val Ile Lys Asp Leu Gln
        515                 520                 525
His Lys Met Leu Thr Thr Thr Ala Arg Tyr Tyr Phe Pro Pro Gly Val
    530                 535                 540
Asp Val Asp Pro Glu Leu Thr Lys Ser Ser Ala Lys Ser Ala Lys Ser
545                 550                 555                 560
Met Pro Ser Gly Glu Pro Lys Met Ala Lys Leu Pro Ile Glu Arg Gly
                565                 570                 575
Ile Thr Val His Leu His Gln Lys Pro Ala Phe Val Leu Ala Leu Glu
            580                 585                 590
Lys Arg Lys Gly Gln Ser Ile Gln Arg Arg Leu Leu Gln Arg Leu Gln
        595                 600                 605
Ser Asp Thr Glu Ile Leu Arg Pro Ser Gly Val Val Arg Leu Ala Arg
    610                 615                 620
Leu Gln Arg Gly Pro Ala Arg Asp Ser Leu Glu Arg Glu Leu Gly Pro
625                 630                 635                 640
Ile Ser Lys Lys Arg Gly Lys Ser Gln Gln Gln Lys Arg Ile Leu Lys
                645                 650                 655
His His Ala Pro Ala Asp Gly Ala Ala Glu Glu Glu Glu Ala Asp Arg
            660                 665                 670
Ala Pro Arg Arg Leu Lys Arg Leu Trp Met Pro Ile Ser Leu Met Ala
        675                 680                 685
Pro Tyr Ala Met Phe Met Asn Pro Val Gln Thr Phe His Ser Ser Thr
    690                 695                 700
Gly Thr Phe Ser Thr Glu Ala Gly Leu Val Ala Val Arg Ala Gly Ala
705                 710                 715                 720
Leu Ala Arg Ala Arg Ala Ala Phe Arg Phe Pro Lys Thr Leu Asp Asp
                725                 730                 735
Ile Leu Asp Gln Ile Lys Arg Thr Pro Val Ile Phe Ser Glu Ala Val
            740                 745                 750
Asp Pro Arg Thr Ser Lys Phe Phe Cys Glu Ala Gly Ala Ile Leu Arg
        755                 760                 765
Trp Glu Leu Gln Asn Glu Glu Phe Ile Phe Glu Lys Pro Ala Glu Gly
    770                 775                 780
```

```
Gln Glu Phe Ser Phe Ile His Gln Thr Leu Asp Asp Phe Pro Glu Ala
785                 790                 795                 800
Val Pro Ile Glu Gly Asp Ile Gln Phe Glu Ile Asp Gln Ser Ala Tyr
                805                 810                 815
Pro Arg Val Arg Val Pro Arg Val Arg Lys Ile Arg Glu Ala Ala Arg
            820                 825                 830
Arg Leu Glu Leu Val Glu Pro Glu Lys Phe Pro Pro Glu Glu Thr Glu
        835                 840                 845
Glu Ala Glu Glu Ser Glu Glu Pro Ser Glu Ser Glu Val Ser Ser Asp
    850                 855                 860
Ala Glu Asp Ser Asp Asp Ser Leu Asp Ala Leu Asp Leu Leu Phe Ser
865                 870                 875                 880
Ala Asp Ser Arg Arg Arg Arg Ser Asp Tyr Val Pro Gln Asn Arg Arg
                885                 890                 895
Leu Glu Lys Leu Ala Ala Glu Gly Pro Arg His Val Val Leu Pro Lys
            900                 905                 910
Pro Ser Asn Arg Pro Ala Ala Arg Arg Asn Arg Ala Leu Leu Leu Phe
        915                 920                 925
Thr Pro Arg Ala Glu Gly Thr Ala Gln Ala
    930                 935
```

Sequence Listing

<210> 35320
<211> 155
<212> PRT
<213> A.fumigatus

<400> 35320

```
Asp Ile Leu Arg Ala Gly Phe Gly Ser Phe Phe Arg Arg Pro Leu Glu
1               5                   10                  15
Asn Thr Leu Ala Arg Leu Val Glu Cys Trp Gln Leu Ser Gln Pro Leu
            20                  25                  30
His Leu Arg His Leu Ala Ile Val Arg Asp Thr Ala Leu Glu Lys Thr
        35                  40                  45
Ile Thr His Tyr Ile His Tyr Ser Thr Ala Asn Phe Gln Lys Leu Val
    50                  55                  60
Asp Ala Gly Glu Ala Ser Trp Glu Ala Val Glu Phe Val Pro Arg Asn
65                  70                  75                  80
Thr Lys Ala Glu Lys Ile Ser Val Pro Pro Ile Asp Ala Val Pro Asp
                85                  90                  95
Leu Asp Glu Asn Gly Leu Pro Lys Ala Val Pro Thr Lys Glu Leu Val
            100                 105                 110
Lys Asn Gly Asn Ala Ser Leu Leu Ala Gly Ile Leu Thr Val Asn Pro
        115                 120                 125
Ala Asp Tyr Asn Cys Thr Gly Asn Asp Pro Met Pro Leu Arg Leu Lys
    130                 135                 140
Asp Asn Ser Tyr Gly Lys Phe Ser Pro Trp Gln
145                 150                 155
```

<210> 35321
<211> 116
<212> PRT
<213> A.fumigatus

<400> 35321

```
Arg Val Arg Glu Ala Asn Thr Ala Val Leu Thr Glu Ala Ile Glu Ala
1               5                   10                  15
```

```
Glu Arg Gly Ala Glu Pro Val Thr Val Asn Ala Val Gly Leu Ala Val
            20                  25                  30
Ile Ala Thr Ala Thr Thr Thr Val Leu Leu Ala Thr Ile Thr Ala Asp
        35                  40                  45
Leu Asp Gly Leu Ala Leu Asp Leu Ala Pro Leu Met Met Thr Asp Thr
    50                  55                  60
Thr Ala Leu Arg Val Ala Leu Ile Glu Lys Ile Gly Lys Met Ser Asp
65                  70                  75                  80
Val Pro Ala Val Asn Ala Ser Ala Ala Gln Ala Glu Arg Ser Leu Gln
                85                  90                  95
Ser Ser Met Arg Met Asn Val Thr Gly Val Gln Ser Leu Phe Ser Ser
            100                 105                 110
Leu Arg His Val
        115
```

<210> 35322
<211> 208
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (193),(196)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35322

```
Glu Gln Gly Leu Arg Leu Cys Thr Val Ser Asp Glu Ser Ser Cys Phe
1               5                   10                  15
Arg Asp Cys Pro Ala Ser Ala Asp Lys Arg Leu Cys Arg Phe Arg Asp
            20                  25                  30
Pro Asn Gln Ala Arg Glu Ala Leu Glu Lys Met Asn Gly Phe Asp Leu
        35                  40                  45
Ala Gly Arg Ala Ile Arg Val Gly Leu Gly Asn Asp Lys Phe Thr Pro
    50                  55                  60
Asp Ser Ser Ala Gln Arg Ser Gln Ser His Gly Ala Asn Gln Pro Asn
65                  70                  75                  80
Phe Gln Gly Ser Ser Phe Ser Gly Gln Gly Gly Arg Gly Ile Gln Ala
                85                  90                  95
Gly Gly Thr Ser Asn Phe Asp Arg Ala Gly Gly Arg Asp Ser Glu Lys
            100                 105                 110
Gly Ala Gly Ala Ser Ala Leu Asp Asp Thr Asp Val Ala Gly Val Asn
        115                 120                 125
Phe Asn Asn Tyr Ser Arg Asp Ala Leu Met Arg Lys Leu Ala Arg Thr
    130                 135                 140
Asp Glu Pro Ala Glu Pro Ala Ala Asp Asp Lys Gln Lys Val Leu Arg
145                 150                 155                 160
Pro Lys Thr Glu Thr Lys Pro Leu Pro Val Asn Val Asn Met Ala Ser
                165                 170                 175
Arg Cys Val Leu Leu Arg Asn Met Phe Asp Pro Ala Glu Tyr Val Ile
            180                 185                 190
Xaa Thr Phe Xaa Glu Ser Tyr Leu Pro Cys Thr Asn Gln Ser Thr Arg
        195                 200                 205
```

<210> 35323
<211> 83
<212> PRT

<213> A.fumigatus

<400> 35323
Gly Glu Ala Cys Ile Lys Glu Leu Glu Asp Asp Val Arg Ala Glu Cys
1 5 10 15
Glu Asp Lys Tyr Gly His Val Val His Ile Ala Leu His Pro Asn Ser
20 25 30
Gln Gly Asp Ile Tyr Leu Lys Phe Asp Arg Val Gln Gly Gly Glu Asn
35 40 45
Ala Ile Lys Gly Leu Asn Gly Arg Phe Phe Gly Gly Arg Gln Ile Thr
50 55 60
Ala Gln Pro Val Val Asp Ala Val Tyr Ser Ser Leu Phe Ser Arg Thr
65 70 75 80
Lys Ala Ile

<210> 35324
<211> 97
<212> PRT
<213> A.fumigatus

<400> 35324
Gly Leu Gln Arg Gly His Ile Arg Tyr Val Arg Ile Ser Thr Glu Cys
1 5 10 15
Ala Arg Thr Trp Gly Gln Cys Pro Arg Gln Ile Gly Ser Thr Tyr Val
20 25 30
Ser Gly Tyr Asp Arg Lys Thr Tyr Gly Ser Tyr Asn Ala Glu Asp Lys
35 40 45
His Ile Lys Trp Pro Pro Tyr Leu Pro Tyr Thr Phe Arg Arg Tyr Thr
50 55 60
Thr Lys Ala Leu Ile Leu Glu Thr Glu Leu Lys Ile Ser Ile Gln Ala
65 70 75 80
Glu Tyr Leu Ser Ile Leu Asn Thr Ser His Ser Gln Asn His Val Leu
85 90 95
Ser

<210> 35325
<211> 152
<212> PRT
<213> A.fumigatus

<400> 35325
Asp Glu Asp Met Lys Ser Pro Arg Ser Glu His Gly Ser Val Asn Gly
1 5 10 15
Ser His Arg Ser Arg Lys Arg Ser Arg Thr Arg Asp Ser Glu Arg Arg
20 25 30
Arg Ser Arg Gly Asp Arg Tyr Gly Asp Asp Tyr Arg Ser Ser Gly Asp
35 40 45
Tyr Tyr Arg Gly Pro Gly Arg Pro Arg Thr Arg Ser Arg Ser Pro Tyr
50 55 60
Asp Asp Arg Tyr Tyr Arg Pro Ser Gly Arg Ser His Arg Glu Asp Arg
65 70 75 80
Glu Asp Glu Arg Arg Ser Arg Arg Glu Arg Lys Arg Ser Pro Ser Arg
85 90 95
Glu Lys Ser Pro Glu Leu Asn Glu Asp Glu Arg Asp Arg Arg Thr Ile

```
            100                 105                 110
Phe Val Gln Gln Leu Ala Ala Arg Leu Arg Thr Lys Glu Leu Ile Ala
        115                 120                 125
Phe Phe Glu Lys Val Gly Pro Val Lys Glu Ala Gln Ile Val Lys Asp
    130                 135                 140
Arg Val Ser Gly Arg Ser Lys Gly
145                 150

<210> 35326
<211> 119
<212> PRT
<213> A.fumigatus

<400> 35326
Val Trp Leu Leu Tyr Leu Leu Leu Val Cys Arg Leu Met Ala His Ser
1               5                   10                  15
Val Gly Tyr Val Glu Phe Lys Ser Glu Glu Ser Val Ala Pro Ala Ile
            20                  25                  30
Gln Leu Thr Gly Gln Lys Leu Leu Gly Ile Pro Ile Ile Ala Gln Leu
        35                  40                  45
Thr Glu Ala Glu Lys Asn Arg Gln Ala Arg Asn Pro Glu Ala Ser Ser
    50                  55                  60
Gly His Asn His Ala Ala Pro Phe His Arg Leu Tyr Val Gly Asn Ile
65                  70                  75                  80
His Phe Ser Ile Thr Glu Asn Asp Leu Gln Asn Val Phe Glu Pro Phe
                85                  90                  95
Gly Glu Leu Glu Phe Val Gln Leu Gln Lys Asp Glu Ala Gly Arg Ser
            100                 105                 110
Lys Gly Tyr Gly Phe Val Gln
        115

<210> 35327
<211> 389
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (292)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35327
Arg Glu Ala Leu Ser Pro Met Ser Gly Lys Glu Ser Gly Leu Pro Leu
1               5                   10                  15
Gly Ala Gly Gly Gln Phe Asp Arg Arg Ile Pro Ser Ile Pro Thr Ser
            20                  25                  30
Arg Trp Val Arg Glu Asp Ser Val Gly Gln Ala His Gln Leu Arg Glu
        35                  40                  45
Ser Asn Thr Val Cys Glu Ser Asp Gln Ala Pro His Leu Pro Ile Asp
    50                  55                  60
Arg Gln Ile Thr Pro Gly Pro Pro Gln Met Val Ser Pro His Ala Gln
65                  70                  75                  80
Met Asp Asn Tyr Leu Pro Ala Gly Leu Gln Ser Gly Leu Pro Thr Met
                85                  90                  95
Asp Ser Asp Ser Gly Val Phe Ser Val Asp Gly Thr Phe Phe Pro Asp
            100                 105                 110
```

```
Phe Ile Pro Asp Ser Leu Ile Pro Ser Leu Thr Arg Met Ser Asp Leu
        115                 120                 125
Asp Pro Leu Pro Val Leu Pro Gln Asp Ser Ile His Asn Val Phe Asp
    130                 135                 140
His Asn Val Asp Phe Asp Phe Asp Leu Thr Asp Leu Asp Tyr Gly Leu
145                 150                 155                 160
Ile Asp Leu Phe Asn Ser Arg Gly Ala Val His His His His His His
                165                 170                 175
His Ala Tyr Asn Ser Asp Gly Ala Thr Glu His Gly Asp Ala Asp Ser
            180                 185                 190
Gly Ile Ala Ile Gly Ala Glu Ala Tyr His Arg Ser Ser Leu Ser Ala
        195                 200                 205
Trp Lys Pro Ala Arg Glu Asp His Ala Phe Ala Asp Gln Glu Asn Leu
    210                 215                 220
Ser Val Pro Glu Ala Ile Asp Ser Pro Glu Ala Asn Phe Arg Pro Asp
225                 230                 235                 240
Arg Gln Met Val Ser Glu Arg Leu Ser Pro Ser Gly Arg Asp Arg Ile
                245                 250                 255
Phe Gly Leu Val Leu Gln Thr Ser Gln Arg Thr Asn Leu Thr Arg Ile
            260                 265                 270
Met Lys Ser Phe Pro Ser Thr Gln Leu Leu Asp Ser Leu Ile Gln Tyr
        275                 280                 285
Tyr Phe Glu Xaa Gln Cys His Asp Ile Asp Ser Trp Ile His Gly Pro
    290                 295                 300
Thr Phe Arg Met Asn Asp Glu Thr Pro Asp Met Leu Ala Ala Leu Ala
305                 310                 315                 320
Ala Ala Gly Ala Leu Ile Ser Thr Ile Pro Thr Ile Arg Lys Leu Gly
                325                 330                 335
Tyr Ala Leu Met Glu Ile Val Arg Leu Gln Leu Ser Asp Lys Val Arg
            340                 345                 350
Trp Tyr Leu Tyr Leu Pro Ala Ala Lys Glu Tyr Gln Leu Thr Leu Leu
        355                 360                 365
Thr Cys Ser Thr Arg Ala Thr Ile Pro Pro Tyr Ala Ile Cys Ala Pro
    370                 375                 380
Arg Arg Arg Leu Arg
385
```

<210> 35328
<211> 95
<212> PRT
<213> A.fumigatus

<400> 35328

```
Ile Cys Cys Arg Asp Leu Met Lys Arg His Ala Ala Gly His Ile His
1               5                   10                  15
Pro Arg Asp Thr Lys Arg Arg Arg Leu Ser Ser Tyr Pro Lys Asn Gly
            20                  25                  30
Arg Val Ser Gln Ala Cys Lys Thr Cys Ala Ala Ser Lys Leu Lys Cys
        35                  40                  45
Asp Asp Glu Lys Pro Cys Arg Arg Cys Gln Glu Lys Asn Leu Val Cys
    50                  55                  60
His Trp Ala Gln Gly Val Ser Ser Ile Asp Gly Ser Pro Pro Ser Gln
65                  70                  75                  80
Arg Gln Gly Gly Cys Glu Arg Thr Gln Leu Ala Arg Pro Thr Asn
                85                  90                  95
```

<210> 35329
<211> 361
<212> PRT
<213> A.fumigatus

<400> 35329
Ser Phe Val Pro Val Ala Gly Pro Thr Gly Leu Leu Ile Arg Asp Arg
1 5 10 15
Leu Val His His Leu Phe Leu His Asp Ala Gln Ser Ala Met Met Leu
20 25 30
Asn Val Asn Pro Ile Ile Ser Tyr Ser Glu Leu Glu Leu Pro Leu Pro
35 40 45
Ala Pro Arg Ser Leu Trp Glu Ala Lys Ser Ala Thr Asp Trp Lys Glu
50 55 60
Ala Tyr Leu Ala Ser Gly Leu Ser Ser His Gly Arg Thr Pro Ser Leu
65 70 75 80
Val Asp Thr Leu Gln Asp Met Ser Gln Leu Ser Ala Phe Gln Ser Arg
85 90 95
Ile Asp Leu Gln Leu Ser Thr Ser Ala Val Ile His Gly Leu Phe Thr
100 105 110
Leu Ile Ser Glu Tyr His Arg His Lys Phe Ile Ala Lys Gly His Ser
115 120 125
Lys His Trp Asn Ala Leu Val Ile Ser Ser Arg His Gln Glu Leu Ser
130 135 140
Gln Ala Met Gln His Leu Arg Met Leu Cys Phe Glu Met Ser Ser Ala
145 150 155 160
Leu Gly Pro Arg Ile Ile Leu Val Ser Glu Leu Ile Ser Met Phe Leu
165 170 175
His Met Ser Leu Glu Glu Leu Gln Leu Phe Ala Gly Lys Glu Asp Lys
180 185 190
Asn Gln Ala Arg Arg Val Tyr Gln Ser Ala Leu Glu Trp Ile Gly Ser
195 200 205
Ile Asp Ser Arg Arg Ala Ile Trp His Ala Gly Gln Val Ile Arg Ala
210 215 220
Ala Lys Val Met Pro Pro Gly Ser Leu Thr Gly Phe Phe Ala Leu Gly
225 230 235 240
Val Tyr Tyr Ala Ser Leu Ala Phe Trp Ser Tyr Ser Val Val Ser Arg
245 250 255
Ala Lys Gly Ser Pro Ala Ala Val Val Arg Pro Pro Ser Asp Ser His
260 265 270
Phe Gly Gly Pro Trp Pro Thr Val Tyr Leu Asp Gly Glu Glu Thr Ala
275 280 285
Asp Val Gln Arg Phe Ile Ser Leu Gly Cys Gly Cys Pro Ala Leu Gln
290 295 300
Ala Pro Ser Gly Ala Ala Val Ile Thr Asp Pro Gly Gln Ile Met Asp
305 310 315 320
Ala Ile Gln Gly Ile Leu Arg Gly Asp Ala His His Asp Asn Ile Pro
325 330 335
Pro Leu Val Gln Gly Leu Thr Gln Leu Met Cys Asp Leu Gly Asn Ala
340 345 350
Ala Arg Ser Lys Thr Tyr Ala Pro Thr
355 360

<210> 35330
<211> 73
<212> PRT

<213> A.fumigatus

<400> 35330
Lys Ala Asp Asn Cys Asp Met Ser Trp Ser Val Ser Thr Asn Glu Gly
1 5 10 15
Val Arg Pro Trp Leu Asp Ser Pro Leu Ala Lys Tyr Ala Ser Phe Gln
20 25 30
Ser Val Ala Asp Phe Ala Ser His Asn Glu Arg Gly Ala Gly Arg Gly
35 40 45
Ser Ser Ser Ser Glu Tyr Glu Met Ile Gly Phe Thr Phe Asn Ile Met
50 55 60
Ala Asp Trp Ala Ser Cys Arg Asn Arg
65 70

<210> 35331
<211> 178
<212> PRT
<213> A.fumigatus

<400> 35331
Ser Ile Thr His Phe Cys Pro Ser Leu Ala Leu Val Met Arg Ile Ser
1 5 10 15
Tyr Gly Ser Ala Val Ala Ala Leu Ala Ala Ala Ala Asn Ala Ala Ser
20 25 30
Leu Ala Asp Val Cys Thr Ile Ser His Val Gln Ser Val Leu Pro Ser
35 40 45
Asn Gly Thr Leu Leu Gly Ile Asn Val Ile Pro Ser Ala Val Thr Ala
50 55 60
Ser Ala Val Tyr Asn Ser Thr Ser Ser Gly Gly Met Gly Gly Met Gly
65 70 75 80
Gly Ser Asn Ser Ala Asn Tyr Pro Tyr Cys Asn Val Thr Val Thr Tyr
85 90 95
Thr His Pro Gly Lys Gly Asp Lys Val Val Val Lys Tyr Ala Phe Pro
100 105 110
Gln Pro Ser Asp Phe Lys Asn Arg Phe Tyr Val Ala Gly Gly Gly Gly
115 120 125
Tyr Ser Leu Ser Ser Asp Ala Thr Gly Gly Leu Glu Tyr Gly Ala Ala
130 135 140
Ser Gly Ala Thr Asp Ala Gly Tyr Asp Ala Phe Ser Tyr Ser Tyr Asp
145 150 155 160
Glu Val Val Leu Tyr Gly Asn Gly Ser Ile Asn Trp Asp Gly Leu His
165 170 175
Gln Gly

<210> 35332
<211> 94
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7),(16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35332

```
Ala Tyr Ser Pro Gly Val Xaa Val Cys Glu Ile Gly Lys Asn Asn Xaa
1               5                   10                  15
His Ala Phe Ser Tyr Ile Leu Leu Val Leu Ile Gly Arg Glu Leu Leu
            20                  25                  30
Pro Leu Pro Lys Met Ser Pro Val Gly Asp Gly Leu Val Thr Pro Tyr
        35                  40                  45
Ser Asn Ala Pro Leu Val Glu Arg Tyr Leu Val Asn Thr Thr Pro Ala
    50                  55                  60
Ser Asn Ser Met Leu Ile Lys Gly Ser Ala Arg Leu Met Ala Lys Leu
65                  70                  75                  80
Thr Val Ser Gly Ser His Asn Ser Gly Asn Pro Tyr Leu Ser
                85                  90
```

<210> 35333
<211> 66
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35333

```
Asn Tyr Leu Leu Ile Leu Ile Pro Ile Val Met Ile Phe Ser Trp Pro
1               5                   10                  15
Phe Tyr Leu Arg Thr Lys Ser Gln Lys Gly Ala Xaa Met Phe Val Ser
            20                  25                  30
Ile Gln Arg Asn Pro His Tyr Leu Thr Ser Asn Ala Val Gly Phe Asp
        35                  40                  45
Glu Thr His Ser Thr Pro Leu Tyr Pro Leu Phe Ile Glu Gly Leu Trp
    50                  55                  60
Leu Ser
65
```

<210> 35334
<211> 138
<212> PRT
<213> A.fumigatus

<400> 35334

```
Ser Pro Thr Ser Trp Ala Arg Arg Phe Pro Pro Leu Gly Pro Leu Pro
1               5                   10                  15
Leu Leu Val Pro Gln Pro Gly Ala Gly Thr Arg Pro Pro Pro Leu Pro
            20                  25                  30
Leu Ala Ser Pro Leu Val Arg Ala Ala Gly Ala Arg Ala Arg Ala Ala
        35                  40                  45
Ser Pro Gly Ile Tyr Pro Arg Cys Ser Pro Arg His Ser Asn Arg Pro
    50                  55                  60
Arg Ser Gly Ala Leu Pro Met Leu Ser Gln Lys Ala Met Val Ser Pro
65                  70                  75                  80
Arg Pro Leu Gln Trp Glu Thr Ala Ile Tyr Pro Asp Cys Ser Val Arg
                85                  90                  95
Ser Gly Gly Lys Arg Arg Arg Ile Gly Arg Gln Thr Thr Ser Trp Cys
            100                 105                 110
Arg Thr Ala Thr Ala Trp Lys Asp Ser Cys Ala Tyr Cys Ala Cys Gly
```

```
        115                 120                 125
Cys His Cys Thr Ala Ser Arg Ala Ser Gly
    130                 135

<210> 35335
<211> 674
<212> PRT
<213> A.fumigatus

<400> 35335
Lys Arg Ser Ser Val Ser Cys His Leu Cys Trp Ile Thr Gln Ile Leu
1               5                   10                  15
Thr Ala Ser Ser Met Asp Val Glu Gly Ala Ser Thr Glu Ala Ser Tyr
            20                  25                  30
Tyr Leu Arg Gly Thr Ala Arg Gly Met Gln His Ala Gly Lys Gly Ser
        35                  40                  45
Ser Tyr Ser Arg Cys Lys Arg Ser Ala Leu Pro Thr Ser Gly Phe Glu
    50                  55                  60
Asn Leu Thr Ser Ser Pro Pro Gln Ile Tyr Ala Asn Arg Ser Ile Ser
65                  70                  75                  80
Glu Ser Arg Arg Tyr Gln Glu Leu Pro Pro Ser Pro Val Glu Ala Pro
                85                  90                  95
Gln Val Gly Ala Val Phe Ser Pro Pro Ile Gln Glu Thr Gln Ile Ile
            100                 105                 110
Pro Glu Ile Ala Pro Met Arg Arg Gly Arg Pro Thr Arg Pro Asp His
        115                 120                 125
Ser Gln His Asn Ser Ala Lys Pro Ser Pro Ser Pro Phe Arg Ala Gly
    130                 135                 140
Ser Ser Thr Asp Pro Phe Ala Ala Leu Asp Gly Thr Gly His Lys Ser
145                 150                 155                 160
Arg Asn Ser Ile Glu Glu Phe Ser Asn Arg Phe Pro Ser Leu Asp Gln
                165                 170                 175
Phe Gln Ile Leu Asn Glu Glu Lys Asp Lys Phe Glu Phe Glu Pro Thr
            180                 185                 190
Val Val Glu Lys Lys Ser Glu Asp Glu Asp Leu Ala Arg Arg Leu Thr
        195                 200                 205
Asn Ala Leu Ala Asp Asp Ala Phe Ala Lys Pro Gln Asn Glu Glu Arg
    210                 215                 220
Pro Ile Asn Gln Arg Pro Gln Thr Ser Ser Val Glu Thr Lys Pro Val
225                 230                 235                 240
Glu Pro Pro Arg His Val Pro Glu Gln Pro Ser Leu Gln Ala Pro Leu
                245                 250                 255
Tyr Gln Pro Val Pro Gln Arg Pro Thr Met Val Ser Thr Gly Thr Met
            260                 265                 270
Thr Ser Pro Pro Pro Thr Pro Gly Glu Ile Lys Ser Ser Ser Arg Asn
        275                 280                 285
Ile Tyr Arg Phe Pro Ser Ser Asp His His Arg Gln Pro Ser Asn Pro
    290                 295                 300
Ser Trp Leu Ala Glu Ala Asp Gln Lys Ser Val Arg Pro Asn Lys Ala
305                 310                 315                 320
Pro Ser Pro Pro Thr Leu Ser Ala Arg Pro Glu Pro His Pro Lys Thr
                325                 330                 335
Ser Phe Asp Lys Leu Ala Ser Leu Ser Ser Leu Ser Ser Arg Pro Ser
            340                 345                 350
Leu Asp Gly Ala Arg Pro Asn Leu Asp Val Asp Val Pro Val Gly Arg
        355                 360                 365
```

```
Ser Lys Ser Ala Asn Gly Lys Ala Arg Pro Val Ser Val His Thr Gly
    370                 375                 380
Ser Arg Leu Glu Phe Ser Arg Gly Ser Glu Ser Ala Arg Ser Ser Leu
385                 390                 395                 400
Glu Leu Ser Arg Pro Met Tyr Glu Gly Gly Ala Pro Leu Gln His Ala
                405                 410                 415
Arg Thr Asp Met Asp Met Ser Glu Arg Ala Asn Ile Ser Ser Asp Val
            420                 425                 430
Asp Phe Leu Arg Ala Arg Glu Glu Glu Leu Asn Arg Lys Arg Glu Lys
        435                 440                 445
Arg Tyr Ser Gly Ser His Lys His Ser Lys Arg Thr Ser Leu Ser Thr
    450                 455                 460
Leu Ser Leu Ser Gly Thr Lys Thr Leu Phe Ala Gly Arg Phe Gly Asp
465                 470                 475                 480
Ala Phe Arg Arg Phe Glu Gln Ser Asn Gln Asp Lys Trp Pro Ser Pro
                485                 490                 495
Thr Ala Glu Asp Val Ala Lys Pro Trp Pro Ser Val Thr Thr Ser Glu
            500                 505                 510
Val Pro His Tyr Ala Ala Gly Ser Ser Gly Glu Glu Ser Ser Glu Asp
        515                 520                 525
Ile Ser Pro Glu Met Arg Arg Glu Leu Glu Arg Arg Arg Leu Ser Gln
    530                 535                 540
Glu Glu Lys Arg Val Ala Ala Ala Ala Ala Glu Tyr Arg Arg Arg Val
545                 550                 555                 560
Ala Glu Gln Gly Glu Gly Gly Ala Arg Val Val Gly Ser Asp Gly Pro
                565                 570                 575
Arg Thr Ser Ala Ile Lys Ser Arg Val Gln Thr Leu Leu Gly Gln Ser
            580                 585                 590
Asn Lys Pro Pro Pro His Lys Thr Ala Thr Gly Tyr Gly Arg Tyr Thr
        595                 600                 605
Asp Glu Ser Ser Ala Ala Ala Leu Gln Ala Lys Gln Thr Glu Gly Arg
    610                 615                 620
Pro Glu Ser Arg Pro Gly Thr Arg Ser Gly Ala Thr Tyr Leu Ala Gln
625                 630                 635                 640
Glu Gln Gln Thr Ala Arg Pro Ala Ser Ala Ser Arg Gln Glu Thr Ala
                645                 650                 655
Arg Thr Val Phe Thr Thr Gly Leu Glu Gly Ser Ala Pro Cys Val Thr
            660                 665                 670
Ala Gln
```

<210> 35336
<211> 162
<212> PRT
<213> A.fumigatus

<400> 35336

```
Gln His Arg Lys Cys Pro Thr Thr Arg Pro Val Arg Val Ala Arg Arg
1               5                   10                  15
Ala Ala Arg Ile Tyr Pro Arg Arg Cys Gly Ala Ser Ser Ser Ala Gly
            20                  25                  30
Gly Ser His Lys Arg Arg Ser Glu Trp Gln Arg Arg Arg Pro Ser Thr
        35                  40                  45
Gly Ala Gly Leu Arg Asn Lys Glu Arg Glu Gly Pro Glu Trp Trp Glu
    50                  55                  60
Ala Thr Gly Pro Gly Arg Arg Arg Leu Arg Ala Gly Cys Arg His Cys
```

```
65                  70                  75                  80
Ser Gly Arg Ala Thr Ser Pro His Leu Thr Arg Arg Arg Arg Ala Thr
                85                  90                  95
Gly Gly Thr Gln Thr Ser Arg Val Leu Leu Leu Cys Arg Arg Ser Arg
            100                 105                 110
Arg Lys Ala Asp Arg Ser Arg Gly Gln Ala His Glu Ala Glu Pro Arg
        115                 120                 125
Thr Trp Leu Lys Asn Ser Arg Leu Gln Asp Arg Arg Ala Pro Pro Gly
    130                 135                 140
Arg Arg Pro Arg Ala Arg Ser Ser Pro Arg Gly Ser Lys Asp Pro Arg
145                 150                 155                 160
His Ala
```

<210> 35337
<211> 266
<212> PRT
<213> A.fumigatus

<400> 35337

```
Trp Arg Ile Thr Ser Ser Glu Gly Val Trp Pro Arg Leu Thr Ser Cys
1               5                   10                  15
Glu Ser Pro Ser Pro Val Val Gly Ser Asp Arg Ala Val Trp Lys Arg
            20                  25                  30
Val Ala Ser Pro Asp Lys Pro Ala Leu Ala Asn Met Arg Thr Glu Val
        35                  40                  45
Glu Thr Met Lys Lys Leu Lys Gly His Arg His Ile Val Lys Tyr Ile
    50                  55                  60
Asp Ser His Ala Ser Gln Leu Arg Gly Gly Gly Tyr Glu Val Phe Leu
65                  70                  75                  80
Leu Met Glu Phe Cys Ser Gly Gly Gly Leu Ile Asp Phe Met Asn Thr
                85                  90                  95
Arg Leu Gln Asn Arg Leu Thr Glu Pro Glu Ile Ile Lys Ile Phe Ser
            100                 105                 110
Asp Val Ala Glu Gly Val Ala Cys Met His Tyr Leu Lys Pro Pro Leu
        115                 120                 125
Leu His Arg Asp Leu Lys Val Glu Asn Val Leu Ile Ser Phe Gln Gly
    130                 135                 140
Asn Thr Pro Leu Tyr Lys Leu Cys Asp Phe Gly Ser Ala Ala Pro Pro
145                 150                 155                 160
Arg Pro Ala Ala Thr Ser Ala Ala Glu Gly Arg Leu Ile Glu Asp Asp
                165                 170                 175
Val Gln Arg His Thr Thr Leu Gln Tyr Arg Ser Pro Glu Met Ile Asp
            180                 185                 190
Val Tyr Arg Lys Gln Pro Ile Asp Glu Lys Ser Asp Ile Trp Ala Leu
        195                 200                 205
Gly Val Leu Leu Tyr Lys Leu Cys Tyr Tyr Thr Thr Pro Phe Glu Glu
    210                 215                 220
Val Gly Gln Met Ala Ile Leu Asn Ala Ser Tyr Lys Phe His Ser Tyr
225                 230                 235                 240
Pro Pro Phe Ser Asp Arg Leu Lys Ala Leu Ile Gly Glu Leu Pro Pro
                245                 250                 255
Val Leu Asp Tyr Ala Asn Thr Asp Ser Gln
            260                 265
```

<210> 35338

<211> 120
<212> PRT
<213> A.fumigatus

<400> 35338
Ala Val Cys Ser Thr His Lys Arg Ile Arg Glu Ser His Val Phe Ser
1 5 10 15
Thr Pro Asp Ile Cys Gln Ser Leu Tyr Leu Arg Ile Ser Ser Leu Ser
20 25 30
Gly Thr Ser Pro Leu Pro Gly Gly Ser Thr Ser Ser Gly Gly Ser Val
35 40 45
Leu Ser Thr Tyr Pro Gly Asn Thr Asp Asn Ser Gly Asn Cys Ala Asp
50 55 60
Ala Ser Arg Thr Ser Asp Ser Thr Gly Ser Phe Ser Thr Gln Leu Gly
65 70 75 80
Glu Thr Glu Pro Val Ser Leu Pro Arg Trp Phe Phe Tyr Arg Pro Leu
85 90 95
Cys Cys Ser Gly Arg His Trp Pro Gln Val Ala Lys Leu His Arg Gly
100 105 110
Val Phe Glu Ser Leu Pro Val Ser
115 120

<210> 35339
<211> 82
<212> PRT
<213> A.fumigatus

<400> 35339
Asn Leu Cys Ile Leu Ala Met Ala Gln Leu His Arg Asn Pro Pro Phe
1 5 10 15
Arg Ala Glu His Leu Gly Ser Leu Leu Arg Thr Lys Glu Leu Leu Lys
20 25 30
Val Lys Thr Ala Phe Glu Lys Gly Gln Ala Ser Ala Ala Glu Leu Lys
35 40 45
Ala Val Glu Glu Arg Asp Ile Lys Asp Ile Val Glu Thr Gln Lys Lys
50 55 60
Leu Gly Tyr Ala Ala Leu Ser Asp Gly Glu Tyr Cys Arg His Ser Lys
65 70 75 80
Ala Ser

<210> 35340
<211> 209
<212> PRT
<213> A.fumigatus

<400> 35340
Glu Thr Trp Lys Leu His Val Leu Asp Trp Pro Ala Asp Ile Leu Thr
1 5 10 15
His Thr Pro Asp Phe Cys Ser Glu Lys Met Leu Glu Gly Trp Lys Ala
20 25 30
Asp Pro Leu Asn Thr Ala Thr Ala Asp Glu Met Phe Asp Lys Tyr Val
35 40 45
Lys Gln Tyr Asn Glu Leu Leu Ser Lys Arg Pro Ala Asp Leu His Val
50 55 60
Gly Val His Ile Cys Arg Gly Asn Phe Val Gly Ser Arg His Phe Ser

```
65                  70                  75                  80
Glu Gly Gly Tyr Asp Arg Ile Ala Thr Lys Leu Phe Lys Glu Leu Asn
                85                  90                  95
Val Asp Thr Tyr Tyr Leu Glu Tyr Asp Thr Pro Arg Ala Gly Gly Phe
            100                 105                 110
Glu Pro Leu Lys Glu Leu Pro Arg His Lys Asn Val Ile Leu Gly Val
        115                 120                 125
Val Thr Ser Lys Phe Pro Lys Leu Glu Asp Lys Glu Glu Met Lys Lys
    130                 135                 140
Arg Val Tyr Asp Ala Ala Lys Phe Ile Ala Glu Gly Asn Asn Ile Ser
145                 150                 155                 160
Val Glu Glu Ala Leu Lys Gln Val Gly Val Ser Pro Gln Cys Gly Phe
                165                 170                 175
Ala Ser His Arg Glu Gly Asn Ala Ile Asp Trp Asp Gly Met Ile Asn
            180                 185                 190
Lys Leu Lys Leu Val Arg Glu Ile Ala Asn Asp Ile Trp Pro Gly Glu
        195                 200                 205
Leu
```

<210> 35341
<211> 160
<212> PRT
<213> A.fumigatus

```
<400> 35341
Phe Asp Val Arg Ala Val Phe Trp Gly Ser Phe Phe Pro Gly Leu Glu
1               5                   10                  15
Gly Phe Glu Glu Val Thr Asp Phe Asp Ala Asp Ile Phe Arg Pro Tyr
            20                  25                  30
Ala Pro Asp Val Ala Ala Phe Leu Glu Ala Gly His Lys Pro Gly Glu
        35                  40                  45
Thr Val Ile Cys Thr Gly Lys Ile Lys His Val Gly Ser Thr Tyr Val
    50                  55                  60
Asp Gln Phe Lys His Leu Ala Ser Leu Val Ala Pro Glu Glu Val Lys
65                  70                  75                  80
Asn Leu Lys Leu Thr Leu Ala Ala Pro Asn Trp Tyr His Leu Arg Tyr
                85                  90                  95
Lys Asn Gly Lys Ala Phe Pro Lys Asp Val Tyr Ser Thr Glu Asp Glu
            100                 105                 110
Tyr Leu Ser Asp Ile Ala Lys Ala Tyr Gln Glu Glu Leu Gln Ile Leu
        115                 120                 125
Tyr Asp Ala Gly Cys Arg Asn Val Gln Phe Asp Asp Pro Asn Leu Ala
    130                 135                 140
Cys Lys Lys Pro Gly Asn Cys Thr Ser Trp Thr Gly Gln Gln Thr Tyr
145                 150                 155                 160
```

<210> 35342
<211> 70
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8),(37)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35342
Arg Met Asn Leu Val Leu Lys Xaa Lys Tyr Tyr Ile Asp Met Ile Ala
1 5 10 15
Tyr Asn Pro Leu Gln Ser Ser Asn Lys Cys Ser Ala Lys Glu Met Ile
20 25 30
Arg Tyr Asn Gln Xaa Gly Lys Arg Val Ala Asn Phe Asn Tyr Gly Val
35 40 45
Thr Leu Gly Ala Phe Asn Ile Phe Arg Met Ser Ala Lys Pro Gln Cys
50 55 60
Tyr Pro Thr Leu Gly Cys
65 70

<210> 35343
<211> 220
<212> PRT
<213> A.fumigatus

<400> 35343
Ala Gln Asp Gly Ser Leu Ala Val Gln Gly Ala Arg Ser Ile Ala Pro
1 5 10 15
Leu Ile Asn Ser Leu Leu Ala Asn Pro Gly Phe Val Ile Arg Val Ala
20 25 30
Ser Gln Asp Tyr His Pro Arg Asp His Val Ser Phe Ala Ser Asn His
35 40 45
Pro Glu Pro Asn Asn Arg Pro Phe Glu Ser Val Ile Gln Met Asn Asn
50 55 60
Pro Ala Pro Gly Lys Glu Ser Glu Thr Lys Glu Gln Arg Leu Trp Pro
65 70 75 80
Val His Cys Val Gly Gly Thr Lys Gly Ala Thr Ile Ile Pro Glu Ile
85 90 95
Asp Ser Ser Lys Ile Asp Leu His Val Lys Lys Gly Met Asp Ser Arg
100 105 110
Val Glu Met Tyr Ser Ala Phe Ser Asp Ala Phe Gly Asn Leu Asp Pro
115 120 125
Ala Val His Ala Gln Ser Val Asp Val Asp Leu Lys Ala Val Leu Ala
130 135 140
Glu Arg Gly Ile Thr His Val Phe Ser Ala Gly Ile Ala Gly Asp Tyr
145 150 155 160
Cys Val Lys Tyr Thr Ala Met Asp Ala Ala Arg Ala Gly Phe Lys Ser
165 170 175
Phe Leu Val Glu Asp Ala Thr Arg Ser Val Asp Ser Gly Ala Gly Trp
180 185 190
Glu Glu Ala Arg Arg Glu Cys Glu Ala Ala Gly Val Ser Ile Ile Gln
195 200 205
Ser Asp Gly Pro Glu Ile Ala Ala Leu Thr Ala Ser
210 215 220

<210> 35344
<211> 113
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (99)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35344

```
Gly Glu Ala Leu Ile His Thr Ser His Ala Met Ser Thr Asn Met Ser
1               5                  10                  15
Ile Ser Thr Gln Ala Ala Thr Cys Thr Thr Thr Asp Glu Asn Ile Ser
            20                  25                  30
Ala Ser Thr Thr Arg Leu Asn Gln Asp Lys Asn Leu Ala Glu Lys Leu
        35                  40                  45
Pro Tyr Trp Leu Val Asn Val Pro Pro Ser Gln Trp Pro Ala Glu Cys
    50                  55                  60
Pro Pro Phe Leu Arg Asp Leu Pro Ala Lys Ser Ile Ser Ile Leu Ser
65                  70                  75                  80
Thr Pro Asp Ala Glu Tyr Lys Lys Gln Asp Trp Glu Thr Val Lys Glu
                85                  90                  95
Ile Val Xaa Asn Trp Gly Arg Val Gly Gly Tyr Cys Thr Ala Thr Cys
            100                 105                 110
Cys
```

<210> 35345
<211> 286
<212> PRT
<213> A.fumigatus

<400> 35345

```
Lys Gln Cys Leu Phe Ser Thr Phe Ser Leu Thr Thr Thr Tyr Ile Ser
1               5                  10                  15
Ala Arg Phe Leu Arg Thr Phe Asp Arg Ser Gln Ser Arg His Ala Ser
            20                  25                  30
Pro Arg Ser Thr Pro Gly Trp Arg Pro Phe Ala Leu Arg Pro Thr Tyr
        35                  40                  45
Leu Ser Ile Leu Gly Ile Leu Met Leu Ile Met Leu Ala Val Leu Glu
    50                  55                  60
Ala Leu Arg Arg Tyr Thr Asp Arg Tyr Gly Gly Leu Val Phe Tyr Gln
65                  70                  75                  80
Asp Thr Thr Asn Leu Ser Ser Pro Ala Thr Phe Ala Tyr Asn Tyr Val
                85                  90                  95
Pro Val Ile Val Ala Leu Ile Leu Val Thr Ser Trp Ser Phe Ile Asp
            100                 105                 110
Phe Asp Val Leu Arg Leu Glu Pro Tyr Phe Gln Leu Ser Arg Pro Glu
        115                 120                 125
Gly Thr Pro Ala Thr Thr Leu Phe Ile Asn Tyr Asn Phe Gly Gln Ser
    130                 135                 140
Phe Leu Thr Pro Leu Thr Ser Ala Lys Arg Gly His Trp Val Val Leu
145                 150                 155                 160
Leu Val Ser Leu Leu Thr Val Leu Met Arg Ile Phe Leu Pro Ala Leu
                165                 170                 175
Gln Ser Ala Val Phe Glu Leu Arg Glu Ile Ser Ile Leu Ser Asp Glu
            180                 185                 190
Thr Met Arg Thr Trp Pro Asn Leu Val Asp Leu Asp Ser Gln Ala Arg
        195                 200                 205
Trp Ile Val Ala Gln Glu Lys Asn Asn Trp Asp Phe Ser Thr Leu Ser
    210                 215                 220
Ala Gly Ser Pro Phe Gln Lys Thr Arg Ser Ala Lys Tyr Ala Val Ala
225                 230                 235                 240
```

```
Pro Val Glu Ile Pro Thr Asp Asp Phe Arg Glu Ser Thr Val Trp Thr
                245                 250                 255
Leu Asn Gln Thr Ile Tyr Trp Ser Glu Leu Ser Cys Gln Asp Val Met
            260                 265                 270
Val Asn Glu Ser Leu Glu Val Phe Ala Lys Glu Thr Thr Asp
        275                 280                 285
```

<210> 35346
<211> 143
<212> PRT
<213> A.fumigatus

<400> 35346

```
Leu Pro Ile Ile Ser Trp Asn Val Lys Gly Val Gln Leu Gln Gln Gln
1               5                   10                  15
Gly Gln Asp Gln Arg Cys Thr Leu Asp Phe Gln Tyr Ser Asn Ile Phe
            20                  25                  30
Phe Pro Ser Ser Asp Tyr Val Gln Ile Arg Tyr Trp Glu Pro Val Trp
        35                  40                  45
Thr Asp Asn Val Ser Gln Ser Phe Phe Tyr Asp Ser Cys Asn Pro Phe
    50                  55                  60
Asp Leu Tyr Gly Ile Leu Ile Ser Val Asn Ala Thr Arg Ala Thr Asp
65                  70                  75                  80
Leu Asp Ala Asp Asp Met Ser Leu Ser Gly Val Thr Phe Ala Ser Ser
                85                  90                  95
Ala Thr Leu Phe Ala Cys Asn Ile Asp Tyr Arg Lys Ala Asp Ala Lys
            100                 105                 110
Leu Gln Leu His Ala Asn Ser Ser Ile Thr Ser Val Asp Val His Pro
        115                 120                 125
Gly Thr Thr Thr Val Leu Thr Asp Asp Gln Phe Asn Ile Asp Glu
    130                 135                 140
```

<210> 35347
<211> 83
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (66)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35347

```
Gln Arg Glu Asp Gly Gln Thr Phe Arg Ser Ser Cys His Ala Gly Phe
1               5                   10                  15
Ala Leu Phe Tyr Pro Cys Cys Cys Leu Thr Trp Gln Ser Lys Phe Phe
            20                  25                  30
Glu Gln Val Tyr Gly Leu Ile Cys Ala Leu Ser Ile Ile Phe Leu Gln
        35                  40                  45
Ser Asp Gln Lys Val Thr Gln Asp Gln Leu Val Gly Val Cys Arg Val
    50                  55                  60
Asn Xaa Trp Gln Ile Leu Gly Ala Pro Lys Lys Cys Tyr Trp Leu Leu
65                  70                  75                  80
Ile Cys Leu
```

<210> 35348
<211> 61
<212> PRT
<213> A.fumigatus

<400> 35348
Cys Trp Thr Arg Thr Ala Gly Asp Cys Thr Val Ile Ser Trp Met Leu
1 5 10 15
Leu Ala Arg Ser Val Gly Ser Leu Asn Ser Asp Ile Thr Pro Arg Cys
20 25 30
Val Ile Phe Ser Thr Gln Asp Asp Lys Met Leu Leu Leu Trp Glu Glu
35 40 45
Gly Val Val Leu Pro Asn Thr Val Pro Leu Asp Pro Val
50 55 60

<210> 35349
<211> 127
<212> PRT
<213> A.fumigatus

<400> 35349
Gly His Cys Ser Ser Asn Gly His Gln Asp Gln Ser Gly Arg Cys Ile
1 5 10 15
Pro Gln Ile Thr Asp Leu Ile Thr Tyr Met Met Ser Tyr Thr Asn Ile
20 25 30
Tyr Ala Ala Lys Gly Ser Asn Leu Leu Leu Leu Lys Asp Ile Arg Gly
35 40 45
Pro Ser Ser Pro Val Leu Ser Asn Val Asp Lys Leu Gly Glu Leu Ser
50 55 60
Pro Val Phe Cys Gln Thr Val Thr His Arg Thr Ser Lys Ser Thr Ser
65 70 75 80
Pro Asp Gly Glu Lys Pro Lys Ser Leu Ala Pro Ile His Ser Ser Pro
85 90 95
Trp Pro Gly Pro Arg Phe Glu Gln Phe Val Gly Pro Asn Asp Pro Asp
100 105 110
Gly Thr Asn Tyr Ala Leu Thr Leu Glu Val His Leu Gln Leu Val
115 120 125

<210> 35350
<211> 262
<212> PRT
<213> A.fumigatus

<400> 35350
Ile Phe Leu Ser Asn Gln Phe Thr Tyr Phe Ile Leu Cys Pro Ala Ile
1 5 10 15
Lys Ile Ser Ile Ile Cys Phe Tyr Arg Arg Leu Phe Asn Thr Lys Ser
20 25 30
Phe Gln Leu Val Thr Phe Ala Leu Asn Ile Leu Ile Ala Ser Trp Gly
35 40 45
Ala Gly Ile Phe Leu Ala Cys Ala Val Gln Cys Arg Pro Leu Arg Ala
50 55 60
Tyr Trp Asp Lys Ser Ile Asp Gly His Cys Phe Asp Gly Asn Lys Phe
65 70 75 80
Phe Ile Val Asn Gln Ala Phe Asn Val Ile Met Asp Phe Val Ile Leu
85 90 95

```
Ala Leu Pro Ile Pro Met Ile Trp Gly Leu Gln Arg Ala Trp Gln Asp
            100                 105                 110
Lys Leu Ala Leu Asn Gly Val Phe Ala Leu Gly Ala Phe Val Cys Phe
        115                 120                 125
Ala Ser Ile Tyr Arg Ile Val Val Leu Phe Trp Ile Lys Thr Ser Asp
    130                 135                 140
Thr Thr Phe Thr Val Tyr Gln Ala Thr Leu Trp Thr His Ile Glu Pro
145                 150                 155                 160
Ser Ile Gly Leu Ile Cys Ser Cys Leu Pro Ile Ile Arg Gly Leu Phe
                165                 170                 175
Pro Thr Leu Lys Leu Ser Gly Ser Arg Lys Thr Thr Ala Pro Tyr Tyr
            180                 185                 190
Ile Arg Thr Asp Tyr Thr Gly Ser His Leu Ala Thr Leu Ser Ser Pro
        195                 200                 205
Lys Ser Pro Ala Ser Ala Tyr Phe Lys Met Glu Glu Gly Leu Met Ser
    210                 215                 220
Arg Ala Thr Thr Asp Thr Glu Val Pro Pro Asp Asp Tyr Leu Ser Pro
225                 230                 235                 240
Lys Asp Ile Ala Val Arg Thr Asp Ile Lys Ile Ser Gln Asp Ala Ala
                245                 250                 255
Ser Leu Arg Ser Gln Thr
            260
```

<210> 35351
<211> 284
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (65)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35351

```
Arg Thr Ser Pro Phe Phe Ile Arg Ser Ile Ala Ser Leu Arg Pro Ser
1               5                   10                  15
Ser Pro Ile Cys Ser Ser Pro Thr Gln Val Leu Gln Ala Leu Val Gly
            20                  25                  30
Arg Gln Leu Lys His Gly Gln His Leu Leu Pro Ala Ala Gln Met Thr
        35                  40                  45
Arg Ser Asp Gln Asn Ser Val Arg Asp Glu Val Leu Arg Leu Asp Asp
    50                  55                  60
Xaa Ala Phe Phe Leu Gly Gln Thr Asp Ala Asp Pro Ala Ala Met His
65                  70                  75                  80
Ile His His Arg Gln Val Leu Gly Gln Val Glu Ala Leu Gly Gly Val
                85                  90                  95
Arg Ala Val Asp Asp Glu Val Glu Arg Glu Pro Val Arg Leu Phe Pro
            100                 105                 110
Ala Leu Leu Arg Arg Gly Asp Val Ser Val Arg Thr Lys Leu Ala Arg
        115                 120                 125
Ile Gly Leu Leu Gly Pro Thr Ala Gly Asp Gly Pro Asp Leu Arg Ala
    130                 135                 140
Gln Arg Leu Gly Glu His His Ala Lys Val Ala Asp Ala Ser Gln Ala
145                 150                 155                 160
Asp Asp Thr Asp Leu Leu Thr Gly Pro Gly Pro Val Ala Asp Gln Arg
                165                 170                 175
```

```
Arg Val Cys Gly Gln Thr Gly Ala Glu His Gly Gly Asp Glu Val Gly
            180                 185                 190
Leu Glu Gly Val Gly Asp Gly Lys His Pro Val Leu Val Gly Ala Asn
        195                 200                 205
Val Gly Gly Val Ala Ala Leu Ala Asp Asp Ala Arg Leu Gly Pro Leu
    210                 215                 220
Gly Ala Val Cys Val Asp His Glu Asp Arg Ala Val Gly Leu Val Val
225                 230                 235                 240
Val Leu Ala Leu Leu Ala Phe Thr Ala Gly Val Gly Leu Ser Ala Asp
                245                 250                 255
Ala Asp Thr Leu Ala Phe Leu Asp Gln Gly His Phe Gly Ala Asn Ala
            260                 265                 270
Asn Cys Thr Ala Asp Asp Leu Cys Trp Lys Gln Leu
        275                 280
```

<210> 35352
<211> 153
<212> PRT
<213> A.fumigatus

```
<400> 35352
Gly Arg Leu Leu Pro Leu Gly Val Lys Ser Ala Thr Pro Ser Ala Thr
1               5                   10                  15
Thr Arg Pro Cys Thr Ser Thr Ser Pro Pro Ser Arg Thr Ala Pro Arg
            20                  25                  30
Ser Pro Ser Ser Cys Thr Thr Thr Pro Gly Pro Ser Pro Ala Ser Thr
        35                  40                  45
Trp Thr Pro Thr Ser Ser Ser Ala Ser Arg Ser Thr Pro Thr Leu Ser
    50                  55                  60
Ala Pro Ser Ser Pro Ala Pro Thr Arg Ala Ser Ser Pro Ala Ser Pro
65                  70                  75                  80
Ala Pro Ser Thr Pro Ser Pro Leu Arg Pro Arg Ser Leu Pro Pro Gln
                85                  90                  95
Arg Glu Pro Pro Pro Ser Arg Ser Lys Thr Thr Pro Thr Leu Pro Leu
            100                 105                 110
Ala Val Ser Pro Thr Ser Pro Cys Arg Arg Trp Cys Pro Val Ala Arg
        115                 120                 125
Gln Ser Trp Pro Ala Ala Pro Thr Ser Ser Pro Val Cys Val Cys Ala
    130                 135                 140
Ser Ser Pro Phe Gly Ala Arg Ala Gly
145                 150
```

<210> 35353
<211> 83
<212> PRT
<213> A.fumigatus

```
<400> 35353
Ser Leu Leu Val Ile Thr Val Ser Gly Ile Leu Asn Gln Ala Ala Ser
1               5                   10                  15
Met Thr Phe Ala Met Ala Asp Thr Ile Arg Leu Asp Val Asp Ile Lys
            20                  25                  30
Val Glu Ala Cys Gly Ile Cys Gly Ser Asp Val His Thr Ile Ser Gly
        35                  40                  45
Glu Ser Trp Val Trp Ser Lys Lys Glu Ile Gln Arg Ile Ala Pro Leu
    50                  55                  60
```

```
Thr Ala Leu Phe Arg Trp Leu Gly Arg Ala Glu Ile Pro Pro Leu Arg
65                  70                  75                  80
Arg Thr Trp


<210> 35354
<211> 158
<212> PRT
<213> A.fumigatus

<400> 35354
Arg Val Leu Arg Arg Arg Gln Arg Arg Asp Pro Val Arg Val Leu His
1               5                  10                  15
Arg Arg Arg Gly Arg Leu Pro Ala Pro Arg His Pro Val Gln Leu Pro
            20                  25                  30
Arg Gly Arg Arg Arg His Arg His Gly Leu Arg Pro His His Pro His
        35                  40                  45
Leu Ala Ala Pro Gln His Cys Arg His Gln Val His Leu Arg Gln His
    50                  55                  60
Gly Gln Ala His Pro Arg Arg Arg Arg Pro Gln Arg His His Pro Ser
65                  70                  75                  80
Val Pro Ala Arg Ser His His Lys Glu Ser Leu His Gln Ala Gly Arg
                85                  90                  95
Lys Pro Pro Leu Arg Cys Leu Trp Arg Tyr Arg Arg Leu His Pro Ala
            100                 105                 110
Asp Ala Gly Val Arg Trp Leu Gly Asn Pro Gly Arg Arg Arg Gln Arg
        115                 120                 125
His Pro Pro Ser Val Cys Ala His Leu His Pro Leu Glu Arg Gly Pro
    130                 135                 140
Val Asp Arg Gly His Gly Gly Ala Ala Val Ala Gln Gln Gly
145                 150                 155

<210> 35355
<211> 266
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (219)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35355
Leu Leu Pro Thr Glu Ile Val Gly Arg Ala Ile Arg Val Gly Pro Lys
1               5                  10                  15
Val Thr Leu Ile Lys Glu Gly Gln Arg Val Gly Val Gly Ala Gln Ser
            20                  25                  30
Tyr Ser Cys Gly Glu Cys Lys Gln Cys Lys Asn Asp Asn Glu Thr Tyr
        35                  40                  45
Cys Pro Val Leu Met Ile Asp Thr Tyr Gly Ala Glu Trp Pro Glu Thr
    50                  55                  60
Gly Ile Val Ser Gln Gly Gly Tyr Ser Ser His Val Arg Thr His Glu
65                  70                  75                  80
His Trp Val Phe Pro Ile Pro Asp Ala Leu Glu Thr Asn Leu Val Ala
                85                  90                  95
Pro Met Leu Cys Ala Gly Leu Thr Ala Tyr Ser Pro Leu Val Arg Asn
```

```
            100                 105                 110
Gly Ala Gly Pro Gly Lys Lys Val Gly Ile Val Gly Leu Gly Gly Ile
        115                 120                 125
Gly His Phe Gly Val Met Phe Ala Lys Ala Leu Gly Ala Glu Val Trp
    130                 135                 140
Ala Ile Ser Arg Ser Arg Ala Lys Glu Ala Asp Ala Arg Lys Leu Gly
145                 150                 155                 160
Ala Asp Gly Tyr Ile Ala Thr Ala Glu Glu Gly Trp Glu Lys Pro His
                165                 170                 175
Arg Phe Ser Phe Asp Leu Ile Ile Asn Cys Ala Asn Ser Ser Glu Gly
            180                 185                 190
Phe Asp Leu Ser Lys Tyr Leu Ser Met Met Asp Val His Gly Arg Trp
        195                 200                 205
Ile Ser Val Gly Leu Pro Glu Glu Glu Gly Xaa Val Ile Lys Ala Gln
    210                 215                 220
His Leu Ile Ser Asn Gly Val Leu Ile Gly Ala Ser His Leu Gly Ser
225                 230                 235                 240
Arg Lys Glu Met Leu Ala Met Leu Gln Leu Ala Ala Asp Lys Gly Leu
                245                 250                 255
Lys Asn Leu Gly Gly Gly Ala Ala Asn Arg
            260                 265
```

<210> 35356
<211> 225
<212> PRT
<213> A.fumigatus

<400> 35356

```
Thr Leu Thr Ser Thr Arg Arg Glu Glu Cys Tyr Ala Val Gly Asn Asp
1               5                   10                  15
Glu Thr Leu Tyr Glu Tyr Phe Thr Ala Val Ala Asp Gly Ser Pro Leu
            20                  25                  30
Pro Val Ile Leu Tyr Asn Tyr Pro Gly Ala Val Ala Gly Ile Asp Met
        35                  40                  45
Asp Ser Asp Leu Ile Ile Arg Ile Ser Gln His Pro Asn Ile Val Gly
    50                  55                  60
Thr Lys Phe Thr Cys Ala Asn Thr Gly Lys Leu Thr Arg Val Ala Gly
65                  70                  75                  80
Ala Leu Asn Ala Ile Thr Pro Pro Ser Pro Leu Ala Pro Thr Thr Lys
                85                  90                  95
Arg Ala Ser Thr Lys Pro Val Glu Asn His Pro Tyr Val Ala Phe Gly
            100                 105                 110
Gly Ile Ala Asp Phe Thr Leu Gln Thr Leu Val Ser Gly Gly Ser Ala
        115                 120                 125
Ile Leu Ala Gly Gly Ala Asn Val Ile Pro Arg Leu Cys Val Arg Ile
    130                 135                 140
Phe Thr Leu Trp Ser Glu Gly Arg Leu Thr Glu Ala Met Glu Ala Gln
145                 150                 155                 160
Gln Leu Leu Ser Lys Ala Asp Trp Val Leu Thr Lys Ala Ala Ile Pro
                165                 170                 175
Gly Thr Lys Ser Ala Ile Gln Ser Tyr Tyr Gly Tyr Gly Gly Tyr Pro
            180                 185                 190
Arg Arg Pro Leu Ala Arg Leu Ser Glu Glu Gln Ala Gln Ala Val Ala
        195                 200                 205
Glu Lys Ile Lys Asp Ala Met Glu Val Glu Gln Ser Leu Pro Asp Ile
    210                 215                 220
```

Ala
225

<210> 35357
<211> 91
<212> PRT
<213> A.fumigatus

<400> 35357
Asn Met Ala Phe Asp Asp Leu Pro Gln Leu Asp Asp Ser Lys Asp Arg
1 5 10 15
Pro Gly Leu Trp Ser Ala Gly Asn Ser Thr Ala Val Ser Leu Gln Pro
20 25 30
Thr Asp Glu Ile Ser Gly Pro Glu Gly Ile Arg Ser Ile Phe Ile Arg
35 40 45
His Phe Ser Ala Asp Ile Asn Thr Lys Tyr Thr Asp Leu Leu Leu Ile
50 55 60
Val Cys Gly Phe Val Ser Gly Leu Val Asp Gly Leu Cys Phe Asn Ala
65 70 75 80
Trp Gly Ser Phe Ala Ser Met Gln Thr Gly Pro
85 90

<210> 35358
<211> 249
<212> PRT
<213> A.fumigatus

<400> 35358
Asp Phe Arg Pro Gly Gly Tyr Ser Leu Asp Leu His Pro Ala Leu Leu
1 5 10 15
Cys Arg His Gln Tyr Gln Ile His Arg Ser Ala Pro Asp Arg Leu Arg
20 25 30
Leu Arg Glu Arg Pro Arg Arg Trp Pro Val Leu Gln Arg Met Gly Gln
35 40 45
Phe Cys Gln His Ala Asn Arg Ser Val Thr Gln Ala Pro Ser Glu Asp
50 55 60
Asn Ser Ala Thr Asp Ile Ala Glu Gly Asn Thr Val Phe Ile Ala Leu
65 70 75 80
Gly Ala Ser Gly Gln Pro Val Tyr Pro Ala Tyr Leu Trp Ala Lys Ser
85 90 95
Leu Ala Ala Val Ala Val Phe Ile Leu Ser Met Ile Val His Ile Tyr
100 105 110
Phe Ser Arg Leu Leu Gly Pro Arg Arg Arg Ser Thr Leu Ile Leu Ser
115 120 125
Phe Ser Ala Gln Thr Leu Ala Leu Met Ala Ala Ala Ile Leu Val Glu
130 135 140
Thr Gly Ala Val Ser Arg Arg Ala Glu Asn Pro Arg Ala Pro Ile Gln
145 150 155 160
Trp Met Gln Ile Leu Pro Ile Ser Leu Leu Ala Phe Gln Ala Ala Gly
165 170 175
Gln Ile Val Ala Ser Arg Ile Leu Ala Tyr Asp Glu Ile Pro Thr Val
180 185 190
Val Leu Thr Thr Leu Leu Cys Asp Leu Ile Val Asp Lys Asp Leu Leu
195 200 205
Ala Arg Gly Trp Thr Ser Asn Pro Arg Arg Asn Arg Arg Val Gly Ala
210 215 220

```
Phe Leu Ala Leu Phe Leu Gly Ala Met Thr Ala Gly Gly Leu Ser Lys
225                 230                 235                 240
Val Thr Asp Met Ala Ala Ser Leu Trp
                245
```

<210> 35359
<211> 93
<212> PRT
<213> A.fumigatus

<400> 35359

```
Ser Met Gly Arg Cys Ser Thr Arg His Asn Tyr Gln Leu Ser Glu Glu
1               5                   10                  15
Phe Asn Thr Lys His Ser Phe Val Asp Ala Arg Gly Glu Ser Gln Ser
            20                  25                  30
Thr Tyr Val Gln Asp Tyr Pro Arg Thr Ile Leu Ser Ile Glu Pro Gly
        35                  40                  45
Lys Tyr Phe Gly Pro Leu Ser Asn Val Ala Leu Pro Gln Ile Leu Met
    50                  55                  60
Leu Lys Leu Asp Ser Tyr Val Tyr Trp Leu Pro Tyr His Ile Tyr Asp
65                  70                  75                  80
Ile Ser Thr Ser Lys Ser Val Arg Pro Pro Pro Ser Asn
                85                  90
```

<210> 35360
<211> 89
<212> PRT
<213> A.fumigatus

<400> 35360

```
Arg Gln Asp Gly Ala Glu Leu Pro Glu Arg Asp Glu Lys Pro Phe Gly
1               5                   10                  15
Asp Pro Trp Asn Leu Ser Gly Ala Thr Glu Asp Tyr Phe Asp Asn Tyr
            20                  25                  30
Thr Gly Tyr Tyr Asp Gly Arg Lys Gly Trp Lys Thr Arg Pro Gly Gly
        35                  40                  45
Asp Thr Leu Asp Ile Thr Thr Trp Ser Ser Ala Asp Arg Lys Lys Ala
    50                  55                  60
Ser Phe Asp Gly Lys Asp Pro Leu Gly Lys Glu Glu Arg Asp Ala Ile
65                  70                  75                  80
Lys Lys Gly Leu Val Met Ser Leu Ala
                85
```

<210> 35361
<211> 94
<212> PRT
<213> A.fumigatus

<400> 35361

```
Ile Pro Gln Ser Leu Phe Ala Arg Leu Gly Arg Trp Asn Met Tyr Thr
1               5                   10                  15
Asp Met Ala His Lys Ile Ser Val Asn Gly Ile Met Asp Arg Leu Val
            20                  25                  30
Val Asp Ser Phe Gln Cys Leu Leu Ser Cys Arg Tyr Ser Tyr Ser Pro
        35                  40                  45
Ile Gly Thr Leu Val Met Ile His Phe Leu Ala Phe Leu Leu Ala Thr
```

```
    50                  55                  60
Ile Ser Ser Leu Asp His Cys Ala Leu Trp Ser Trp Val Glu His Asp
65                  70                  75                  80
Pro Ala His Pro Val Lys Leu Leu Arg Arg Ile Arg Ile Ala
                85                  90
```

<210> 35362
<211> 213
<212> PRT
<213> A.fumigatus

<400> 35362

```
Leu Ser Leu Val Asn Ser Tyr Val Leu Asp Pro Ala Arg Ile Ala Pro
1               5                   10                  15
Ser Arg Ser Asp Ala Asn Ser Asn Gly His Phe Pro Leu Ser Ser Ser
            20                  25                  30
Gln Asn Gln Thr Gly Thr Pro Arg Gly Phe Ser Leu Ala Asn Leu Pro
        35                  40                  45
Pro Tyr Leu Ala Asn Asn Val Asn Ile Pro Gly Gly Thr His Gly Leu
    50                  55                  60
Pro Gly Ala Ala Gly Ile Pro Gly Phe Met Asn Val Asn Asn Gln Ala
65                  70                  75                  80
Trp Asn Ala Asn Gly Leu Val Thr Gly Glu His Ala Ala Asn Leu His
                85                  90                  95
His Pro Gly Val Ile Arg Arg Gly Gly Gly Arg Tyr Asn Asn Arg Ser
            100                 105                 110
Gly Pro Tyr Asp Arg Arg Ser Asn Arg Gln Gly Ala Ser Gly Gly His
        115                 120                 125
Leu Ser Pro Ala Arg Gly Met Ser Ser Met Tyr Gly Ala Gly Ala Arg
    130                 135                 140
Met Gly Ala Ser Gly Ala Val Pro Tyr Ile Pro Pro Gly His Pro Ala
145                 150                 155                 160
Ala Ala Ala Leu Met Gly Ala Gly Pro Phe Pro Asp Ala Met Gly Ser
                165                 170                 175
Gly Pro Gly Gln Gln Gly Met Gly Pro Arg Glu Ala Thr Gln Gly Arg
            180                 185                 190
Ser Ile Lys Ser Tyr Glu Asp Leu Asp Ala Val Gly Gly Ala Gly Ser
        195                 200                 205
Gly Glu Leu Asn Tyr
    210
```

<210> 35363
<211> 71
<212> PRT
<213> A.fumigatus

<400> 35363

```
Phe Ile His Thr Leu Phe Phe Leu Phe Phe Ser Pro Val Tyr Ile Ile
1               5                   10                  15
Thr Gly Val Val Leu Leu Ser Ser Asp Trp Tyr Ile Phe Phe Tyr His
            20                  25                  30
Phe Leu Leu Ser Leu Val Leu Ser Phe Leu Ser Ile Phe Ser Arg Ser
        35                  40                  45
Lys Asp Phe Trp Asp Tyr Ile Met Asp Leu Thr His Pro Leu Met Cys
    50                  55                  60
Thr Ile Leu Ala Ala Glu Ile
```

65 70

<210> 35364
<211> 597
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35364
Asp Asn Asp Xaa Leu Arg Arg Leu Glu Val Arg Ser Leu Arg Arg Pro
1 5 10 15
Leu Met Asp Phe Arg Val Gly Ala Tyr Gln Gln Trp Glu Arg Asp Leu
20 25 30
Glu Gly Gly Leu Phe Asp Asp Phe Thr Leu Glu Gly Ile Tyr Lys Thr
35 40 45
Glu Ser Asp Gly Ala Gly Gly Val Ile Glu Lys Glu Glu Gly Glu Thr
50 55 60
Thr Ala Val Gly Glu Thr Leu Gly Val Leu Asp Leu Leu Pro Val Arg
65 70 75 80
Cys Gly Asp Leu Arg Asp Glu Ala Leu Ser Gln Pro Ala Leu Leu Ile
85 90 95
Lys Thr Leu Ala Pro Asn Val Ser Arg Ala Lys Ile Glu Glu Phe Cys
100 105 110
Lys Glu His Leu Gly Glu Gln Asp Gly Gly Phe Lys Trp Leu Ser Leu
115 120 125
Ser Asp Pro Asn Pro Ser Lys Lys Phe His Arg Met Gly Trp Ile Met
130 135 140
Leu His Pro Ala Pro Glu Ser Ala Val Ile Glu Arg Gly Asp Gly Arg
145 150 155 160
Glu Glu Glu Gly Glu Glu Met Asp His Asp Gln Gly Ala Asn Gly Thr
165 170 175
Val Thr Val Ser Ala Ala Glu Lys Ala Leu Glu Ala Val Asn Asp Lys
180 185 190
Thr Ile His Asp Pro Val His Gly Asp Phe Val Cys His Val Gly Val
195 200 205
His Val Pro Pro Ser Gln Thr Arg Lys Lys Ala Leu Trp Asp Leu Phe
210 215 220
Ser Ala Pro Glu Arg Ile Glu Arg Asp Leu Glu Leu Ala Arg Arg Leu
225 230 235 240
Val Cys Lys Leu Asp Gly Glu Met Gly Gly Asn Ala Asp Gly Tyr Ser
245 250 255
Lys Ile Glu Asp Arg Val Glu Glu Leu Arg Gly Lys Gly Trp Leu Gln
260 265 270
Pro Pro Val Thr Gly Pro Val Ser Val Lys Lys Arg Lys Pro Asp Phe
275 280 285
Asp Pro Ala Asp Ile Asp Glu Gly Glu Ala Glu Glu Gly Glu Glu Gln
290 295 300
Glu Gly Trp Asp Asp Asp Glu Val Asp Asp Glu Glu Leu Leu Ala Lys
305 310 315 320
Lys Lys Lys Leu Asp Leu Met Val Glu Tyr Leu Arg Arg Val Tyr Asn
325 330 335
Phe Cys Phe Phe Cys Val Phe Glu Ser Asp Ser Val His Glu Leu Ala

```
            340                 345                 350
Arg Lys Cys Pro Gly Gly His Leu Arg Arg Pro Arg Ala Gly Leu Ser
        355                 360                 365
Ser Gln Ser Lys Ala Val Ala Arg Ala Ser Ala Leu Gly Gln Pro Phe
    370                 375                 380
Pro Val Lys Lys Lys Glu Pro Ser Glu Glu Gly Glu Glu Gln Pro Pro
385                 390                 395                 400
Ala Glu Glu Lys Arg Thr His Arg Leu Ser Lys Ala Glu Gln Gln Leu
                405                 410                 415
Gln Arg Ala Phe Asn Trp Val Arg Thr Phe Glu Asp Lys Leu Leu Gln
            420                 425                 430
Ile Leu Glu Pro Asp Asn Val Asp Ile Arg Lys Leu Gly Gly Lys Pro
        435                 440                 445
Val Glu Glu Ala Leu Glu Glu Glu Leu Ser Lys Phe Val Lys Gln Glu
    450                 455                 460
Asp Glu Ala Lys Phe Arg Cys Lys Val Pro Glu Cys Thr Lys Leu Phe
465                 470                 475                 480
Lys Ala Glu His Phe Trp Arg Lys His Val Glu Lys Arg His Thr Glu
                485                 490                 495
Trp Phe Glu Asn Ile Lys Ser Asp Val Ser Cys Ala Ile Thr Leu Pro
            500                 505                 510
Tyr Trp Met Val Leu Thr Ala Asn Lys Tyr Asn Ser Ser Leu Trp Ser
        515                 520                 525
Ile Leu Thr Phe Ser Ile Leu Pro Glu Leu Pro Pro Arg Val Pro Met
    530                 535                 540
Pro Thr Ala Met Ala Ile Ser Leu Ser Ala Pro Val Lys Thr Arg Pro
545                 550                 555                 560
Val Pro Leu Val Val Ser Ala Trp Pro Ile Tyr Arg Pro Ile Leu Gln
                565                 570                 575
Thr Thr Ser Thr Ser Leu Ala Glu Pro Met Val Ser Pro Ala Leu Leu
            580                 585                 590
Val Phe Gln Ala Leu
        595

<210> 35365
<211> 502
<212> PRT
<213> A.fumigatus

<400> 35365
Asp His Pro Ile Ile Gln Ser Glu Leu Lys Lys Glu Pro Arg Thr Leu
1               5                   10                  15
Pro Asp Ala Leu Trp Lys Ile Phe Arg Lys Tyr Gly Leu Val Arg Tyr
            20                  25                  30
Pro Lys Glu Glu Leu Tyr Lys Ile Leu Gln Thr Ser Glu Thr Val Gly
        35                  40                  45
Leu Pro Glu Thr Val Phe Ala Tyr Ser Val Ala His Thr Leu Arg Ala
    50                  55                  60
Leu Leu Arg Leu Asp Pro Arg Thr Glu Asn Thr Asn Ile Val Phe Val
65                  70                  75                  80
Arg Cys Val Ser Asp Val Val Asp Met Ala Tyr Arg Ala Glu Arg Asp
                85                  90                  95
Thr Leu Tyr Ile His Glu Lys Trp Leu Trp Pro His Thr Thr Cys Gln
            100                 105                 110
Gly Ala Glu Gln Leu Ala Ile Pro Glu Pro Asp Val Phe Val Trp Gln
        115                 120                 125
```

```
His Thr Val Glu Asp Leu Tyr His Arg Leu Leu Ala Ile Ile Leu Asn
    130                 135                 140
Gln Ser Glu Gly Arg Arg Ala Gly Gln Asn Thr Arg His Leu Leu Arg
145                 150                 155                 160
Leu Ala His Gln Lys Leu His Tyr Met Pro Arg Asn Ile Gln Val Thr
                165                 170                 175
Val Glu Asp Glu Gly Ser Leu Thr Val Ser Phe Tyr Thr Gly His Ser
            180                 185                 190
Leu Leu Tyr Val Glu Gln Tyr Gly Ala Cys Val His Tyr Leu Ile Val
        195                 200                 205
Ile His Arg Pro Asp Cys Glu Val Arg Thr Asn Ile Leu Thr Tyr Asp
    210                 215                 220
Ser Thr Asn Asp Thr Cys Ala Cys Pro Arg Lys Ala Val Ser Leu Ala
225                 230                 235                 240
Ser Arg Thr Ala Arg Phe Ser Gly Leu Asn Gly Val Thr Trp Thr Pro
                245                 250                 255
Thr Val Val Arg Met Gln Gly Arg Asp Asn Ile Ala Lys Asp Gly Ser
            260                 265                 270
Ser Ala Ser Thr Leu Lys Ala Met Asp Gly Glu Leu Ile Gly Ile Ala
        275                 280                 285
Ser Gly Ala Val Ser Leu Leu Pro Ser Thr Thr Ser Ser His Ala Val
    290                 295                 300
Thr Asp Asp Asp Cys Asp Val Leu Leu Ser Ser His Cys Phe Gln Ser
305                 310                 315                 320
Asp Asn Ala Gln Ser Val Ala Asn Leu Ala Ser Glu Gln Ser Val Ala
                325                 330                 335
Asp Ala Ala Pro Val Pro Pro Lys Ile Glu Gly Thr Gln Glu Arg Ala
            340                 345                 350
Thr Val Ser Arg Asn Val Ser Pro Gln Pro Pro Ala Asp Ile Gly His
        355                 360                 365
Ser Val Ala Val Glu Gly Asn Thr Cys Ala Ala Ser Asn Gly Thr Leu
    370                 375                 380
Val Val Glu Ser Asp Gln Arg Pro Lys Asp Thr Ile Pro Cys Asn Leu
385                 390                 395                 400
Ser Asp Ser Gly Ala Leu Ile Ala Gly Pro Lys Glu Thr Leu Ala Lys
                405                 410                 415
Thr Arg Glu Ala Asn Asp Arg Val Glu Thr Asp Gly Ile Ala Lys Asp
            420                 425                 430
Phe Leu Arg Gly Ala Asn Ala Gln His Ser Ser Thr Phe Ser Thr Cys
        435                 440                 445
Pro His Pro Ala Ala Ala Met Asp Asn Leu Glu Ala Cys Glu Val Gln
    450                 455                 460
Glu Asn Gly Gln Gln Pro Cys Glu Val Gly His Asp Ser Ser Asn His
465                 470                 475                 480
Ser Ser Thr Val Ser Thr Thr Ser Phe Pro Leu His His Tyr Leu Leu
                485                 490                 495
Ala Gln Ile Val Val Cys
            500
```

<210> 35366
<211> 131
<212> PRT
<213> A.fumigatus

<400> 35366
Asn Ile Lys Phe Gly Ser Cys Gln Val Arg Gly Glu Asp Pro Lys Asn

```
1               5                   10                  15
Pro Ser Pro Lys Leu Val Ala Tyr Asn Thr Ser Lys Gly Ile His Ser
            20                  25                  30
Thr Gly Tyr Ser Cys Leu Gly Ser Thr Asn Ser Pro Leu Tyr Lys Asp
        35                  40                  45
Gln Thr Leu Leu Gln Ile Ala Glu Lys Lys Gly Lys Thr Pro Gln Gln
    50                  55                  60
Val Leu Leu Gln Trp Gly Leu Gln Lys Gly Trp Ser Val Ile Pro Lys
65                  70                  75                  80
Ser Val Ser Glu Glu Arg Ile Gly Lys Asn Phe Glu Leu Asp Gly Trp
                85                  90                  95
Asp Leu Thr Ala Asp Glu Val Asn Gln Leu Asp Asn Leu Lys Gly Arg
            100                 105                 110
Phe Lys Val Cys Gly Asp Ser Trp Leu Pro Val Lys Val Phe Phe Gly
        115                 120                 125
Asp Asp Glu
    130

<210> 35367
<211> 449
<212> PRT
<213> A.fumigatus

<400> 35367
Glu Val Tyr Phe Asn Ser Leu Thr Leu Pro Arg Phe Ala Tyr Glu Lys
1               5                   10                  15
Ala Leu Lys Thr Phe Lys Ala Lys Phe Pro Glu Pro Thr Gln Gln Val
            20                  25                  30
Ser Leu Arg Leu Gln Pro Ala Tyr Ala Arg Ile Pro Thr Arg Gln Pro
        35                  40                  45
Ile Ser Arg Ala Ala Ala Ile Arg Gln Ser Arg Ser Asn Arg Tyr Phe
    50                  55                  60
Ser Thr Arg Thr Ala Asn Ser Phe Val Ser Ser Leu Lys Asn Gly Leu
65                  70                  75                  80
Arg Gly Glu His Thr Ala Tyr Arg Pro Ser Arg Val Ala Ala Asn Ile
                85                  90                  95
Ser Arg Leu Thr Ser Arg Ala Pro Phe Ala Ser Thr Leu Arg Pro Asn
            100                 105                 110
Leu Thr Gly Gly Thr Leu Gly Arg Thr Ala Gly Gly Tyr Ala Ile Gly
        115                 120                 125
Ala Gly Arg Ile Gly Gly Ala Arg Tyr Phe Ser His Gly Pro Ala Ser
    130                 135                 140
Pro Ala Gln Val Ile Asn Asn Val Ser Met Gly Val Arg Ala Phe Phe
145                 150                 155                 160
Leu Ser Gly Gln Lys Ala Arg Phe Asp Gly Ile Asp Pro Ile Thr Gly
                165                 170                 175
Gln Lys Arg Tyr Lys Ala Val Ser Ala Leu Gln Asp Gln Ala Glu Arg
            180                 185                 190
Lys Met Ala Ala Ile Pro Arg Thr Ala Ser Gly Ser Phe Ile Asp Phe
        195                 200                 205
Gln Ile Ser Pro Ala Ile Thr Ala Phe Gly Leu Gln Lys Lys Ala Ala
    210                 215                 220
Ser Ala Gly Ala His Tyr Val Glu Thr Leu Asn Ser Asp Thr Leu Cys
225                 230                 235                 240
Phe Leu Ser Ala Asp Phe Ala Arg Ala Leu Lys Asp Leu Ala Ala Val
                245                 250                 255
```

```
Leu Asn Asp Leu Glu Arg Leu Ser Ser Leu Gly Asp Leu Pro Ile Ser
            260                 265                 270
Leu His Asp Arg Ser Thr Ile Arg Val Arg Phe Pro Gly Cys Asp Ala
        275                 280                 285
Glu Thr Val Glu Arg Leu Cys Asp Glu Val Gly Val Arg Gln Gly Arg
    290                 295                 300
Ile Gly Gln Asp Glu Asp Phe Asn Leu Arg Thr Gly Ala Asp Leu Ala
305                 310                 315                 320
Leu Leu Phe Pro Phe Ala Arg Ser Val Ser Ala Pro Ser Asp Val Ala
                325                 330                 335
Glu Phe Phe Phe Arg Gln Glu Thr Ser Glu Gly Gln Ser Pro Asp Gln
            340                 345                 350
Val Asp Trp Gln Ala Met Met Thr Ser Glu Asp Gly Thr Gly His Ser
        355                 360                 365
Pro Glu Asn Pro Arg Lys Ser Ser Asn Gly Leu Ser Phe Glu Asp Ser
    370                 375                 380
Pro Leu Phe Ala Asp Lys Asn Pro Trp Ala Ser Ser Ser Ser Gly Tyr
385                 390                 395                 400
Ser Ser Ile Asn Val Ser Glu Leu Gly Asp Arg Ala Phe Phe Pro Glu
                405                 410                 415
Val Ser Ser Ala Gly Phe Tyr Glu Ser Ala Ser Glu Asp Glu Gly Val
            420                 425                 430
Glu Gly Ile His Arg Phe Leu Ala Glu Cys Asp Arg Ala Glu His Phe
        435                 440                 445
Arg
```

<210> 35368
<211> 69
<212> PRT
<213> A.fumigatus

<400> 35368

```
Phe Ser Asp Tyr Thr Tyr Cys Gly Leu Gln Glu Pro Leu Gln Leu Asn
1               5                   10                  15
Ile Glu Gly Gly Val Leu Tyr Ile Asn Leu Gly Gly Gly Ala Thr Pro
            20                  25                  30
Ser Ala Tyr Phe Glu Gly Leu Ile Met Pro Ala Ile Arg Arg Ala Glu
        35                  40                  45
Ala Thr Asn Thr Ile Ser Glu Phe Arg Lys Asp Tyr Thr Thr Leu Thr
    50                  55                  60
Ser His Val Leu Thr
65
```

<210> 35369
<211> 110
<212> PRT
<213> A.fumigatus

<400> 35369

```
Arg Arg Tyr Pro Gln Trp Ala Glu Asp Leu Pro Thr Thr Leu Asp Val
1               5                   10                  15
Asp Lys Ser Thr Glu Asp Tyr Pro Arg Ala Leu Ala Arg Leu Lys Glu
            20                  25                  30
Tyr Leu Ser Leu Pro Glu Tyr Gly Leu Lys Val Gln Trp Ser Tyr Asn
        35                  40                  45
```

```
Ser Thr Arg Glu Ile Pro Ala Asp Trp Glu Ala Thr Leu Ser Leu Arg
    50                  55                  60
Glu Val Val Asn Ile Lys Tyr Ser Arg Met Phe Arg Phe Gln His Ser
65                  70                  75                  80
Glu Pro Gly Thr Thr Tyr Ser Tyr Glu Asp Trp Lys Ala Gly Arg Thr
                85                  90                  95
Ala His Ala Ile Val Gly Arg Arg Asp Tyr His Asn Val Asp
            100                 105                 110
```

<210> 35370
<211> 268
<212> PRT
<213> A.fumigatus

<400> 35370

```
Leu Ser Glu Leu Trp Gln Lys Ser His Glu Ile Lys Asp Pro Met Val
1               5                   10                  15
His Asn Glu Ile Leu Arg Ala Lys Asp Glu Val Asp His Gln Phe Gln
            20                  25                  30
Thr Val Lys Leu Gln Asp Glu Phe Arg Glu Lys Gly Leu Gln Ile Ile
        35                  40                  45
Val Lys Leu Gly Gly Ile Glu Leu Ala Pro Asp Asn Pro Ser Phe Leu
    50                  55                  60
Gly Glu Asp Trp His Val Asp Gly Leu Ala Asn Glu His Ile Ala Gly
65                  70                  75                  80
Val Ala Leu Tyr Cys Phe Asp Leu Gly Asn Val Ala Asn Pro Arg Ile
                85                  90                  95
Ser Phe Ala His Glu Ile Ser Met Asp Ala Asp Asp Phe Ser Phe Ser
            100                 105                 110
Tyr Phe Asn Trp Asp Ile Pro Tyr Leu Glu Arg Leu Phe Gly Val Gln
        115                 120                 125
Asn Glu Lys Pro Ser Phe Gln Glu Leu Gly Ser Val Ser Ile Arg Gln
    130                 135                 140
Gly Gly Leu Ile Ala Phe Pro Asn Cys Ile Tyr His Arg Leu Glu Ser
145                 150                 155                 160
Phe Glu Leu Val Asp Lys Ala Arg Pro Gly Arg Cys Arg Phe Leu Thr
                165                 170                 175
Leu Trp Leu Val Asp Pro Tyr Tyr Arg Ile Arg Ser Thr Arg Asn Val
            180                 185                 190
Pro Pro Gln Arg Leu Asp Trp Trp Glu Gln Glu Ala Arg Ser His Leu
        195                 200                 205
Ser Ser Ala His Pro Leu Pro Gln Glu Leu Ala Asp Gln Ile Ile Thr
    210                 215                 220
Glu Ala Gly Leu Trp Leu Met Asn Leu Pro Glu Ala Gln His His Arg
225                 230                 235                 240
Arg Glu Arg Ala Lys Glu Glu Ala Leu Ala Tyr Glu Lys Ile Arg Ser
                245                 250                 255
Gln Ile Glu Arg Asn Thr Ile Cys Leu Leu Lys Gln
            260                 265
```

<210> 35371
<211> 130
<212> PRT
<213> A.fumigatus

<400> 35371

```
Ala Trp Arg Ile Gly Val Thr Pro Gly Ala Lys Ser Ser Gly Glu Trp
1               5                  10                  15
Asp Ser Ile His Val Phe Glu Ala Thr Asp Arg Ala Arg Met Ser His
            20                  25                  30
Tyr Lys Leu Thr Ser Thr Val Ile Leu His Leu Ala Asn Glu Asn Glu
        35                  40                  45
Ala Leu Gly Glu Met Asp Leu Ser Gly Asn Met Thr Arg Gln Met Glu
    50                  55                  60
Val Asp Leu Pro Val Glu Ser Asp Ala Ser His Val Ala Asn Val Gly
65                  70                  75                  80
Arg Leu Val Glu Asp Met Glu Leu Lys Met Arg Asn Leu Leu Arg Met
                85                  90                  95
Cys His Ile Cys Glu Asp Leu Phe Cys Leu Asp Thr Ser His Ala Asn
            100                 105                 110
Met Thr Cys Asp Gly Arg Gly Gly Leu Leu Trp Gln Gly Gln Gly Cys
        115                 120                 125
Gly Gly
    130
```

<210> 35372
<211> 162
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (59),(63),(83),(87)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35372

```
Leu Glu Val Phe Ile Asn Glu Val Asn Arg Ile Asn Cys Leu Asp Phe
1               5                  10                  15
Ser Asp Asp Asn Met Leu Val Ala Ala Gly Met Gln Glu Ser Tyr Ile
            20                  25                  30
Arg Val Trp Ser Met Asp Gly Lys Lys Ile Gln Thr Thr Tyr Asp Asn
        35                  40                  45
Val Asp Asp Ala Pro Pro Ser Asn Ser Arg Xaa Phe Ile Gly Xaa Ile
    50                  55                  60
Trp Ser Ser Leu Cys Ser Cys Ile Leu Pro Leu Arg Gln Asn Pro Ser
65                  70                  75                  80
Lys Gly Xaa Cys Pro Pro Xaa Gln Thr Pro Val Gly Trp Leu Ser Ser
                85                  90                  95
Ser Gly Glu Lys Lys His Pro Lys Ser Gly Ser Leu Asn Phe Trp Ser
            100                 105                 110
Gly Leu Val Phe Tyr Lys Ala His Asn His Pro Val Gly Glu Ser Pro
        115                 120                 125
Trp Gly Ala Leu Trp Ala Leu Thr Cys Phe Arg Gly Asp Leu Asn Lys
    130                 135                 140
Thr Leu Val Ser Trp Val Thr Asn Ile Phe Leu Pro His Ala Phe Ser
145                 150                 155                 160
Ser Ala
```

<210> 35373
<211> 63
<212> PRT

<213> A.fumigatus

<400> 35373
Leu Ala Thr Ala Glu Glu Val Tyr Phe Gly Lys Ala Lys Asp Val Val
1 5 10 15
Gly Glu Leu Arg Ser Lys Pro Leu Leu Cys His Gly Arg Thr Lys Ala
20 25 30
Met Asp Ala Asp Lys Asn Thr Gly Leu Ala Pro Leu Ser Glu Thr Asn
35 40 45
Lys Glu Lys Ala Ala His Leu Glu Met Ile Arg Ser Met Gln Arg
50 55 60

<210> 35374
<211> 137
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (26)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35374
Ser Thr Thr Ala Asp Pro Ser Ser Pro Val Val Lys Thr Lys Thr Asn
1 5 10 15
Arg Asp Tyr Leu Leu Cys Asp Tyr Asn Xaa Asp Gly Asp Ser Tyr Arg
20 25 30
Ser Pro Trp Ser Asn Glu Phe Asp Pro Pro Leu Glu Asp Gly Thr Val
35 40 45
Pro Ser Glu Arg Val Arg Lys Leu Glu Val Ala Ala Asn Glu Ala Phe
50 55 60
Asp Val Tyr Arg Glu Leu Tyr Tyr Glu Gly Gly Val Gly Ser Val Tyr
65 70 75 80
Phe Trp Asp Leu Asp Asp Gly Phe Ala Gly Val Ile Leu Leu Lys Lys
85 90 95
Gly Gly Leu Cys Tyr Ala Met Ser Cys Glu Val Arg Ala Leu Leu Ile
100 105 110
Gly Met Ala Asn Arg Cys His Thr Arg Ser Glu Glu Leu Arg Arg Val
115 120 125
Gly Gln His Ser Cys Leu Arg Gly Asp
130 135

<210> 35375
<211> 299
<212> PRT
<213> A.fumigatus

<400> 35375
Ala Thr Leu Ser Ser Leu Thr Arg Ala Met Leu Ile Phe Gly Gln Pro
1 5 10 15
Glu Leu Arg Arg Val Leu Trp Pro Leu Phe Val Tyr Ser Phe Leu Asn
20 25 30
Met Val Thr Ser Phe Tyr Pro Gln Glu Ala Lys Gln Phe Phe Asp Ile
35 40 45
Asn Lys Asn Leu Phe Leu Pro Glu His Thr Asp Asp Ile Arg Lys Leu
50 55 60

```
Glu Pro Ile Ser Leu Pro Glu His Val Gln Asp Asn Ala Thr Ala Lys
65                  70                  75                  80
Leu Tyr Arg Asn Asn Lys Tyr Arg Leu Val Leu Ser Asn Pro Ala Phe
                85                  90                  95
Ser Asn Leu Met Gln Phe Leu Glu Asn Lys Ser Lys Glu Gly Gly Ser
            100                 105                 110
Val Met Ser Ala Ile Leu Ser Ser Tyr Cys Thr Ile Ile Thr Lys Glu
        115                 120                 125
Arg Ala Ser Asp Asp Arg Phe Ser Phe Ala Ala Met Leu Gly Gln Ala
    130                 135                 140
Gly Ala Gly Gln Thr Phe Pro Ala Glu Asp Glu Gly Ile Pro Gly His
145                 150                 155                 160
His Pro Gly Ser Ala Tyr Thr Gly Asp Asn Pro Ala Met Ala Gly Thr
                165                 170                 175
Leu Pro Arg Leu Arg Leu Gly Lys Leu Pro Met Glu Ser Thr Leu Glu
            180                 185                 190
Thr Asp Val Arg Gly Glu Leu Ala Asp Glu Asp Val Lys Asn Pro Pro
        195                 200                 205
Ala Pro Gly His Asn Ser Leu Val Gln Glu Phe Asp Gln Met Ile Lys
    210                 215                 220
Lys Glu Glu Asp Glu Glu Ala Pro Ser Arg Ala Asp Ile Pro Tyr Pro
225                 230                 235                 240
Pro Ser Thr Ala Arg Asp Val Ala Leu Glu Val Gln Lys Val Lys Glu
                245                 250                 255
Asn Arg Asp Arg Phe Arg Ile Glu Gly Arg Thr Gly Gly Val Gly Pro
            260                 265                 270
Ala Val Ser Val Cys Met Phe Thr Phe His Asn Thr Tyr Asp Gly Cys
        275                 280                 285
Val Met Thr Val Ser Val Thr Gly Ser Phe Tyr
    290                 295

<210> 35376
<211> 73
<212> PRT
<213> A.fumigatus

<400> 35376
Arg Val Lys Thr Glu Gln Ile Phe Thr Asp Val Thr His Thr Gln Gln
1               5                   10                  15
Val Pro His Leu Gln Leu His Ile Leu Asn Glu Pro Thr Asp Ile Gly
            20                  25                  30
Asp Met Ala Arg Ile Arg Phe His Arg Lys Ile Asn Leu His Leu Pro
        35                  40                  45
Gly His Ile Ala Ala Glu Ile His Leu Ala Lys Gly Leu Ile Leu Val
    50                  55                  60
Arg Gln Val Gln Asp Asp Arg Ala Arg
65                  70

<210> 35377
<211> 71
<212> PRT
<213> A.fumigatus

<400> 35377
Thr Ser Asp Thr Cys Phe Pro Leu Leu Leu Pro Ser Arg Leu Asn Val
1               5                   10                  15
```

```
Leu Ser Ser Gly Thr Ile Thr His Lys Ala Val Ser Ile Gly Tyr Thr
            20                  25                  30
Cys Tyr Ser Gly Thr Lys Pro Leu Leu Leu Asp Ala Gly Pro Trp Thr
        35                  40                  45
Asp Ser Lys Val Ser Phe Asn Asp Leu Thr Gly Asn Gly Pro Gly Ser
    50                  55                  60
Ser Asn Phe Ala Arg Pro Ile
65                  70
```

<210> 35378
<211> 155
<212> PRT
<213> A.fumigatus

<400> 35378

```
Ala Asp Arg Ala Val Glu Glu Met Asp Lys Ser Arg Val Glu Arg Asn
1               5                   10                  15
Ala Arg Met Thr Val Arg Thr Ile Arg Glu Asp Leu Ala Gln Val Ala
            20                  25                  30
Gln Ser Thr Arg Ile Val Ile Arg Cys Leu Ser Ser Gly Arg Asp Ala
        35                  40                  45
His Asp Ser Ala Ala Lys Ala Leu Ser Val Leu Ile Asp Ile Leu Asp
    50                  55                  60
Cys Leu His Arg Val Arg Asp Gln Ile Ser Trp Gly Glu Glu Lys Trp
65                  70                  75                  80
Leu Val Glu Pro Ala Arg Leu Asn Ala Leu Ala Glu Val Ile Val Trp
                85                  90                  95
Phe Gly Thr Thr Leu Arg Ser Ile Glu Phe Tyr Phe Gln Pro Gly Gly
            100                 105                 110
Val Ser Val Tyr Tyr Phe Arg Lys His Leu Leu Gly Gly Thr Phe Leu
        115                 120                 125
Pro Arg Leu Glu Gln Tyr Lys Ile Leu Leu Leu Leu Ala Met Gln Pro
    130                 135                 140
Asp Ser Arg Leu Val Ala Leu Thr Val Leu Met
145                 150                 155
```

<210> 35379
<211> 796
<212> PRT
<213> A.fumigatus

<400> 35379

```
Asn Val Pro Arg Gly Cys Pro Leu Gly Asp Gly Lys Lys Pro Trp Cys
1               5                   10                  15
Val Ser Asn Ser Asp Arg Ser Leu Ile Cys Leu Ala Gly His Phe Leu
            20                  25                  30
Ala Asn Arg Gly Cys Pro Tyr Arg Phe Leu Leu Ala Lys Ile His Leu
        35                  40                  45
Asp Leu Leu Ala Arg Tyr Thr Asp Lys Ser Leu Leu Glu Arg Ala Val
    50                  55                  60
Met His Leu Pro Glu Ser Leu Ser Glu Ala Tyr Gly Glu Ala Met Lys
65                  70                  75                  80
Gln Val Val Ser Gln Asn Pro Thr Ala Thr Arg His Val Tyr Trp Thr
                85                  90                  95
Leu Tyr Ala Tyr Arg Pro Leu Thr Val Ala Glu Leu Lys Ala Ala Thr
            100                 105                 110
```

```
Gln Ser Lys Ile Ala Ser Glu Asp Lys Asp Glu Leu Val Ser Phe Glu
        115                 120                 125
Gln Ser Leu Gln Thr Gln Ser Ala Gly Leu Leu Thr Val Asp Ala Val
    130                 135                 140
Thr Gly Thr Val Arg Phe Val His Lys Thr Ala Lys Glu Tyr Leu Asn
145                 150                 155                 160
Gly Thr Ala Ala Arg Val Phe Phe Pro Ser Ala Gln Arg Asp Ile Ala
                165                 170                 175
Glu Val Cys Leu Thr Ala Ile Ile Pro Asp Glu Val Val Asp Asp Cys
            180                 185                 190
Tyr Tyr Ile Gly Gly Thr Thr Pro Arg Asn Ser Ser Gly Gly Phe Leu
        195                 200                 205
Ser Tyr Ala Ala Thr Tyr Trp Gly Tyr His Ala Arg Glu Val Thr Glu
    210                 215                 220
Asp Glu Gln Ala Ile Gln Val Leu Ile Lys Thr Phe Leu Asn Lys Leu
225                 230                 235                 240
Leu Trp Arg Arg Pro Pro Ile Lys Gly Leu Ile Arg Asn Lys Cys Leu
                245                 250                 255
Pro Thr Glu Leu Gly Leu Gly Lys Tyr Pro Asp Asp Trp Ser Ala Leu
            260                 265                 270
His Ile Leu Ser Phe Phe Gly Ile Ser Gly Lys Phe Lys Arg Leu Leu
        275                 280                 285
Val Gln Gly Ala Gln Ile Asp Ala Asn Asp Asn Ser Leu Lys Ile Thr
    290                 295                 300
Pro Leu His Cys Ala Ala Tyr Arg Gly Asn Asp Glu Met Val Asp Phe
305                 310                 315                 320
Leu Leu Glu Asn Gly Ala Asp Gly Asn Ala Thr Thr Asn Asn Gly Ser
                325                 330                 335
Thr Ala Leu His Leu Ala Thr Glu Arg Gly Asn Arg Lys Ser Met Lys
            340                 345                 350
Leu Leu Leu Ser Arg His Val Asn Val Gln Val Ala Asn Glu Lys Gly
        355                 360                 365
Glu Thr Gly Leu Gln Val Ala Val Gly Thr Thr Ala Asp Glu Ala Thr
    370                 375                 380
Val Pro Leu Leu Ile Lys Asn Lys Val Asp Val Asn Ile Arg Asn Ile
385                 390                 395                 400
Arg Thr Gly Asp Thr Ala Leu His Leu Ala Val Glu Trp Lys Arg Pro
                405                 410                 415
Arg Ile Ile Leu Phe Leu Leu Asp Lys Gly Ala Thr Ile Asp Met Thr
            420                 425                 430
Asn Glu Asp Gly Phe Thr Pro Leu Gln Leu Ala Ala Lys Leu Asp Asn
        435                 440                 445
Cys Glu Ala Val Ala Leu Leu Leu Gln Arg Gly Ala Gln Val Glu Ala
    450                 455                 460
Arg Ser Leu Ser Gly Leu Thr Ala Leu Gln Leu Ala Ala His Glu Gly
465                 470                 475                 480
His Trp Val Ala Phe Asp Leu Leu Leu Ile Gly Gly Ala Asp Ile Asn
                485                 490                 495
Ser Trp Asn Lys Glu Gly Glu Thr Leu Leu His Glu Glu Ala Arg Lys
            500                 505                 510
Ser Arg Asn Val Ser Thr Ala Ala Lys Leu Leu Ala Gln Gly Ala Asn
        515                 520                 525
Ile Glu Ala Arg Thr Ser Gln Gly Tyr Thr Pro Leu Gln Cys Ala Ala
    530                 535                 540
Ile Ser Gly Asn Leu Asn Met Phe Lys Phe Leu Leu Ser Lys Gly Ala
545                 550                 555                 560
```

```
Lys Ile Asp Val Glu Thr Ala Lys Gly Glu Ser Leu Leu His Ile Thr
                565                 570                 575
Pro Pro Ile Asn Asn Asp Cys Leu Glu Ile Leu Lys Ile Ala Leu Asp
            580                 585                 590
His Gly Leu Asp Val Lys Ala Ile Ser Ser His Gly Trp Met Pro Leu
        595                 600                 605
His His Ala Val Tyr Ile Gly Thr Gly Val Ser Asp Leu Ala Phe His
    610                 615                 620
Lys Thr Ser Asp Tyr Ile Ile Leu Leu Leu Ser Tyr Gly Ala Asp Ile
625                 630                 635                 640
Asn Cys Gln Thr Thr Ser Ala Tyr Ala Glu Thr Ala Leu His Leu Ala
                645                 650                 655
Val Met Ala Ile Asn Pro Asn Thr Ser Leu Val Ser Leu Leu Leu Lys
            660                 665                 670
Leu Gly Ala Asp Ile Asn Ala Met Thr Asn Glu Gly Lys Thr Pro Leu
        675                 680                 685
His Leu Ala Ala Glu Arg Gly Arg Glu Ser Ile Phe Arg Val Leu Ile
    690                 695                 700
Gln Ala Gly Ala Asp Ile Ser Leu Glu Val Pro Asp Ser Ala Lys Ala
705                 710                 715                 720
Ile Asp Gly Arg Gly Thr Gly Gly Gly Asn Thr Ala Leu Asp Leu Ala
                725                 730                 735
Arg Lys Asn Pro Phe Asn Ala Leu Trp Leu Asp Asp His Gly Gln Leu
            740                 745                 750
Arg Pro Glu Pro Lys Val Lys Arg Arg Asp Ser Val Tyr Thr Ile Ile
        755                 760                 765
Glu Glu Glu Phe Asn Asp Asp Val Ser Glu Asp Glu Thr Cys Glu Ser
    770                 775                 780
Thr Leu Val Gly Ser Asp Gln Pro Tyr Ile Leu Val
785                 790                 795

<210> 35380
<211> 189
<212> PRT
<213> A.fumigatus

<400> 35380
Leu Met Ile Ser Ser Val Ile Ile Asp Phe Leu Gln Arg Thr Phe Thr
1               5                   10                  15
Ser Pro Asn Val Ala Thr Val Phe Val Phe Cys Gln Asp Glu Lys Glu
            20                  25                  30
Lys Glu Gln Thr Ser Leu Asp Leu Leu Gln Asn Ile Leu Ala Gln Leu
        35                  40                  45
Val Tyr Arg Lys Arg Ser Leu Ser Tyr Ala Thr Ser Ser Leu Tyr Tyr
    50                  55                  60
Ser Glu Ser Leu Thr Lys Gly Arg Ala Ser Pro Lys Ala Tyr Gln Asn
65                  70                  75                  80
Ala Ile Arg Ala Glu Val Asn Arg Phe Ser Lys Val Phe Phe Ile Val
                85                  90                  95
Asp Gly Leu Asp Gly Phe Ser Asp Lys Glu Arg Ile Leu Thr Arg Leu
            100                 105                 110
Gln Lys Leu Pro Glu Gln Ala Gln Leu Leu Val Thr Leu Arg Glu Ile
        115                 120                 125
Asn Gln Ile Asp Ser Asp Ser Gly Tyr Val Arg Val Val Pro Ser Pro
    130                 135                 140
Glu Asp Leu Gln Leu Tyr Ala Leu Ser Arg Ile Gln Asn Asp Pro Gly
```

```
145                 150                 155                 160
Leu Lys Ser Leu Cys Asn Asp Gly Pro Ala Gly Val Glu Met Cys Gln
                165                 170                 175
Glu Val Val Arg Leu Val Met Glu Lys Ser His Gly Val
            180                 185
```

<210> 35381
<211> 526
<212> PRT
<213> A.fumigatus

<400> 35381

```
Leu Pro Leu Thr Arg Arg Val Asn Glu Asp Ser Ile Leu Ala Ile Gln
1               5                   10                  15
Ile Phe Asp Gln Lys Lys Phe Lys Lys Lys Asp Gln Gly Phe Leu Gly
            20                  25                  30
Val Ile Asn Val Arg Ile Gly Asp Val Ile Asp Leu Gln Met Gly Gly
        35                  40                  45
Asp Gly Glu Ser Leu Pro Ile Arg His Ser Cys Asp Val Ser Arg Leu
    50                  55                  60
Thr Phe Arg Leu Leu Leu Leu Glu Thr Glu Met Leu Thr Arg Asp Leu
65                  70                  75                  80
Lys Lys Ser Asn Asp Asn Leu Val Val His Gly Lys Leu Ile Ile Asn
                85                  90                  95
Leu Ser Thr Asn Leu Ser Thr Pro Asn Thr Asn Gln Ala Asn Gly Leu
            100                 105                 110
His Arg Ser His Val Gln Ser Ser Thr Ser Ser Gly Leu Val Pro Gln
        115                 120                 125
Val Ala Pro Ser Ser Ser His Pro Ala Ala Ser Gly Thr Ala Pro Val
    130                 135                 140
Asp Pro Ser Ala Ser Asn Pro Ser Leu Asn Pro Gln Arg Val Pro Ser
145                 150                 155                 160
Thr Thr Arg Pro Ser Ser Thr Ala Ala Pro Ala Ser Ala Ala Gly Ala
                165                 170                 175
Ala Val Ser Asn Ser His Gly Ser Arg Thr Asn Leu Ser Ser Phe Glu
            180                 185                 190
Asp Ser Gln Gly Arg Leu Pro Ala Gly Trp Glu Arg Arg Glu Asp Asn
        195                 200                 205
Leu Gly Arg Thr Tyr Tyr Val Asp His Asn Thr Arg Thr Thr Thr Trp
    210                 215                 220
Thr Arg Pro Ser Ser Asn Tyr Asn Glu His Ala Gln Arg Ser Gln Arg
225                 230                 235                 240
Glu Ala Asn Met Gln Leu Glu Arg Arg Ala His Gln Ser Arg Met Leu
                245                 250                 255
Pro Glu Asp Arg Thr Gly Ala Asn Ser Pro Asn Leu Pro Glu Ser Ser
            260                 265                 270
Gln Gln Ala His Thr Pro Pro Ala Gly Gly Ser Ala Asn Ala Val Ser
        275                 280                 285
Met Met Ala Thr Gly Ala Thr Thr Ala Gly Thr Gly Glu Leu Pro Pro
    290                 295                 300
Gly Trp Glu Gln Arg Thr Thr Pro Glu Gly Arg Pro Tyr Phe Val Asp
305                 310                 315                 320
His Asn Thr Arg Thr Thr Thr Trp Val Asp Pro Arg Arg Gln Gln Tyr
                325                 330                 335
Ile Arg Met Tyr Gly Gln Asn Ala Asn Gly Thr Asn Thr Thr Ile Gln
            340                 345                 350
```

```
Gln Gln Pro Val Ser Gln Leu Gly Pro Leu Pro Ser Gly Trp Glu Met
        355                 360                 365
Arg Leu Thr Asn Thr Ala Arg Val Tyr Phe Val Asp His Asn Thr Lys
    370                 375                 380
Thr Thr Thr Trp Asp Asp Pro Arg Leu Pro Ser Ser Leu Asp Gln Gly
385                 390                 395                 400
Val Pro Gln Tyr Lys Arg Asp Phe Arg Arg Lys Leu Ile Tyr Phe Arg
                405                 410                 415
Ser Gln Pro Ala Leu Arg Ile Met Ser Gly Gln Cys His Val Lys Val
            420                 425                 430
Arg Arg Asn Asn Ile Phe Glu Asp Ser Tyr Ala Glu Ile Met Arg Gln
        435                 440                 445
Ser Ala Ser Asp Leu Lys Lys Arg Leu Met Ile Lys Phe Asp Gly Glu
    450                 455                 460
Asp Gly Leu Asp Tyr Gly Gly Leu Ser Arg Tyr Val Pro Cys Leu Val
465                 470                 475                 480
Leu Val Thr Asp Met Leu Thr Ile Arg Leu Val Asn Ser Ser Ser Phe
                485                 490                 495
Ser Pro Thr Lys Cys Leu Ile Arg Ser Ile Ala Phe Ser Asn Thr Pro
            500                 505                 510
His Thr Ile Ile Thr Pro Tyr Arg Leu Ile Pro Ile Pro Val
        515                 520                 525
```

<210> 35382
<211> 169
<212> PRT
<213> A.fumigatus

<400> 35382

```
Ile Cys Arg Val Ser Cys Tyr Leu Pro Leu Pro Leu Ala Ala Glu Asp
1               5                   10                  15
Asp Gln Asp Lys Ile Thr Asn Gly Phe Phe Arg Leu Val Thr Glu Trp
            20                  25                  30
Lys Ile Val Lys Arg Val Glu Glu Gln Phe Asn Ala Phe Met Ser Gly
        35                  40                  45
Phe Asn Glu Leu Ile Pro Ala Asp Leu Val Asn Val Phe Asp Glu Arg
    50                  55                  60
Glu Leu Glu Leu Leu Ile Gly Gly Ile Ala Asp Ile Asp Val Asp Asp
65                  70                  75                  80
Trp Lys Lys His Thr Asp Tyr Arg Gly Tyr Gln Glu Ser Asp Glu Val
                85                  90                  95
Ile Gln Asn Phe Trp Lys Ile Val Arg Ser Trp Asp Ala Glu Gln Lys
            100                 105                 110
Ser Arg Leu Leu Gln Phe Thr Thr Gly Thr Ser Arg Ile Pro Val Asn
        115                 120                 125
Gly Phe Lys Asp Leu Gln Gly Ser Asp Gly Pro Arg Arg Phe Thr Ile
    130                 135                 140
Glu Lys Ser Gly Asp Pro Ala Ala Leu Pro Lys Ser His Thr Trp Tyr
145                 150                 155                 160
Val Lys Phe Pro Leu Ser Ile Leu Leu
                165
```

<210> 35383
<211> 75
<212> PRT
<213> A.fumigatus

<400> 35383
Arg Arg Ser Ser Pro Gln Ser His Met Asp Phe Val Ser Tyr Tyr Ala
1 5 10 15
Gly Asn Arg Val Gly Ser Gly Phe Leu Thr Ile Cys Arg Asp Asn Asp
20 25 30
Ile Glu Gly Val Leu Glu Leu Thr Phe Ser Val Asp Asp Glu Lys Phe
35 40 45
Gly Glu Arg Arg Thr Ile Asp Leu Lys Pro Gly Gly Arg Asp Ile Pro
50 55 60
Val Thr Asn Glu Asn Lys Ala Glu Tyr Val Glu
65 70 75

<210> 35384
<211> 125
<212> PRT
<213> A.fumigatus

<400> 35384
Ala Glu Lys Pro Gly Arg Leu Ala Pro Asn Tyr Leu Ile His Gly Val
1 5 10 15
Thr Ala Thr Pro Lys Glu Glu Trp Lys Val His Arg Cys Gly Thr Gln
20 25 30
Arg Thr Cys Pro Arg Val His Ser Ser Leu Ser Ser Ser Tyr Ser Arg
35 40 45
Tyr His Arg Thr Phe Asp Val Leu Ser Ser Val Ile Ala Leu Ile Glu
50 55 60
Pro Gln Lys Lys Lys Asn Val Ala Ile Leu Val Ser Pro Leu Leu Pro
65 70 75 80
Phe His Ser His Pro Ala Arg Arg Pro Ser Pro Ser Ser Ser Ser Val
85 90 95
Pro Arg Thr Ser Ala His Phe Ser Thr Thr Arg Asp Arg Gln Ser Arg
100 105 110
Ile His Arg Arg Leu Leu Gly Pro Glu Tyr Ile Lys Cys
115 120 125

<210> 35385
<211> 83
<212> PRT
<213> A.fumigatus

<400> 35385
Leu Leu Thr Val Ile Ala Ala Asp Gly Leu Tyr Lys Arg Asp Val Phe
1 5 10 15
Arg Lys Ser Tyr Ile Leu Ala Ile Leu Leu Val Val Arg Ile Leu Thr
20 25 30
Ser Gly Ala Phe Ala Gly Phe Pro Asp Pro Phe Ala Val Ala Thr Val
35 40 45
Gly Gly Glu Gln Thr His Thr Thr Ser Val Ile Lys Lys Thr Leu Asn
50 55 60
Pro Tyr Trp Asn Glu Met Phe Asp Leu Tyr Val Ala Leu His Leu Leu
65 70 75 80
Leu Arg Met

<210> 35386

<211> 105
<212> PRT
<213> A.fumigatus

<400> 35386
Tyr Ala Asp Tyr Ser Pro Ser Glu Phe Phe Phe Leu Leu Ser His Glu
1 5 10 15
Met Phe Asn Pro Phe Tyr Cys Leu Phe Glu Tyr Ser Ala His Asp Asn
20 25 30
Tyr Thr Leu Gln Ile Asn Pro His Ser Gly Val Asn Pro Glu His Leu
35 40 45
Asn Tyr Phe Lys Phe Ile Gly Arg Val Val Gly Leu Ala Ile Phe His
50 55 60
Arg Arg Phe Leu Asp Ser Phe Phe Ile Gly Ala Phe Tyr Lys Met Met
65 70 75 80
Leu Arg Lys Lys Val Ser Leu Gln Asp Met Glu Gly Val Asp Glu Asp
85 90 95
Leu His Arg Asn Leu Thr Trp Thr Leu
100 105

<210> 35387
<211> 143
<212> PRT
<213> A.fumigatus

<400> 35387
Ile Gln Arg Ala Val Gly Glu Tyr Met Gln Asn Arg Gln Ala Phe Lys
1 5 10 15
Tyr Ile Val Lys Val Lys Gln Arg Gln Val Val Trp Pro Cys Asp Lys
20 25 30
Asn Ala Leu Val Leu Thr Thr Ser Ala Phe Asp Arg Leu Leu Phe Arg
35 40 45
Phe Gly Lys Phe Glu Cys Leu Ile His Thr Gly Asp Glu Met Arg His
50 55 60
Ser Ser Ala Leu Phe His Tyr Thr Ala Ser Phe Lys His Ser Glu Asn
65 70 75 80
Val Thr Ile Gly Lys Thr Thr Glu Glu Tyr Ser Arg Pro Leu Val His
85 90 95
Ile Ser Phe His Tyr Leu Gly Lys Asn Leu Ser Ala Arg Ser Val Asn
100 105 110
Ala Ser Asn Thr Met Asp Ile Glu Asp Asp Ile Leu Ile Ile Leu Trp
115 120 125
Arg Thr His Ser Arg Glu Gly Trp Met Tyr Ser Ala Arg Ala Ile
130 135 140

<210> 35388
<211> 102
<212> PRT
<213> A.fumigatus

<400> 35388
Ser Tyr Thr Gln Cys Ala Ala Pro Ser Ser Pro Val Val Lys Thr Pro
1 5 10 15
Asp Leu Ser Gln Ala Gln Arg Asp Ile Ala Gly Leu Phe Ala Met Gly
20 25 30
Val Ala Gly Asn Lys Glu Asp His Val Leu His Thr Val His Tyr Ile

```
        35                  40                  45
Val Gln Arg Ser Ala Cys Ser Ser Gly Leu His Ser Tyr Gly Asn Ser
    50                  55                  60
Gln Thr Leu Ser Asn Glu Ala Ile Leu Arg Trp Leu Asn Ala Phe Ser
65                  70                  75                  80
Arg Leu Tyr Lys Tyr Ser Val Leu Ser Gly Asn Ile Cys Arg Ile Val
                85                  90                  95
Lys Arg Ser Asn Thr Ser
            100
```

<210> 35389
<211> 224
<212> PRT
<213> A.fumigatus

<400> 35389

```
Ile Ser Tyr Ile Ser Tyr Tyr Ile Pro Phe Phe Asn Trp Ile Gly Gln
1               5                   10                  15
Tyr Gln Trp Ser Phe Phe Arg Gly Asp Leu Ile Ser Ala Leu Thr Val
            20                  25                  30
Ala Ser Ile Tyr Ile Pro Met Ala Leu Ser Leu Ser Ser Asn Leu Ala
        35                  40                  45
His Ala Pro Pro Ile Asn Gly Leu Tyr Ser Phe Val Ile His Pro Phe
    50                  55                  60
Ile Tyr Ala Val Leu Gly Ser Ser Pro Leu Leu Val Val Gly Pro Glu
65                  70                  75                  80
Ala Ala Gly Ser Leu Leu Thr Gly Thr Ile Val Lys Thr Ser Val Arg
                85                  90                  95
Gln Gly Thr Ser His Glu Asp Asn Ala Ala Glu Asn Ala Met Val Val
            100                 105                 110
Gly Val Ala Thr Ala Met Ala Gly Ser Met Ile Leu Ile Ala Gly Leu
        115                 120                 125
Thr Arg Leu Gly Phe Leu Asp Asn Val Leu Ser Arg Pro Phe Leu Arg
    130                 135                 140
Gly Phe Ile Thr Ala Ile Gly Phe Val Ile Phe Val Asp Gln Leu Ile
145                 150                 155                 160
Pro Glu Ala Gly Leu Ala Glu Met Ala Lys Asp Ala Gly Val Ser His
                165                 170                 175
Gly Ser Thr Val Asp Lys Leu Leu Phe Phe Phe Arg Asn Ile Arg Asn
            180                 185                 190
Cys His Arg Leu Thr Ala Ala Met Ser Phe Ser Ser Phe Ala Ile Ile
        195                 200                 205
Met Val Phe Arg Tyr Val Leu Asn Pro Pro Cys Arg Val Cys Lys Ser
    210                 215                 220
```

<210> 35390
<211> 184
<212> PRT
<213> A.fumigatus

<400> 35390

```
Leu Gly Thr Leu Phe Arg Thr Leu Lys Lys Lys Leu Glu Pro His Tyr
1               5                   10                  15
Pro Gln Val Val Tyr Phe Pro Asp Arg Ile Leu Val Val Ile Leu Ala
            20                  25                  30
Ala Ile Leu Thr Trp Arg Leu Asp Trp Asp Glu Lys Gly Leu Glu Ile
```

```
        35                  40                  45
Leu Gly Pro Met Lys Asn Thr Gly Asn Gly Val Phe Ala Phe Lys Trp
    50                  55                  60
Pro Phe Gln Phe Ser His Met Asn His Val Arg Thr Ala Met Ser Thr
65                  70                  75                  80
Ser Phe Ile Ile Ala Leu Leu Gly Phe Phe Glu Ser Ser Val Ala Ala
                85                  90                  95
Lys Gly Leu Gly Glu Ser Arg Gly Thr Gly Ile Lys Gly Met Thr Val
            100                 105                 110
Ser Pro Asn Arg Glu Met Val Ala Leu Gly Val Ala Asn Val Val Gly
        115                 120                 125
Gly Cys Phe Met Ala Leu Pro Ala Phe Gly Gly Tyr Gly Arg Ser Lys
    130                 135                 140
Val Asn Ala Ser Thr Gly Ala Arg Ser Pro Met Ser Ser Ile Phe Leu
145                 150                 155                 160
Ser Leu Ile Thr Leu Val Cys Ile Leu Val Leu Leu Pro Tyr Leu Tyr
                165                 170                 175
Tyr Leu Pro Val Gly Ser Pro Leu
            180
```

<210> 35391
<211> 231
<212> PRT
<213> A.fumigatus

<400> 35391

```
Lys Ala Val Leu Ser Ala Met Ile Ser Val Val Ala Phe Ser Leu Ile
1               5                   10                  15
Glu Glu Cys Pro His Asp Leu Ala Phe Phe Ile Arg Leu Arg Gly Trp
            20                  25                  30
Thr Glu Leu Ala Leu Met Leu Leu Ile Phe Ala Ser Thr Ile Phe Tyr
        35                  40                  45
Ser Leu Glu Leu Gly Ile Ala Leu Gly Ile Gly Leu Ser Val Leu Ile
    50                  55                  60
Leu Ile Arg His Ser Thr Gln Ser Arg Ile Gln Ile Leu Gly Gln Ile
65                  70                  75                  80
Pro Asp Thr Gly Arg Phe Asp Asn Ala Glu Leu His Pro Glu Asn Val
                85                  90                  95
Gln Leu Ile Glu Gly Ala Leu Ile Val Lys Ile Pro Glu Pro Leu Thr
            100                 105                 110
Phe Ala Asn Thr Gly Asp Leu Lys Asn Arg Leu Arg Arg Leu Glu Leu
        115                 120                 125
Tyr Gly Ser Ser Arg Val His Pro Ser Phe Pro Arg Met Arg Ser Pro
    130                 135                 140
Glu Asn Asn Lys Asn Ile Ile Phe Asp Val His Gly Val Thr Ser Ile
145                 150                 155                 160
Asp Gly Ser Gly Thr Gln Val Leu Ser Glu Ile Val Glu Gly Tyr Val
                165                 170                 175
Asp Gln Gly Thr Arg Val Phe Phe Cys Arg Leu Pro Asn Arg Asp Val
            180                 185                 190
Phe Arg Met Phe Glu Arg Ser Gly Ile Val Glu Gln Cys Gly Gly Met
        195                 200                 205
Thr His Phe Val Pro Ser Val Asp Glu Ala Leu Lys Leu Ala Glu Ser
    210                 215                 220
Glu Glu Gln Thr Val Glu Ser
225                 230
```

<210> 35392
<211> 216
<212> PRT
<213> A.fumigatus

<400> 35392
Arg Gly Ser Phe Asp Pro Arg Gly Glu Asp Lys Asn Arg Gln Pro Ala
1 5 10 15
Arg Leu Leu Glu Tyr Asp Ile Ser Ser Gly Thr Pro Lys Tyr Lys His
20 25 30
Glu Tyr Ala Val Leu Leu Pro Lys Tyr Ser Asp Tyr Thr Glu Lys Asp
35 40 45
Pro Ser Asp Ala Ala Lys Val Ala Ser Gln Ser Glu Ile His Lys Leu
50 55 60
Pro Thr Gly Asp Phe Leu Val Leu Ser Arg Asp Ser Gly Phe Gly His
65 70 75 80
Gly Gln Pro Glu Ser Leu Ser Val Tyr Arg His Ala Asp Val Ile Ser
85 90 95
Ile Ser Glu Ser Thr Thr Asp Leu Lys Gly Thr Tyr Asp Ala Ala Asp
100 105 110
Gly Ser Ile Ala Ser Ser Lys Gly Val Leu Asn Ser Ser Ile Thr Pro
115 120 125
Ala Glu Tyr Cys Pro Phe Leu Asp Phe Asn Val Asn Ser Glu Leu Ala
130 135 140
Lys Phe Gly Leu His Asn Gly Gly Ala Gln Asp Ala Gly Leu Leu Asn
145 150 155 160
Glu Lys Trp Glu Ser Leu Ala Leu Val Pro Val Asp Pro His Gly His
165 170 175
Lys Asp Arg His Ser Lys Lys Ala Arg Glu Tyr Phe Leu Phe Ser Phe
180 185 190
Ser Asp Asn Asp Phe Ile Thr Gln Asp Gly Arg Phe Gln Ala Ala Phe
195 200 205
Arg Leu Leu Pro Ala Gln Ile Cys
210 215

<210> 35393
<211> 65
<212> PRT
<213> A.fumigatus

<400> 35393
Thr Gln Arg Thr Thr Ile Thr Met Ser Asp Pro Arg Pro Gln Glu Ser
1 5 10 15
Glu Thr Gln Pro Lys Leu Pro Lys Ser Leu Phe Pro His Gln Thr Pro
20 25 30
Ala Ala Ala Ser Ser Ser Thr Ala Ser Lys Asp Asp Asp Val Pro Ala
35 40 45
Gly Met Thr Lys Leu Pro Asn Gly Val Ile Leu Asp Lys Glu Gly Lys
50 55 60
Pro
65

<210> 35394
<211> 120
<212> PRT

<213> A.fumigatus

<400> 35394

```
Gln Gln Asn Ser Cys Arg Leu Cys Thr Ser Ala Ala Ser Trp Arg Ala
1               5                  10                  15
Leu Thr Lys Gln Ala Lys Ser Gln Thr Ala Ala Gly Thr Thr Pro Thr
            20                  25                  30
Thr Thr Pro Ser Asn Ala Ser Ala Ser Ala Pro Ala Pro Ser Pro Met
        35                  40                  45
Gln Ala Glu Cys Pro Pro Asp Val Lys Glu Leu Gly Arg Ala Thr Trp
    50                  55                  60
Thr Phe Leu His Ser Leu Thr Ala Ala Tyr Pro Ala Lys Ala Ser Pro
65                  70                  75                  80
Glu Gln Gln Ile Glu Met Arg Ser Phe Leu Ser Leu Phe Ser Arg Leu
                85                  90                  95
Tyr Pro Cys Trp Val Cys Pro Gly Gly Leu Ser Glu Val Asp Gly Gly
            100                 105                 110
Thr Gln Arg Pro Glu Trp Pro Pro
        115                 120
```

<210> 35395
<211> 265
<212> PRT
<213> A.fumigatus

<400> 35395

```
Glu Val Gln Asp Arg Leu Ala Gln Glu Pro Ala Gln Glu Glu Glu Val
1               5                  10                  15
Glu Val Ala Glu Glu Asp Ile Thr Leu Ser Pro Gln Lys Thr Ser Lys
            20                  25                  30
Pro Thr Lys Arg Ala Lys Pro Thr Ser Thr His Thr Ser Arg Lys Arg
        35                  40                  45
Arg Lys Thr Ala Thr Leu Glu Pro Lys Val Ser Asp Asp Asp Glu Thr
    50                  55                  60
Gly Ala Leu Ser Ala Ser Glu Asn Asp Ile Lys Asn Ala Thr Gly Arg
65                  70                  75                  80
Gln Ser Lys Thr Glu Ser Glu Arg Ala Asp Ser Ala Asp Ala Ala Lys
                85                  90                  95
Asp Ala Ala Asp Ile Asp Asn Val Ala Ser Glu Ser Glu Met Ser Val
            100                 105                 110
Val Leu Asp Glu Glu Pro Lys Pro Ser Arg Lys Arg Gly Lys Ser Ser
        115                 120                 125
Glu Ser Thr Ser Ala Lys Gly Lys Lys Lys Val Pro Ala Lys Ser Lys
    130                 135                 140
Asp Ala Asn Leu Asp Pro Asn Glu Ala Glu Ile Lys Arg Leu Gln Gly
145                 150                 155                 160
Trp Leu Val Lys Cys Gly Ile Arg Lys Val Trp Ser Arg Glu Leu Ala
                165                 170                 175
Pro Tyr Asp Thr Pro Lys Ala Lys Ile Lys His Leu Lys Asp Met Leu
            180                 185                 190
Lys Asp Ala Gly Met Asp Gly Arg Tyr Ser Leu Glu Lys Ala Lys Gln
        195                 200                 205
Ile Lys Glu Lys Arg Glu Phe Glu Ala Asp Leu Ala Met Ile Lys Glu
    210                 215                 220
Gly Glu Lys His Trp Gly Arg Gly Ser Val Glu Glu Glu Ser Asp Asn
225                 230                 235                 240
```

```
Ser Arg Pro Arg Arg Arg Leu Asn Arg Gly Arg Gln Thr Leu Ala Phe
                245                 250                 255
Leu Glu Ser Asp Gly Glu Glu Thr Asp
            260                 265

<210> 35396
<211> 61
<212> PRT
<213> A.fumigatus

<400> 35396
Gln Cys Thr Gly Glu Cys Lys His Leu Ile Ser Gln Tyr Leu Lys Cys
1               5                   10                  15
Leu Lys Leu Arg Lys Gly Val Asn Asp Glu Glu Cys Arg Lys Leu Ala
            20                  25                  30
Lys Gly Tyr Leu Ser Cys Arg Met Glu Lys Tyr Val Trp Ala Val Gln
        35                  40                  45
Gly Pro Met Gln Thr Phe Asn Leu Ala Lys Asn Gly Cys
    50                  55                  60

<210> 35397
<211> 119
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (21)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35397
Thr Gln Tyr Leu Pro Thr Pro Gly Val Asp Asp Lys Leu Asp Asn Cys
1               5                   10                  15
Leu Thr Leu Tyr Xaa Asp Thr Trp Ile Val Val Thr Ala Asn Asn Ile
            20                  25                  30
Tyr Ser Val Ser Ala Thr His Thr Leu Leu Pro Trp Met Leu Tyr Asp
        35                  40                  45
Asp Leu Leu Ile Arg Cys Val Leu Thr Glu Tyr Ile Leu Lys Lys Asn
    50                  55                  60
Ile Ile Ser Pro Trp Arg Thr Asp Thr Ser Ser Ser Leu Ile Val Asn
65                  70                  75                  80
Leu Gly Thr Leu Lys Val Ala Val Ala Asn Leu Ser Phe Ala Asp Asp
                85                  90                  95
Tyr Ser Val Thr Tyr Pro Arg Glu Met Gln Leu Ala Ser Met Leu His
            100                 105                 110
Lys Phe Cys Val Asn Ile Met
        115

<210> 35398
<211> 73
<212> PRT
<213> A.fumigatus

<400> 35398
Leu Leu Leu Ala Asn Thr Leu Val Thr Pro Leu Asn Ser Gln Ile Val
1               5                   10                  15
```

```
Thr Arg Ser Val Thr Ser Ala Gly Ile Ser Ser Ser Lys Ile Ser Asn
            20                  25                  30
Ala Leu Leu Cys Asp Ser Leu His His Gly Asn Asp Lys Cys Trp Pro
        35                  40                  45
Trp Asp Tyr Phe Ile Tyr Arg Thr Val His Thr Pro Lys Ser Asp Gln
    50                  55                  60
Ala Trp Ser Ala Cys Ser Gly Gly Thr
65                  70
```

<210> 35399
<211> 66
<212> PRT
<213> A.fumigatus

<400> 35399

```
Gly Asp Asn His Cys Ala Asp Pro Arg Pro Pro Val Val Lys Thr Arg
1               5                   10                  15
Met Ser Ser Val Lys Gln Thr Gly Cys Met Leu Cys Leu Asn Asn Thr
            20                  25                  30
Tyr His Leu Gly Leu Lys Pro Gly Gln Glu Val Leu Asp Gln Val Gly
        35                  40                  45
Gly Ala His Lys Leu Gln Gly Trp Asp Arg Asn Ile Leu Thr Asp Thr
    50                  55                  60
Gly Gly
65
```

<210> 35400
<211> 89
<212> PRT
<213> A.fumigatus

<400> 35400

```
Thr Thr Ser Leu Arg Leu Pro Leu Pro Ile Met Pro Glu Phe Thr Arg
1               5                   10                  15
Pro Trp Glu Arg Ser Val Arg Trp Leu Asp Arg Cys Ile Asp Ala His
            20                  25                  30
Lys Tyr Pro Glu Arg Gln Asn Leu Phe Cys Ile Ile Gln Gly Gly Leu
        35                  40                  45
Asp Leu Glu Leu Arg Lys Gln Cys Cys Ala Glu Met Val Ala Arg Asp
    50                  55                  60
Thr Pro Gly Ile Ala Ile Gly Gly Leu Ser Gly Gly Glu Ala Lys Glu
65                  70                  75                  80
Glu Phe Cys Lys Val Tyr Val Leu Ala
                85
```

<210> 35401
<211> 376
<212> PRT
<213> A.fumigatus

<400> 35401

```
Phe Cys Leu Ser Ala Arg Asp Leu Ala Arg Arg Val Tyr Ala Leu Leu
1               5                   10                  15
Lys Lys Val Leu Arg Asn Gln Tyr Gln Arg Arg Asn Ile Ser Ile Thr
            20                  25                  30
Met Thr Ile Gln Ser Lys Asp Gln Thr Ser Ile Met Ser Pro Ala Ala
```

```
        35                  40                  45
Val Leu Pro Gln Asp Thr Pro Ser Gln Thr Gly Thr Pro Thr Pro Pro
    50                  55                  60
His Asn Pro Ala His Glu Glu His Gln Tyr Leu Asn Leu Ile Arg Thr
65                  70                  75                  80
Ile Leu Ala Glu Gly Glu His Arg Pro Asp Arg Thr Gly Thr Gly Thr
                85                  90                  95
Arg Ser Ile Phe Ala Pro Pro Gln Leu Arg Phe Ser Leu Ser Lys Pro
            100                 105                 110
Gly Ala Thr Pro Ser Ser Asp Pro Ile Pro Ile Leu Pro Leu Leu Thr
        115                 120                 125
Thr Lys Arg Val Phe Leu Arg Ala Val Ile Ala Glu Leu Leu Trp Phe
    130                 135                 140
Ile Ser Gly Cys Thr Ser Ser Ile Pro Leu Ser Glu Ala Gly Ile Lys
145                 150                 155                 160
Ile Trp Asp Gly Asn Gly Ser Arg Glu Phe Leu Asp Lys Val Gly Leu
                165                 170                 175
Gly His Arg Glu Val Gly Asp Leu Gly Pro Val Tyr Gly Phe Gln Trp
            180                 185                 190
Arg His Phe Gly Ala Glu Tyr Ile Asp Ala Lys Thr Asp Tyr Thr Gly
        195                 200                 205
Gln Gly Val Asp Gln Leu Ala Glu Val Val Arg Lys Leu Lys Glu Thr
    210                 215                 220
Pro Phe Asp Arg Arg Ile Ile Met Ser Ala Trp Asn Pro Ala Asp Leu
225                 230                 235                 240
Lys Lys Met Ala Leu Pro Pro Cys His Met Phe Ala Gln Phe Tyr Val
                245                 250                 255
Ser Tyr Pro Asn Gly Leu Gly Asn Lys Gly Ser Leu Ser Cys Leu Leu
            260                 265                 270
Tyr Gln Arg Ser Cys Asp Met Gly Leu Gly Val Pro Phe Asn Ile Ala
        275                 280                 285
Ser Tyr Ala Leu Leu Thr His Ile Leu Ala His Ala Thr Asp Leu Asn
    290                 295                 300
Pro Gly Thr Leu Ile His Thr Met Gly Asp Ala His Val Tyr Leu Asp
305                 310                 315                 320
His Val Asp Ala Leu Asn Glu Gln Leu Lys Arg Glu Pro Thr Glu Phe
                325                 330                 335
Pro Glu Leu Arg Ile Lys Arg Asn Asp Arg Gly Ser Gly Val Val Asp
            340                 345                 350
Gly Trp Lys Glu Glu Glu Phe Glu Val Val Gly Tyr Gln Pro His Lys
        355                 360                 365
Ala Ile Lys Met Asn Met Ser Val
    370                 375

<210> 35402
<211> 124
<212> PRT
<213> A.fumigatus

<400> 35402
Thr Trp Ser Tyr Gly Ser Ser Ala Ala Leu Lys Trp Leu Arg Glu Ile
1               5                   10                  15
His Arg Val Leu Pro Leu Glu Val Tyr Arg Val Val Arg Gln Arg Arg
            20                  25                  30
Ser Phe Val Lys Cys Met Cys Trp Arg Lys Cys Val Arg Ala Thr Cys
        35                  40                  45
```

```
Ala Tyr Asn Ser Arg Val Asp Thr Cys Thr Gly Leu Leu Pro Glu His
    50                  55                  60
Lys Pro Arg Tyr Val Met Gly Val Val Ser Thr Arg Trp Pro Ile Arg
65                  70                  75                  80
Leu Ala Val Ser Phe Ile Asp Ala Ala Gln Gly Tyr Pro Glu Asp Leu
                85                  90                  95
Val Val Ala Val Ala Leu Gly Ala Asp Met Phe Asp Cys Val Trp Pro
            100                 105                 110
Thr Arg Thr Ala Val Arg Thr Thr Ser Gly Ile Val
        115                 120
```

<210> 35403
<211> 150
<212> PRT
<213> A.fumigatus

<400> 35403

```
Gln Phe Asn Pro Lys Thr Lys Gln Ala Ser Cys Arg Arg Gln Pro Cys
1               5                   10                  15
Cys Arg Lys Ile Pro Pro Ala Lys Leu Ala His Arg Leu Leu Leu Ile
            20                  25                  30
Thr Leu His Met Arg Asn Ile Asn Thr Ser Thr Ser Ser Ala Pro Ser
        35                  40                  45
Ser Pro Lys Ala Ser Ile Val Pro Thr Ala Gln Gly Gln Ala Pro Ala
    50                  55                  60
Arg Ser Ser His His Arg Ser Tyr Asp Ser Arg Ser Pro Ser Leu Val
65                  70                  75                  80
Gln His Pro Pro Arg Thr Arg Ser Pro Ser Ser Pro Ser Ser Pro Pro
                85                  90                  95
Asn Ala Phe Ser Cys Val Pro Ser Ser Pro Ser Ser Ser Gly Ser Ser
            100                 105                 110
Pro Asp Ala Pro Pro Pro Ser Pro Ser Arg Lys Gln Ala Ser Lys Ser
        115                 120                 125
Gly Thr Val Thr Ala Ala Ala Ser Ser Trp Thr Lys Leu Gly Ser Gly
    130                 135                 140
Thr Ala Arg Ser Ala Ile
145                 150
```

<210> 35404
<211> 65
<212> PRT
<213> A.fumigatus

<400> 35404

```
Phe Leu Asn Arg Leu Thr Ile His Asn Val His Tyr Leu Leu Asn Leu
1               5                   10                  15
Met Gly Ser Ala Arg Gln Ala Ile Leu Glu Asp Arg Tyr Pro Ala Phe
            20                  25                  30
Leu Arg Glu Phe Phe Asp Asn Leu Tyr Gly Asp Lys Ala Lys Phe Pro
        35                  40                  45
Glu Trp Ala Val Thr Ala Leu Arg Gly Val Gly Val Asp Leu Leu Ala
    50                  55                  60
Asp
65
```

<210> 35405

<211> 62
<212> PRT
<213> A.fumigatus

<400> 35405
Ala Leu Leu Val Asp Tyr Lys Lys Ser Val Leu Asn Ala Gln Gln Gln
1 5 10 15
Val Glu Glu Ser Pro Asp Tyr Gly Arg Lys Thr Asn Ala Ile Lys Lys
20 25 30
Thr Lys Val Glu Ala Ser Pro Ser Asp Asp Asp Asp Asn Ser Ile Leu
35 40 45
Lys Ala Ala Ile Ile Ile Lys Pro Gly Leu Ser Phe Gly His
50 55 60

<210> 35406
<211> 115
<212> PRT
<213> A.fumigatus

<400> 35406
His Arg Pro Asp Gly Asn Arg Leu Gly Asn Ser Gly Leu Lys Ile Ser
1 5 10 15
Lys Ile Ile Leu Gly Ala Met Ser Tyr Gly Ser Lys Lys Trp Gln Asp
20 25 30
Trp Val Leu Asp Glu Asp Glu Ala Leu Pro Leu Ile Glu His Ala Tyr
35 40 45
Lys Arg Gly Ile Asn Thr Trp Asp Thr Val Ser Gly Arg Ser Trp Ala
50 55 60
Gln Ile Thr Arg Ala Gln Pro Asp Pro Leu Thr Thr Gly Asn Cys Ile
65 70 75 80
Glu Gly Arg His Ile Ile Pro Trp Pro Leu Gly Arg Asp Pro Arg Gln
85 90 95
Gly Ser Glu Lys Ile Pro His Pro Pro Glu His Arg Ile Val Ile Leu
100 105 110
Thr Lys Cys
115

<210> 35407
<211> 171
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (29)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35407
His Leu Gln Met Ala Ala Trp Glu Phe Gln Thr Leu Gln Asn Ile Ala
1 5 10 15
Ala Arg Asn Gly Trp His Gln Phe Ile Ser Met Gln Xaa Tyr His Asn
20 25 30
Leu Phe Ala Arg Glu Glu Glu Arg Glu Met Ile Pro Tyr Cys Leu Asp
35 40 45
Ser Gly Val Gly Leu Ile Pro Trp Ser Pro Met Ala Arg Gly Val Leu
50 55 60

```
Ala Arg Pro Trp Gly Ser Arg Ser Ser Val Arg Glu Asn Thr Asp Ala
65                  70                  75                  80
Thr Leu Gln Leu Leu Val Arg Ser Arg Glu Thr Glu Ala Asp Lys Ala
                85                  90                  95
Ile Val Glu Arg Val Glu Glu Ile Ala Lys Lys Lys Asn Ile Ser Met
            100                 105                 110
Ala Gln Val Ala Ile Ala Trp Val Leu Ser His Pro Lys Glu Asn Pro
        115                 120                 125
Ile Leu Gly Leu Ser Ser Lys Glu Arg Ile Asp Glu Ala Val Ala Ala
    130                 135                 140
Ile Lys Val Gln Leu Thr Pro Glu Glu Ile Lys Tyr Leu Glu Glu Pro
145                 150                 155                 160
Tyr Arg Pro Lys Ala Leu Thr Ala Leu Glu Arg
                165                 170
```

<210> 35408
<211> 212
<212> PRT
<213> A.fumigatus

<400> 35408

```
Ser Val Cys Gly Gly Cys Ala Glu Leu Pro Val Cys Pro Phe Ser Gly
1               5                   10                  15
Phe Ala Leu Pro Ala Val Phe Leu Phe Phe Ser Leu Phe Ile Leu Pro
            20                  25                  30
His Arg Ser Leu Ser Ile Gly Tyr Ser Pro Thr Pro Asn Arg Tyr Phe
        35                  40                  45
Ala Asn Ser Thr Pro Phe Leu Lys Val Leu His Cys Ile Phe Glu Ser
    50                  55                  60
Phe Arg Met Asn Ile Met Arg Leu Leu Pro Arg Ser Lys Ala Leu Ser
65                  70                  75                  80
Ser Pro Thr Ala Val Ala Pro Ala Phe Arg Gly Arg Gly Ala Gly Val
                85                  90                  95
Tyr Ser Pro Ser Ser Gln Thr Val Tyr Met Cys Pro Thr Ser Ala Val
            100                 105                 110
Ser Leu Met His Cys Ser Pro Cys Ser Thr Ser Ala Pro Leu Leu Ser
        115                 120                 125
Ser Gln Lys Ser Val Ala Gln Thr Ser Ala Asn Asn Asp Ser Leu Ser
    130                 135                 140
Asp Lys Phe Ser Ala Ala Leu Ala Lys Asn Lys Glu Trp Ala Ala Lys
145                 150                 155                 160
Cys Ser Gln Asp His Pro Glu Leu Leu Pro Thr Leu Ala Val Gly Gln
                165                 170                 175
His Pro Glu Ile Leu Trp Ile Gly Cys Ser Asp Ser Arg Leu Pro Glu
            180                 185                 190
Asn Thr Ile Leu Arg Pro Ser Ala Trp Arg Cys Leu His Pro Pro Gly
        195                 200                 205
Leu Leu Pro Thr
    210
```

<210> 35409
<211> 116
<212> PRT
<213> A.fumigatus

<400> 35409

```
Tyr Val Val Thr Pro Ser Ala Glu Gly Val Ala Ala Ala Leu Gly Asn
1               5                  10                  15
Lys Gly Leu Gly Ile Leu Asp Pro Trp Leu Ile Pro Leu Arg Gln Leu
            20                  25                  30
Arg Glu Gln His Leu Ala Glu Leu Gln Ser Leu Ser Arg Asp Glu Ala
        35                  40                  45
Val Val Arg Leu Ala Glu Leu Asn Val Lys Glu Gly Leu Lys Ala Leu
    50                  55                  60
Thr Gln Lys Ser Val Val Leu Glu Ala Met Gln Glu Arg Gly Leu Gln
65                  70                  75                  80
Val His Gly Leu Ile Tyr Asp Val Gly Ser Gly Phe Leu Arg Gln Leu
                85                  90                  95
Asp Ala Ala Glu Pro Glu Glu Ala Leu Lys Ala Arg Leu Thr Ser Phe
            100                 105                 110
Lys Thr Asp Ala
        115
```

<210> 35410
<211> 201
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (73),(156)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35410

```
Lys Asn Thr Pro Ser Pro Arg Thr Gln Asn Arg His Pro Asn Gln Met
1               5                  10                  15
Leu Ile Trp Ala Phe Leu Thr Lys Pro Asn Asp Gly Lys Met Ala Ser
            20                  25                  30
Tyr Leu Arg Pro Ala Thr Glu Asn His Gly Asp Trp Gly Glu Pro Arg
        35                  40                  45
Gly Ile Pro Arg Lys His Ile Phe Asp Ala Val Asp Ala Ser Val Lys
    50                  55                  60
Arg Leu Gly Thr Tyr Ile Asp Val Xaa Gln Ile His Arg Leu Asp Arg
65                  70                  75                  80
Glu Thr Pro Arg Glu Glu Ile Met Lys Ala Leu Asn Asp Val Val Glu
                85                  90                  95
Ser Gly Lys Val Arg Tyr Ile Gly Ala Ser Thr Val Arg Phe Phe Pro
            100                 105                 110
Arg Leu Leu Ser Glu Leu Val Arg Asn Glu Pro Tyr Ser Leu Thr Phe
        115                 120                 125
Ala Asp Gly Arg Leu Gly Ile Pro Asn Pro Pro Glu Tyr Arg Arg Pro
    130                 135                 140
Gln Arg Leu Ala Pro Val His Leu His Ala Glu Xaa Pro Gln Pro Leu
145                 150                 155                 160
Arg Pro Arg Gly Arg Thr Arg Asp Asp Pro Val Leu Pro Arg Leu Arg
                165                 170                 175
Arg Arg Ser Asp Pro Leu Val Ala Asp Gly Thr Arg Cys Pro Gly Pro
            180                 185                 190
Thr Leu Gly Leu Pro Leu Leu Arg Pro
        195                 200
```

<210> 35411

<211> 97
<212> PRT
<213> A.fumigatus

<400> 35411
Ile Gly Val Val Gly Asp Leu Leu Ile Leu Tyr Cys Ser Ala Tyr Val
1 5 10 15
Asn Leu Ala Ser Phe Pro Thr Pro Leu Asp Ser Pro Arg Leu Tyr Ser
20 25 30
Phe Pro Ser Trp Leu Val Asp Lys Met Thr Ile Phe Asp Glu Ile Lys
35 40 45
His Val Gln Arg Leu Ala Glu Ala Glu Ala Ala Gly Asp Pro Asn Ala
50 55 60
His Asn Gln Leu Leu Ala Ala Ile Arg Lys Leu Gln Leu Ala Ala Glu
65 70 75 80
Lys Pro Ile Asp Thr Thr Ser Arg Val Asn Phe Gln Val Ser Pro Met
85 90 95
Ala

<210> 35412
<211> 68
<212> PRT
<213> A.fumigatus

<400> 35412
Leu Val Gly Ala Leu His Ala Ser Leu Arg Ile Glu Ser Asn Thr His
1 5 10 15
Pro Asn Ala Ser Val Arg Val Met Arg Val Leu Thr Ala Ile Gly Phe
20 25 30
Ala Ile Glu Thr Ala Asn Gln Thr Tyr Ala Ala Asn Asp Thr Thr His
35 40 45
Phe Glu Ile Leu Pro Gly Ser Ile Ala Ala Val Lys His Gln Tyr Val
50 55 60
Phe Pro Cys Ser
65

<210> 35413
<211> 120
<212> PRT
<213> A.fumigatus

<400> 35413
Asp Ala Phe Pro Val Pro Thr Asp Gln Thr Glu Leu Thr Ser Lys Gly
1 5 10 15
Ala Arg Ala Tyr Phe Phe Arg Gln Val Leu His Asn Trp Ser Asp Ala
20 25 30
Lys Ser Lys Gln Ile Leu Ser His Ile Ala Asp Ala Met Glu Pro Gly
35 40 45
Tyr Ser Thr Leu Leu Ile Asp Asp Tyr Val Leu Pro Asp Thr Gly Ala
50 55 60
Glu Leu Arg Ala Ala Glu Met Asp Ile Leu Met Trp Leu His Thr Ala
65 70 75 80
Gly Leu Glu Arg Thr Val Ser Gln Trp Arg Ala Leu Phe Asp Ala Val
85 90 95
Gly Leu Glu Leu Val Gln Ile Trp Asn Thr Asp Lys Gly Asp Glu Ser

```
            100                 105                 110
Val Leu Glu Val Arg Lys Arg Leu
        115                 120

<210> 35414
<211> 279
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (221),(226)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35414
Ser Ile Leu Ile Ile Ala Thr Ser Val Arg Cys Arg Phe Asp Tyr Asn
1               5                  10                  15
Thr Glu Gln Val Ser Ile Gln Leu Gln Pro Thr Met Ser Thr Leu Thr
            20                  25                  30
Arg Ala Phe Thr Lys Arg His Lys Arg Pro Glu Val Ser Ala Pro Met
        35                  40                  45
Pro Tyr Arg Glu Gly Gln Val Lys Phe Thr Ala Gly Thr Ile Lys Arg
    50                  55                  60
Gly Lys Ile Ser Gly Pro Val Glu Leu Ile Ser Thr Thr Asn Met Leu
65                  70                  75                  80
Ala Tyr Asn Ala Pro Asp Leu His Ser Ala Val Ser Ser Ser Ser Ser
                85                  90                  95
Ser Leu Gln Ser Pro Asp Asp Ser Glu Leu Ser Phe Ser Gln Arg Ser
            100                 105                 110
Phe Gly Ser Pro Ile Thr Thr Pro Asp Asp Ser Pro Val Glu Pro Asn
        115                 120                 125
Pro Leu Ser Ser Tyr Phe Pro Lys Arg Ser Ala Thr Val Thr Ser His
    130                 135                 140
Pro Arg Ser Ser Thr Ser Thr Thr Ser Ser Thr Asp Ala Pro Leu Val
145                 150                 155                 160
Pro Lys Arg Ala Leu Ser His Thr Lys Arg Ser His Gln Glu Leu Ala
                165                 170                 175
Arg Gln Arg Ser Leu Ser Arg Leu Ser Pro Pro Pro Leu Asn Ser Met
            180                 185                 190
Arg Ser Ser Pro Ser Ile Arg Thr Asn Gln Asp Phe Phe Lys Ser Glu
        195                 200                 205
Pro His Pro Phe Gly Lys Glu Leu Glu Gln Val Asn Xaa Met Ala Lys
    210                 215                 220
Glu Xaa Asn Ser Gly Ala Asn Arg Val Leu Asp Glu Glu Glu Met Ile
225                 230                 235                 240
Leu Leu Asn Lys Gly Leu Arg Lys Phe Thr Ala Asn Asp Tyr Leu Val
                245                 250                 255
Glu Ile Glu Glu Leu Tyr Gly Ser Ile Phe Asp Asp His Leu Gly Pro
            260                 265                 270
Val Ala Thr Gly Ser Trp Leu
        275

<210> 35415
<211> 66
<212> PRT
<213> A.fumigatus
```

<400> 35415
Gln Leu Leu Pro Tyr Gln Leu Gln Ile Ile Ile Lys Ala Gln Thr Gln
1 5 10 15
Thr Gln Ala Lys Glu Gln Gln Pro Glu Met Glu Arg Ile Asp Cys Val
20 25 30
Gln His Glu Pro Glu Asp Arg Val Trp Val Gly Tyr Gly Ser Gly Pro
35 40 45
Gly Val Lys Val Phe Gly Asn Pro Ser Lys Gly Asp Val Tyr Val Leu
50 55 60
Asp Ser
65

<210> 35416
<211> 132
<212> PRT
<213> A.fumigatus

<400> 35416
Val Val Ala Leu Tyr Arg Asn Gly Ser Leu Ser Val Arg Ser Arg Ser
1 5 10 15
Arg Phe Phe Val Gly Cys Ser Ser Ile Ile Ala Gly Leu Leu Lys Leu
20 25 30
Met Lys Met Ala Gly Asp Lys Thr Val Glu Val Thr Pro Ser Pro Arg
35 40 45
Ile Gly Ile Glu Asp Ser Leu Glu Cys Leu Pro Ser Ile Met Asp Ala
50 55 60
Ser Ile Thr His Gly Glu Leu Thr Gln Glu Leu Cys Leu Ile Leu Tyr
65 70 75 80
Leu Thr Tyr Ser Thr Gly Gly Gly Ser Leu Tyr Cys Leu Thr Leu Thr
85 90 95
Ser Val Ala Pro Phe Pro Asn Ile Ala Ser Ile Gly Gly Ala Thr Thr
100 105 110
Gln Ile Phe Cys Gln Gly Leu Ala Ala Pro Cys Ala Glu Val Arg Ala
115 120 125
Ser Gln Gly Pro
130

<210> 35417
<211> 64
<212> PRT
<213> A.fumigatus

<400> 35417
Val Val Arg Leu Arg Cys Leu Leu His Ile Pro Asn Ala Val Asn Ser
1 5 10 15
Phe Lys Pro Ile Tyr Pro Ser Ile Gly Leu Val His Ile Ile Asn Gln
20 25 30
Thr Leu Leu Ser Arg Leu Ser Ile Ala Ser Ala Pro Thr Asn Ser Thr
35 40 45
Ser Ala Ser Tyr Ser Asn His Ala Thr Asp Ile Met Phe Glu Val Leu
50 55 60

<210> 35418
<211> 209
<212> PRT

<213> A.fumigatus

<400> 35418

```
Leu Phe Ile Met Ala Gly Ile Thr Ser Thr Asp Gly Leu Pro Pro Leu
1               5                  10                  15
Ala Val Val Gly Phe Ser Phe Lys Phe Pro Glu Asp Ala Thr Ser Ser
            20                  25                  30
Asp Ser Phe Trp Gln Met Leu Leu Asp Gly Arg Cys Val Ser Ser Glu
        35                  40                  45
Phe Pro Ala Asp Arg Leu Asn Ile Asp Ala His Tyr Tyr Pro Asp Arg
    50                  55                  60
Asn Arg Leu Asp Ser Ile Ser Met Arg Gly Gly His Phe Leu Lys Asp
65                  70                  75                  80
Asn Ile Ala Thr Phe Asp Ala Pro Phe Phe Ala Met Ser Ala Ala Glu
                85                  90                  95
Ala Glu Ala Met Asp Pro Gln Gln Arg Met Val Leu Glu Thr Val Tyr
            100                 105                 110
Arg Ala Leu Glu Asn Ala Gly Leu Pro Met Glu Lys Val Ala Gly Ser
        115                 120                 125
Lys Thr Ser Val Ile Ala Gly Ser Phe Ser Asp Asp Tyr Phe Leu Leu
    130                 135                 140
Gln Thr Lys Asp Pro Leu Asp Met Pro Lys Tyr Thr Ala Val Gly Thr
145                 150                 155                 160
Ser Arg Asn Met Leu Ala Asn Arg Val Ser Trp Phe Phe Asp Leu Leu
                165                 170                 175
Gly Pro Ser Ala Ala Val Asp Thr Ala Cys Ser Ser Ser Leu Ile Ala
            180                 185                 190
Leu Asp Met Thr Cys Gln Ser Ile Trp Ser Arg Asp Ala Asp Met Val
        195                 200                 205
Cys
```

<210> 35419
<211> 168
<212> PRT
<213> A.fumigatus

<400> 35419

```
Gln Lys Asp Lys Ser Leu Trp Leu Phe Leu Leu Lys Phe Trp Gln Gly
1               5                  10                  15
Leu Ala Ile Gly Ser Asn Val Ile Leu Thr Pro Glu Leu Thr Met Ser
            20                  25                  30
Leu Asp Asn Leu Gly Leu Leu Ser Pro Asp Ser His Ser Tyr Ser Phe
        35                  40                  45
Asp Ser Arg Ala Asn Gly Tyr Ala Arg Gly Glu Gly Ile Gly Val Ile
    50                  55                  60
Val Ile Lys Arg Phe Asp Asn Ala Ile Arg Asp Gly Asp Thr Ile Arg
65                  70                  75                  80
Ala Val Ile Arg Ser Ser Ser Ser Asn Gln Asp Gly Lys Thr Pro Gly
                85                  90                  95
Ile Thr Gln Pro Ser Lys Glu Ala Gln Val Arg Leu Ile Arg Asp Thr
            100                 105                 110
Tyr Lys Lys Ala Gly Leu Asp Met Ser Leu Thr Arg Tyr Phe Glu Ala
        115                 120                 125
His Gly Thr Gly Ile Tyr Ser Met Arg Leu Gln Glu Val Pro Ser Gln
    130                 135                 140
```

```
Leu Thr Arg Leu Arg Asp Pro Asn Trp Arg Pro Asn Arg Asn Lys Ser
145                 150                 155                 160
Asp Arg Asp Gly Phe Ser Pro Val
                165
```

<210> 35420
<211> 95
<212> PRT
<213> A.fumigatus

<400> 35420

```
Val Ser Arg Ala Ala Ile Ile Arg Val Ser Pro Ala Trp Ser Leu Arg
1               5                  10                  15
Ala Arg Thr Thr Leu Arg His Cys Ser Gly Ser Val Lys Ser Asn Ile
            20                  25                  30
Gly His Leu Glu Gly Ala Ser Gly Val Ala Gly Val Ile Lys Val Ile
        35                  40                  45
Leu Ala Leu Glu Lys Gly Ile Ile Pro Pro Asn Ser Arg Asn Leu Gln
    50                  55                  60
Phe Leu Asn Pro Gln Ile Asp Glu Glu Phe Leu Asn Leu Lys Val Trp
65                  70                  75                  80
Lys Ser Ile Gln Leu Glu Ser Thr Val Leu Thr Ala Phe Ala Gln
                85                  90                  95
```

<210> 35421
<211> 190
<212> PRT
<213> A.fumigatus

<400> 35421

```
Val Leu Gln Lys Ala Ile Pro Trp Pro Glu Asn Asp Leu Arg Arg Ala
1               5                  10                  15
Ser Val Ser Ser Phe Gly Phe Gly Gly Ser Asn Cys His Val Val Leu
            20                  25                  30
Asp Asp Ala Tyr Asn Ser Leu Arg Leu Met Gly Ile Glu Gly Ser Arg
        35                  40                  45
His Gln Thr Val Val Val Pro Pro Ser Leu Glu Val Thr Ala Leu Val
    50                  55                  60
Ala His Gly Lys Cys Gly Tyr Thr Thr Asn Ala Gly Ser Asp Gln Pro
65                  70                  75                  80
Asn Asp Asp His Pro Asn Gly Leu His Asp Glu Glu Glu Thr His Gln
                85                  90                  95
Leu Leu Val Trp Ser Thr Ala Asp Glu Glu Gly Ile Glu Arg Leu Val
            100                 105                 110
Glu Thr Trp Lys Pro Phe Leu Ser Asp Lys Arg Glu Phe Ser Arg Ser
        115                 120                 125
Gln Arg Arg Gln Tyr Leu Leu Asp Leu Ala Tyr Thr Leu Gly Gln Arg
    130                 135                 140
Arg Ser His Leu Gln Trp Arg Ser Tyr Ala Ile Gly Asp Ala Leu Glu
145                 150                 155                 160
Asp Leu Gly Ser Leu Ala Asp Arg Phe Thr Pro Ala Ile Arg Ser Thr
                165                 170                 175
Asp Glu Ser His Ile Ala Phe Leu Phe Thr Gly Val Arg Leu
            180                 185                 190
```

<210> 35422

<211> 440
<212> PRT
<213> A.fumigatus

<400> 35422
Tyr Asn Leu Ser Asn Ser Tyr Trp Leu Lys Tyr Leu Val Val Thr Pro
1 5 10 15
Asn Gln Leu Thr Ala Ala Ala Leu Val Ile Ser Tyr Trp Leu Asp Thr
20 25 30
Lys Asp Val Asn Pro Gly Ile Trp Ile Thr Val Phe Leu Val Val Ile
35 40 45
Gly Ser Val Asn Tyr Trp Ala Ala Arg Phe Ile Gly Pro Tyr Glu Phe
50 55 60
Ala Leu Ser Thr Phe Lys Ile Leu Val Leu Phe Ala Leu Thr Val Leu
65 70 75 80
Ser Val Val Ile Ala Leu Gly Gly Gly Pro Asp His Asp Arg Arg Gly
85 90 95
Phe Arg Tyr Trp Arg Asp Pro Gly Ala Phe Ala Ser Tyr Gly Asn His
100 105 110
Glu Leu Val Gly Lys Leu Arg Ala Val Ser Lys Thr Met Pro Ser Thr
115 120 125
Ile Phe Ala Tyr Leu Gly Ser Glu Leu Leu Gly Met Ala Met Leu Gln
130 135 140
Thr Arg Asn Thr Pro Lys Ala Ala Ala Arg Ala Ile Lys Leu Thr Phe
145 150 155 160
Tyr Arg Ile Phe Ile Phe Asn Ile Val Ser Val Thr Leu Leu Gly Met
165 170 175
Leu Ile Pro Tyr Asp Ser Gln Asp Leu Ala Phe Ala Asn Asn Ala Ser
180 185 190
Lys Pro Thr Thr Val Ser Val Phe Val Val Ala Ile Lys Met Ala His
195 200 205
Leu Pro Thr Leu Pro Asn Ile Leu Asn Ala Cys Phe Leu Leu Phe Val
210 215 220
Leu Ser Ala Ala Asn Gln Ala Leu His Met Ala Thr Gln Ile Ile His
225 230 235 240
Gly Leu Ser Gln Glu Gln Lys Ala Pro Ser Phe Leu Ser Arg Thr Asp
245 250 255
Arg Lys Gly Val Pro Val Tyr Ser Leu Gly Thr Cys Ala Ile Leu Ala
260 265 270
Ser Leu Ala Tyr Leu Asn Ile His Asn Asp Ser Lys Val Leu Phe Gly
275 280 285
Tyr Phe Val Asn Ile Ile Thr Met Phe Ser Leu Leu Thr Trp Ile Ser
290 295 300
Ile Leu Ile Thr His Ile Ser Phe Val Arg Ala Arg Lys Ala Gln Lys
305 310 315 320
Val Pro Asp Ser Ala Leu Val Phe Arg Ala Pro Phe Gly Ala Cys Gly
325 330 335
Ser Trp Val Ala Leu Ile Ser Cys Ile Leu Phe Ser Leu Met Gly Gly
340 345 350
Leu Asp Val Ala Glu Leu Ala Thr His Pro Glu Ala Phe Asp Tyr Met
355 360 365
Thr Leu Ile Thr Ser Tyr Ile Ala Val Pro Leu Tyr Leu Ser Leu Val
370 375 380
Ile Gly Tyr Lys Val Val Thr Arg Cys Glu Ser Val Asn Pro Ala Glu
385 390 395 400
Ala Asp Leu Trp Thr Ala Thr Thr Ile Arg Glu Arg His Glu Ser Ser

```
                405                 410                 415
Glu Pro Glu Asp Thr Gly Leu Leu Asp Gln Asn His Trp Leu Trp Asn
            420                 425                 430
Arg Phe Val Ala Ala Trp Leu Leu
        435                 440
```

<210> 35423
<211> 126
<212> PRT
<213> A.fumigatus

<400> 35423

```
Val Ser Glu Glu Thr Val Tyr Thr Arg Val Leu Ala Ala Arg Gln Ser
1               5                   10                  15
Ser Glu Thr Tyr Pro Phe Asp Pro Val Lys Phe Ile Pro Arg Tyr Leu
            20                  25                  30
Ala Glu Tyr Gln Leu Ser Trp Gly Ile Arg Gly Asp Asn Thr Pro Glu
        35                  40                  45
Tyr Ala Lys Tyr Leu Gly Tyr Leu Asp Ala Lys Glu Leu Tyr Pro Asp
    50                  55                  60
Phe Arg Pro Thr Asp Phe Arg Asp Tyr Leu Glu Ser Val Val Arg Gly
65                  70                  75                  80
Thr Ala Lys Gly Ile Tyr Thr Asp Arg Thr Ile Ser Arg Ala Gln Gln
                85                  90                  95
Arg Glu Phe Pro Arg Thr Glu Ser Ser Asp Ser Leu Tyr Thr Arg Ile
            100                 105                 110
Phe Pro Arg Ala Glu Ser Ser Asp Ser Leu Tyr Met Ser Arg
        115                 120                 125
```

<210> 35424
<211> 61
<212> PRT
<213> A.fumigatus

<400> 35424

```
Pro Val Lys Pro Ala Ala Ile Leu Ile Ser Tyr Thr Ala Val Gly Ile
1               5                   10                  15
Val Val Tyr Leu Thr Leu Cys Ala Leu Gly Glu Val Ala Ala Trp Phe
            20                  25                  30
Pro Glu Pro Ser Thr Ala Val Asp His Ala Arg Ser Phe Cys Asp Pro
        35                  40                  45
Ala Val Gly Phe Thr Leu Gly Trp Arg His Gly Phe Pro
    50                  55                  60
```

<210> 35425
<211> 80
<212> PRT
<213> A.fumigatus

<400> 35425

```
Ile Ser His Asp Pro Leu His Ser Leu Ser Pro Ser Ser Thr Ala Ser
1               5                   10                  15
Phe Ser Ser Leu Leu Phe Arg Val Cys Leu Ala His Ser Gly Val Lys
            20                  25                  30
Val Ile Ala Leu Leu Val Ser Thr Ala Pro Met Arg Arg Glu Met Tyr
        35                  40                  45
```

```
Thr Cys Glu Arg His Met Ala Glu Leu Asn Leu Leu Ser Ser Ser Gln
    50                  55                  60
Pro Leu His Met Phe Ala Ala Ile Pro Thr Leu Gln Gln His Cys Cys
65                  70                  75                  80

<210> 35426
<211> 398
<212> PRT
<213> A.fumigatus

<400> 35426
Val Glu Ser Leu Leu Tyr Ile Ile Cys Met Leu Ser Ser Trp Phe Phe
1               5                   10                  15
Asp Ile Asn Ile Phe Ser His Ser Ser Glu Val Ser Thr Ala Trp Leu
            20                  25                  30
Gln Arg Asp Thr Thr Gln Phe Thr Arg Ser Leu Thr Gln Ile Lys Pro
        35                  40                  45
Gly Asp Ser His Phe Gln Lys Thr Phe Leu Leu Ala Ile Val Thr Ala
    50                  55                  60
Gln Leu Met Val Met Asn Trp Thr Ser Glu Ser Phe Ala Ser Ala Ser
65                  70                  75                  80
Thr Tyr Ala Pro Ser Ser Ser Glu Asp Asn Ser Met Met Ile Glu Thr
                85                  90                  95
Ser His Gly Tyr Ala Thr Glu Ala Phe Glu His Ala Asn His Pro Asn
            100                 105                 110
Asn Ser Gln Pro Pro Thr Gly Leu Gly Ile Thr Tyr Val Gly Met Glu
        115                 120                 125
Ala Gln Phe Ser Gln Met Gly Leu Cys Ser Val Pro Glu Thr Leu Ser
    130                 135                 140
Gln Pro Thr Thr Asp Trp Pro Asp Gln Leu Met Gln Ser Val Phe Glu
145                 150                 155                 160
Pro Cys Leu Asp Val Glu Asn Leu Thr Thr Gly Thr Cys Tyr Glu Ser
                165                 170                 175
Phe Pro Val His His Asp Leu Ser Thr Ser Pro His Ser Leu Tyr Ser
            180                 185                 190
Pro Gln Thr Leu Ser Ala Ser Pro Ser Tyr Cys Ser Thr Leu Asp Val
        195                 200                 205
Gly Asn Gln Gly Thr Thr Cys Ser Gln Thr Ser Arg Arg Trp Pro Gly
    210                 215                 220
Thr Pro Cys Ser Asp Asn Thr Thr Pro Phe Glu Gly Trp Ser His Val
225                 230                 235                 240
Lys Gln Glu Tyr Asp Asp Cys Pro Asp Pro Leu Leu Tyr Ser Glu Pro
                245                 250                 255
Ser Asp Ala Ser Gly Val Ser Thr Ser Thr Thr Ile Pro Gln Leu Met
            260                 265                 270
Val Asn Asn Thr Phe Ala Val Thr Ala Ser Pro Gly Lys Glu Lys Gly
        275                 280                 285
Asp Thr Thr Leu Lys Pro Asp Pro Ile Phe Glu Asp Ser Ile Asp His
    290                 295                 300
Asp Gln Thr Ala Thr Ile Pro Gln Ser Thr Ala Gln Ala Arg Thr Thr
305                 310                 315                 320
Ile Ser Asn Asp Asn Glu Ser Cys Lys Val Thr Ser Ala Ser Gly Leu
                325                 330                 335
Val Cys Thr Val Cys Gly Thr Arg Phe Thr Arg Arg Ser Asn Cys Arg
            340                 345                 350
Glu His Met Lys Arg His Asp Pro Ser Cys Arg Lys Leu Tyr Pro Cys
```

```
        355                 360                 365
Glu Ala Cys Gly Lys Thr Phe Gly Arg Arg Thr Asp Leu Lys Arg His
    370                 375                 380
Val Asp Ser Val Ser Leu Val Gly Arg Leu Ala Val Cys Cys
385                 390                 395

<210> 35427
<211> 319
<212> PRT
<213> A.fumigatus

<400> 35427
Leu Thr Glu Glu Asp Arg His Ala Glu Pro Glu Gln Val Arg Thr Asn
1               5                   10                  15
Cys Arg Gln Thr Asp Cys Leu Pro Pro Ala Thr Asp Phe Gln Gln Val
            20                  25                  30
Ala Gln Met Ile Gly Ser Met Gln Val Ser Ser Gln Pro Gln Ala Gln
        35                  40                  45
Arg Pro Pro Arg Thr Ser Ser His Ala Pro Pro Gly Gly His Pro Gln
    50                  55                  60
Arg Val Pro Val Thr Asn Ala Gln Ile Asn Lys Pro Leu Pro Ala Thr
65                  70                  75                  80
Gly Pro Pro Pro Ala Ser His Ala Arg Pro His Pro Leu His Pro Ser
                85                  90                  95
Pro Pro Pro Gln Asn Tyr Gly Phe Gly Pro Pro Pro Ser Gln Pro Val
            100                 105                 110
Arg Asn Arg Pro Ser Pro Val Ser Arg Pro Pro Gln Ser Pro His Pro
        115                 120                 125
Pro Pro Leu Ser Ala Pro His Asp Asp Pro Gln Gln Leu Phe Pro Leu
    130                 135                 140
Phe Arg Ala Ala Asn Ala Ser His Ser Gly Ala Leu Thr Glu Met Glu
145                 150                 155                 160
Leu Gly Ser Ala Leu Val Asn Gly Asp Tyr Thr Ser Phe His Pro Lys
                165                 170                 175
Thr Val Lys Met Met Ile Arg Met Phe Asp Arg Asn Ser Ser Gly Thr
            180                 185                 190
Ile Ser Phe Asp Glu Phe Val Ala Leu Trp Arg Phe Leu Ala Ala Trp
        195                 200                 205
Arg Glu Leu Phe Asp Arg Phe Asp Glu Asp Arg Ser Gly Arg Ile Ser
    210                 215                 220
Leu Gln Glu Phe Glu Lys Ala Leu Val Ala Phe Gly Tyr Arg Leu Ser
225                 230                 235                 240
Gln Pro Phe Val Thr Val Leu Tyr Thr Thr Phe Glu Ser Lys Lys Gln
                245                 250                 255
Gln Ile Asn Gly Gly His Gly Pro Ala Lys Asp Gly Met Ser Phe Asp
            260                 265                 270
Leu Phe Val Gln Ala Cys Ile Ser Leu Arg Arg Met Thr Asp Val Phe
        275                 280                 285
Lys Arg Tyr Asp Glu Asp Arg Asp Gly Tyr Ile Thr Leu Ser Phe Glu
    290                 295                 300
Glu Phe Leu Thr Gly Lys Trp Arg Phe Glu Ala Val Trp Ser Asp
305                 310                 315

<210> 35428
<211> 292
<212> PRT
```

<213> A.fumigatus

<400> 35428
Ser Gly Trp Ser Ser Arg Leu Leu Gln Met Ser Ser Pro Glu Ser Pro
1 5 10 15
Thr Gly Ile Ser Phe Ala Gly Gln Thr Val Val Leu Thr Gly Ala Thr
20 25 30
Ser Gly Leu Gly Phe Glu Ala Ala Ile Lys Leu Leu Asn Leu Gly Val
35 40 45
Asp Ser Leu Val Ile Gly Cys Arg Asn Leu Glu Arg Gly Glu Ala Thr
50 55 60
Lys Ala Glu Leu Glu Leu Arg Thr Asn Arg Pro Gly Val Ile His Val
65 70 75 80
Trp Glu Leu Asp Met Ser Ser Phe Gln Ser Val Lys Asp Phe Ala Ala
85 90 95
Arg Val Asn Thr Glu Ile Glu Arg Leu Ala Val Val Leu Leu Asn Ala
100 105 110
Gly Leu Trp Asn Arg Ser Tyr Ile Ala Ser Pro Asp Gly Trp Glu Glu
115 120 125
Thr Leu Gln Val Asn Thr Leu Ser Thr Ser Leu Leu Ala Ile Leu Leu
130 135 140
Leu His Lys Leu Arg Ser Ser Ser Ser Ala Glu Ser Pro Ser His Leu
145 150 155 160
Arg Val Val Ser Ser Lys Leu Phe Thr Arg Val Glu Ala Asp Ser Leu
165 170 175
Arg Thr Asp Gly Ser Leu Leu Glu His Leu Asn Asp Pro Lys His Phe
180 185 190
Asn Gly Pro Gln Gln Tyr Arg Ile Ser Lys Leu Leu Met Glu Tyr Val
195 200 205
Leu Lys Thr Val Ala Gln His Ala Arg Glu Glu Asn Gly Ser Val Pro
210 215 220
Val Ile Ile Asn Thr Val Ser Pro Gly Phe Cys Ala Ser Ser Leu Gly
225 230 235 240
Arg Gln Tyr Asp Arg Phe Tyr Glu Arg Trp Met Met Trp Leu Val Tyr
245 250 255
Lys Leu Phe Ala Arg Thr Ala Glu Gln Gly Ser Arg Ser Leu Val Ser
260 265 270
Ala Thr Tyr Gln Gly Val Glu Ser His Gly Lys Cys Trp Arg Asp Asp
275 280 285
Gly Tyr Val Glu
290

<210> 35429
<211> 213
<212> PRT
<213> A.fumigatus

<400> 35429
Asp Lys Ile Cys Thr His Leu Asp Leu Ser Ala Gln Pro Pro Val Glu
1 5 10 15
Ala Ser Asp Ala Leu Arg Ala Ser Val Leu Gln Ser Cys His Ser Thr
20 25 30
Leu Ile Arg Leu Gly Asp Leu Ser Arg Tyr Arg Glu Thr Glu Leu Val
35 40 45
Ser Lys Asp Arg Asn Trp Gly Pro Ala Ile Gly Tyr Tyr Asp Leu Ala
50 55 60

```
Ile Ala Ile Tyr Pro Ala Ser Gly Ala Ser His Asn Gln Leu Ala Val
65                  70                  75                  80
Ile Ala Leu Ala Asp Gly Asn His Leu Arg Ala Thr Tyr His Leu Tyr
                85                  90                  95
Arg Ala Leu Ala Ala Gln Glu Pro His Pro Ser Ala Lys Gly Asn Leu
            100                 105                 110
Glu Ile Glu Phe Arg Lys Val Arg His Ala Trp Cys Lys Arg Glu Leu
        115                 120                 125
Ile Arg Pro Glu Asp Ala Gly Ile Pro Gly Arg Ala Leu Ala Pro Trp
    130                 135                 140
Phe Val Tyr Leu His Ala Gln Cys Tyr Lys Gly Asn Asp Phe Pro Glu
145                 150                 155                 160
His Asp Glu Leu Glu Ser Glu Val Leu Asn Gln Leu Ala Val Asp Leu
                165                 170                 175
Lys Glu Arg Ser Leu Glu Gly Thr Leu Gln Lys Phe Cys Leu Ile Asn
            180                 185                 190
Ile Ala Ala Glu Asp Phe Ser Trp Thr Gln Pro His Gly Lys Ser Pro
        195                 200                 205
Ser Cys Arg Asn Tyr
    210
```

<210> 35430
<211> 234
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (122),(221)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35430

```
Arg Ser Arg Ser Arg Cys Glu Gln Cys Thr Lys Cys Pro Val Tyr Ser
1               5                   10                  15
Phe Val Pro Ile Arg Leu Leu Thr Asp Thr Ala Leu Arg Ser Gln Arg
            20                  25                  30
Ile Pro Ile Val Leu Val Asp Asp Glu Asp Lys Lys Thr Phe Ile Tyr
        35                  40                  45
Lys Glu Glu Gly Leu Pro Ser Gln Phe Phe Ala Ser Pro Ser Gly His
    50                  55                  60
His Asn Thr Leu Ser Thr Ala Ser Val Glu Arg Tyr Asp Val His His
65                  70                  75                  80
Ala Thr Lys Asp Ala Asn His Ile Ala Asp Ser Arg Ser Thr Phe Gly
                85                  90                  95
Gly Ser Gln Ser Ala Ser Ala Ser Met Ser Ala Asn Met His Arg Ile
            100                 105                 110
Val Glu Gly Val Glu Arg Leu Val Glu Xaa Asp Thr Tyr Glu Asn Thr
        115                 120                 125
Pro Ala Leu Ser Glu Gln Leu Ala Phe Leu Arg Ser Asn Asn Gln Gln
    130                 135                 140
Ser Ile Pro Asn Asp Phe Phe Glu Ser Ser Leu Asn Thr Thr His Arg
145                 150                 155                 160
Glu Ala Asn Ala Pro Thr Arg Tyr Pro Pro Ile Ala Pro Pro Gly Leu
                165                 170                 175
Gln Phe Ser Met Pro Asn Pro Gln Leu Gly Pro Gln Leu His Pro Pro
            180                 185                 190
```

```
Val Leu Asn Phe Leu Thr Tyr Pro Ser Gly Phe Pro Arg Phe Trp Thr
        195                 200                 205
Pro Glu Trp Ser Met Lys Ser Val Asp Leu Gly Ser Xaa Lys Pro Phe
    210                 215                 220
Gln Gly Leu Asp Thr Ser Ser Ser Ala Asn
225                 230
```

<210> 35431
<211> 129
<212> PRT
<213> A.fumigatus

<400> 35431

```
Asp Met Ser Lys Arg Pro Arg Ile Ser Arg Ser Pro Ser Pro Gly Gln
1               5                   10                  15
Thr Pro Glu Thr Trp Ser Thr Ser Pro Ser Pro Ala Ala Ser Thr Pro
            20                  25                  30
Ser Cys Gln Arg Ser Lys Ile Ile Leu Gln Asp Thr Asn Glu Pro Ala
        35                  40                  45
Val Glu Ala Met His Cys Ser Leu Pro Pro His Arg Glu Val Ile Tyr
    50                  55                  60
Phe Ser Ser Tyr Glu Asp Tyr Glu Val His Tyr Thr Gln Thr His Val
65                  70                  75                  80
Asn Arg Cys Ser Glu Cys Gly Lys Asn Phe Pro Thr Asp Arg Phe Leu
                85                  90                  95
Asn Leu His Ile Glu Glu Asn His Asp Pro Leu Val Ala Thr Lys Arg
            100                 105                 110
Asp Lys Gly Glu Lys Thr Val Arg Gln Pro Trp Asp His Cys Phe Arg
        115                 120                 125
Asn
```

<210> 35432
<211> 180
<212> PRT
<213> A.fumigatus

<400> 35432

```
Leu Arg Thr Ile Pro Pro Glu Gln Gln Arg Leu Asn Thr Val Ala Gln
1               5                   10                  15
Ile Phe Tyr His Ser Pro Gly Asn Phe Ala Met Arg Leu Phe Val Val
            20                  25                  30
Pro Ile Ser Thr Gln Arg Ala Leu Ile Tyr Ser Arg Pro Leu Ser Arg
        35                  40                  45
Asp Ile Val Arg Glu Leu Ser Val Leu Asp Arg Val Thr Asn Lys Ala
    50                  55                  60
Ala Glu Thr Trp Ala Lys Trp Glu Glu Ala Asp Lys Gly Trp Lys Lys
65                  70                  75                  80
His Leu Val Thr Trp Gly Asn Lys Val Gln Gln Arg Ile Pro Phe Glu
                85                  90                  95
Glu Trp Gly Leu Lys Ser Ile Pro Ser Leu Lys Ala Gln Arg Arg Leu
            100                 105                 110
Asp Lys Ser Ser Glu Thr Lys Lys Val Asp Val Leu Phe Pro Gly Asn
        115                 120                 125
Ala Ile Lys Ala Glu Lys Ile Arg Ser Ile Leu Arg Lys Ile Ala Thr
    130                 135                 140
```

```
Glu Arg Gln Asp Leu His Arg Lys Lys Met Trp Trp Ser Leu Val Ala
145                 150                 155                 160
Ala Pro Leu Thr Ala Pro Ile Ala Leu Ile Pro Val Tyr Ser Leu Cys
                165                 170                 175
Leu Thr Glu Tyr
            180

<210> 35433
<211> 70
<212> PRT
<213> A.fumigatus

<400> 35433
Ser Ala Ser His Arg Asp Asp Leu Gln Arg Lys Ala Met Val Val Ala
1               5                   10                  15
Glu Thr Ala Gly Gln Gly Ser Val Thr Tyr Thr Ile Asp Asp Ile Pro
            20                  25                  30
Glu Ser Tyr Ile Pro Pro Gln Arg Ser Trp Gly Arg Glu Tyr Met His
        35                  40                  45
Gly Val Asn His Val Asn Glu Val Ala Ala Tyr Asn Val Pro Val Gly
    50                  55                  60
Trp Lys Ser Ser Thr Thr
65                  70

<210> 35434
<211> 75
<212> PRT
<213> A.fumigatus

<400> 35434
Gln Cys Leu Leu Thr Asp Arg Cys Ile Asp Pro Gly Gln Ala Ser Met
1               5                   10                  15
Thr Leu Ala Lys Leu Gln Asn Ser Val Lys Ser Ser Phe Asp Ala Ile
            20                  25                  30
Asn Asp Asn Leu Lys Glu His His Ser Ala Leu Asn Lys Tyr Ser Lys
        35                  40                  45
Ala Leu Asp Lys Val Leu Ser Pro Ser His Phe Tyr Ile Phe Gly Ala
    50                  55                  60
Leu Glu Thr Asp Thr Val Ala Ala Leu Gln Arg
65                  70                  75

<210> 35435
<211> 72
<212> PRT
<213> A.fumigatus

<400> 35435
Val Glu Ile Pro Leu Pro Pro Pro Tyr Leu Phe His Ser Ile Leu Val
1               5                   10                  15
Cys Pro Val Ser Lys Glu Gln Ser Thr Asp Glu Asn Pro Pro Met Met
            20                  25                  30
Met Pro Cys Gly His Val Ile Ala Glu Glu Ser Leu Lys Arg Leu Cys
        35                  40                  45
Lys Gly Thr Arg Phe Lys Cys Pro Tyr Cys Pro Asn Glu Ser His Pro
    50                  55                  60
Arg Glu Ala Arg Lys Val Phe Leu
```

65 70

<210> 35436
<211> 253
<212> PRT
<213> A.fumigatus

<400> 35436
Ile Arg Ser Cys Leu Arg Val Ile Ser Thr Tyr Leu Val Leu Ser Lys
1 5 10 15
Leu Thr Leu Trp Gln Leu Phe Lys Asp Lys Pro Leu Pro Ser Thr Glu
20 25 30
His Asp Ala Leu Ser Ser Arg Glu His Leu Ile Asn Arg Ala Ile Ala
35 40 45
Met His Leu Leu Arg Glu Gly Gln Phe Ser Val Ala Ala Thr Phe Leu
50 55 60
Ser Glu Ile Ala Glu Lys Lys Ala Ser Thr Arg Glu Asn Asp Met Asp
65 70 75 80
Thr Asp Gly Pro Asp Ala Ala Lys Ser Leu Leu Asp Ile Asp Asp Val
85 90 95
Pro Ser Asp Glu Val Arg Lys Gln Phe Ala Thr Met Tyr His Ile Leu
100 105 110
His Glu Met Lys Glu Asn Asn Asn Leu Leu Pro Ala Ile Gln Trp Ser
115 120 125
Arg Glu Asn Lys Glu Ser Leu Glu Ala Arg Gly Ser Asn Leu Glu Phe
130 135 140
Glu Leu Cys Arg Leu Gln Phe Val Trp Leu Phe His Gly Gly Gln Gly
145 150 155 160
Pro Ala Val Ala Gly Pro Gln Ala Ala Leu Glu Tyr Ala Arg Arg Glu
165 170 175
Phe His Val Phe Leu Pro Arg Tyr Leu Val Glu Ile Gln Gln Leu Met
180 185 190
Gly Ala Met Ala Phe Ser Pro Asn Leu Gln Glu Ser Pro Tyr Arg Asn
195 200 205
Ile Phe Asp Asn Pro Ser Ala Trp Ser Asp Val Ala Gln Ser Phe Thr
210 215 220
Arg Glu Phe Cys Ser Leu Leu Gly Leu Ser Ala Asp Ser Pro Leu Tyr
225 230 235 240
Ile Ala Ala Thr Ala Gly Ala Ile Ala Leu Pro Leu Cys
245 250

<210> 35437
<211> 86
<212> PRT
<213> A.fumigatus

<400> 35437
Gln His Ala Cys Ile Cys Thr Cys Val Cys Lys Tyr Asp Asp Gln Gly
1 5 10 15
Gly Asp Thr Asp Asp Val Gly Thr Ala Asp Lys Gln Ser Thr Asn Ser
20 25 30
Arg Asn Gln Thr Ile Leu Glu Thr Gly Phe Ser Tyr Ile Phe Ser Ala
35 40 45
Met Leu Ser Asn Ser Asp Ser Tyr Asn Ser Lys Asp Thr Arg Gln Pro
50 55 60
Cys Trp Ile Leu Ser Leu Leu His Leu Ser Gln Met Ser Gln Phe Glu

65 70 75 80
Gly Arg Thr Val Gly Ala
85

<210> 35438
<211> 96
<212> PRT
<213> A.fumigatus

<400> 35438
Gln Arg Gln Leu Arg Thr Ile Leu Arg Ala Pro Val Leu Trp Tyr Thr
1 5 10 15
Pro Val Arg Met Leu Val Arg Trp Ala Leu Gln Gly Tyr Asp Ser Ser
20 25 30
Glu Val Val Arg Pro Leu Lys His Arg Phe Pro Val Gln Thr Ser Phe
35 40 45
Lys Ala Ser Lys Thr Ser Asn Ile Thr Ile Leu Leu Arg Ser Met Val
50 55 60
Val Ser Ile Ala Asn Met Ala Ile Pro Arg Pro Ser Thr Pro Pro Glu
65 70 75 80
Ala Pro Leu Glu Val Thr Glu Ile Ser Lys Arg Ser Gln Ser Ser Arg
85 90 95

<210> 35439
<211> 103
<212> PRT
<213> A.fumigatus

<400> 35439
Ser Pro Gly Phe His Thr Arg Gly Thr Arg Glu Ser Arg Gln Gly Pro
1 5 10 15
Leu His Phe Arg Glu Val Pro Asn Ser Leu Thr Gly Ser Trp Met Val
20 25 30
Arg Lys Arg Thr Leu Glu Tyr Ala Lys Asp Glu Lys Glu Leu Phe Ala
35 40 45
Ala Gln Gly Asp Lys Ala Leu Ala Ala Gly Asn Gly Glu Thr Leu Thr
50 55 60
Tyr Asp Glu Leu Lys Val Leu Ile Asp Phe Ala Ser Arg Lys Phe Ser
65 70 75 80
Glu Asp Leu Ala Glu Pro Lys Ile Gly Lys Ile Ser Trp Leu Arg Arg
85 90 95
Lys Pro Ala Pro Met Arg Cys
100

<210> 35440
<211> 74
<212> PRT
<213> A.fumigatus

<400> 35440
Ser Asn Gly Ser Tyr Ile Cys Pro Ala Ile Val Thr Lys Val Ser His
1 5 10 15
Arg Asn His Gly Gln Val Arg Leu Lys Ala Ala Ala Glu Phe Ala Glu
20 25 30
Ser Gly Asp Ile His Asp Thr Val Arg Asp Leu Trp Glu Arg Pro Glu
35 40 45

```
Asp Ala Lys Lys Glu Leu Ile Val Lys Val Asp Thr Leu Pro Ser Ser
    50                  55                  60
Val Gly Leu Gln Leu Ile Ile Leu Gly Asn
65                  70
```

<210> 35441
<211> 237
<212> PRT
<213> A.fumigatus

<400> 35441

```
Gln Trp Leu Ala Ser His Leu Ala Lys Leu Arg Arg Ile Thr Ala Ser
1               5                   10                  15
Glu Ser Lys Gln Pro Gln Pro Glu Ala Arg Ala Thr Pro Arg Arg Trp
            20                  25                  30
Thr Leu Ile Gly Ala Met Lys Ser Arg Arg Asp Ser Ile Ser Gln Pro
        35                  40                  45
Val Tyr Leu Pro Leu Asn His Glu Met Ala Asn Ala Phe Asp Thr Thr
    50                  55                  60
Leu Gln Ser Leu Arg Asn Leu Ala Ser Thr Ala Leu Phe Ala Leu His
65                  70                  75                  80
Ile Asp Ile Arg Cys Gly Val Ile His Met Leu Thr Arg Thr Met Thr
                85                  90                  95
Gly Pro Asn Pro Pro Ser Asn Arg Asp Ser Glu Pro Thr Thr Pro Ser
            100                 105                 110
Pro Asn Ser Asn Leu Asn Trp Trp His Ile Leu Val Asn Gln Pro Thr
        115                 120                 125
Ala Ala Ser Pro Thr Ile Leu Glu Leu Asn Asn Asp Leu Ile Ala Phe
    130                 135                 140
Asp Thr Asn Ile Ser Ser Tyr Leu Gly Pro Ala Glu His Trp Phe Ile
145                 150                 155                 160
Thr Ser Gly Leu Ala Arg Phe Ile Asp Gln Ala Phe Val Ser Ser Thr
                165                 170                 175
Arg His Ile Gly Ala Met Asn Glu Asn Gly Ala Leu Arg Leu Gln Leu
            180                 185                 190
Asp Val Leu Val Leu Gln Gln Asn Leu Lys Asn Ile Ile Ile Asp Pro
        195                 200                 205
Thr Ala Asp Lys Ala Gln Asp Ser Thr Leu Glu Glu Pro Gly Asn Pro
    210                 215                 220
Asp Lys Val Leu Cys Thr Ser Ala Lys Cys Gln Ile Pro
225                 230                 235
```

<210> 35442
<211> 67
<212> PRT
<213> A.fumigatus

<400> 35442

```
Ala Phe Asn Tyr Asn Lys Val Ser Leu Ala Ser Arg Ile Leu Val Pro
1               5                   10                  15
Glu Ala Met Ser Ile Asp Leu Cys Cys Arg Cys Gly Ser Val Asp Ile
            20                  25                  30
Cys Met Val Val Gln Ala Leu Lys Phe Phe Gln Ala Ser Ala Arg Phe
        35                  40                  45
Phe Arg Gln Ala Tyr Asp Tyr Ser Leu Pro Thr Ile Val Pro Glu Arg
    50                  55                  60
```

Gln Pro Cys
65

<210> 35443
<211> 101
<212> PRT
<213> A.fumigatus

<400> 35443
Thr Asn Asn Met Ser Val Arg Val Val Ala Arg Val Arg Pro Leu Leu
1 5 10 15
Lys Ala Glu Arg Glu Gln Asp Ile Ile Leu Arg Thr Gly Pro Ser Ser
20 25 30
Gln Thr Leu Pro Pro Lys Gly Asp Gln Lys Ser Thr Arg Gly Asn Ser
35 40 45
Ala Val Ala Lys Leu Arg Asp Arg Asn Thr Ile Val Arg Ile Pro Asn
50 55 60
Pro Lys Asn Glu Asn Glu Glu Tyr Ser Phe Gln Phe Asn Ala Val Tyr
65 70 75 80
Asp Ala Asp Ala Ser Gln Gln Glu Leu Tyr Asp Ala Glu Gly Ser Leu
85 90 95
Arg Ala Ser Leu Ile
100

<210> 35444
<211> 158
<212> PRT
<213> A.fumigatus

<400> 35444
Pro Pro Arg Tyr Ala Asp Ile Ile Pro Ser Val Ala Pro Thr Val Lys
1 5 10 15
His Leu Phe Asn Gly Phe Asp Val Thr Ile Phe Ala Tyr Gly Val Thr
20 25 30
Gly Thr Gly Lys Thr His Thr Met Arg Gly Gly Lys Ser Leu Ala Glu
35 40 45
Arg Gly Val Ile Pro Arg Leu Leu Ser Ser Ile Tyr Arg Arg Ser Arg
50 55 60
Lys Ile Glu Lys Asp Ser Glu Gly Glu Thr Thr Val Lys Val Ala Leu
65 70 75 80
Ser Tyr Tyr Glu Ile Tyr Asn Asp Lys Val Phe Asp Leu Phe Glu Pro
85 90 95
Pro Glu Lys Arg Thr Leu Ala Gly Leu Pro Leu Arg Asp Asn Gly Gly
100 105 110
Lys Thr Val Val Val Gly Leu Thr Glu Lys Pro Cys Thr Ser Leu Lys
115 120 125
Glu Phe Glu Ser Leu Tyr Asp His Ala Asn Ile Asn Arg Ser Thr Ser
130 135 140
Ala Thr Lys Val Asn Arg His Gly Phe Gly Asn Gln Asp Thr
145 150 155

<210> 35445
<211> 100
<212> PRT
<213> A.fumigatus

<400> 35445
Leu Asn Ala His Ser Ser Arg Ser His Ala Ile Leu Cys Val Lys Val
1 5 10 15
Thr Ile Ser Ser Gly Asp Lys Val Arg Val Ser Thr Ala Ser Ala Ile
20 25 30
Asp Leu Ala Gly Ser Glu Asp Asn Arg Arg Thr Asp Asn Asp Lys Glu
35 40 45
Arg Met Val Glu Ser Ala Ser Ile Asn Lys Ser Leu Phe Val Leu Ala
50 55 60
Gln Cys Val Glu Ala Ile Ser Lys Lys His Gln Arg Ile Pro Tyr Arg
65 70 75 80
Glu Ser Lys Met Thr Arg Ile Leu Ser Leu Gly Gln Asn Asn Gly Leu
85 90 95
Thr Val Met Ile
100

<210> 35446
<211> 122
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11),(12),(14),(15),(16),(17),(18),(19),(20),(21)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35446
Gly Val Arg Ala Ser Lys Ile Pro Gly Arg Xaa Xaa Phe Xaa Xaa Xaa
1 5 10 15
Xaa Xaa Xaa Xaa Xaa Ala Pro Arg Arg Leu Arg Leu Ser Leu Thr Lys
20 25 30
Pro Leu Arg Arg Arg Gly Arg Leu Val Gly Ile Ile Gly Ala Thr Glu
35 40 45
Tyr Val Val Asn Thr Pro Lys Leu Leu Tyr Arg Ser Thr Pro Gln Asp
50 55 60
Cys Asp Tyr Ser His Met Thr Ser Met Ser Val Arg Ser Phe Asn Leu
65 70 75 80
Asn Glu Gly Leu Arg Ile Pro Val Ser Ile Asn Leu Ile Gln Leu Leu
85 90 95
Tyr Val His Phe Ser Arg Pro Trp Asn Cys Asn Pro Phe Phe His Ile
100 105 110
Pro Pro Ala Arg Val Gln Asp Ile Gln Asn
115 120

<210> 35447
<211> 68
<212> PRT
<213> A.fumigatus

<400> 35447
Arg Lys Thr Ser Val Phe Asp Arg Ile Ile Tyr Thr Pro Ile Ile His
1 5 10 15
Leu Leu Trp Glu Val Phe Asn Tyr Thr Leu Gln Lys Val Glu Ser Lys
20 25 30
Ala Phe Ile Gly Phe Gly Gly Asn Gln Phe Leu Glu Asp Thr Lys Asp
35 40 45

```
Thr Asp Gln Leu Leu Val Phe Gln Asp Glu Leu Arg Thr Thr Arg Asp
    50                  55                  60
Asn Arg Arg Lys
65
```

<210> 35448
<211> 76
<212> PRT
<213> A.fumigatus

<400> 35448

```
Leu Tyr Gln Asn Leu Ser Ser Arg Leu Leu Cys Tyr Gly Gln Ser Met
1               5                   10                  15
Asp Glu Asp Leu Arg Trp Pro Cys Met Asp Glu His Asp Met Thr Ala
            20                  25                  30
Lys Gln Thr Ala Val Phe Asp Leu Lys Ala Ser Trp Cys Arg Gly Ala
        35                  40                  45
Thr Thr Trp Leu Ala Asn Ile Arg Thr Ile Gly Ser Val Asp Ser Val
    50                  55                  60
His Asp Asn His Glu His Leu Ser Glu Val Ile Arg
65                  70                  75
```

<210> 35449
<211> 216
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (88),(90)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35449

```
Ser Tyr Gln Ile Leu Met Phe Phe Ser Ile Thr Ala Val Lys Lys Tyr
1               5                   10                  15
Phe Asp Ser Ile Met Gln Val Ile Leu Thr Arg Leu Gln Asn Ser Lys
            20                  25                  30
Thr Glu His Leu Ile Leu Arg Phe Val Arg Phe Tyr His Phe Ile Ser
        35                  40                  45
Ala His Asp Asp Lys Gly Tyr Ser Ala Asp Tyr Phe Ile Gln Val Thr
    50                  55                  60
Asp Lys Val Gln Ala Glu Tyr Val Glu Met Asn Phe Cys Ile Ala Asp
65                  70                  75                  80
Leu Lys His Ile Leu Thr Asp Xaa Ser Xaa Phe Thr Pro Ile Tyr Leu
                85                  90                  95
Asn Ile Ile Leu Pro Glu Thr Gln Lys Leu Ala Arg Pro Leu Asp Arg
            100                 105                 110
Lys Thr Ala Val Leu Ser Phe Thr Lys Thr Leu Ala Asn Ser Glu Ala
        115                 120                 125
Phe Ala Asn Arg Tyr Lys Lys Gly Trp Ala Phe Thr Cys Glu Ala Leu
    130                 135                 140
Leu Lys Leu Leu Glu Leu Pro Pro Leu Pro Ala Ser Lys Asp Asp Ile
145                 150                 155                 160
Ile Ala Glu His Asp Val Glu Asp Met Ala Phe Gly Val Gly Phe Thr
                165                 170                 175
Ala Leu Asn Thr Val Arg Pro Gln Pro Arg Asp Pro Trp Pro Asp Thr
```

```
            180                 185                 190
Gly Ala Asp Leu Lys Ala Trp Val Gly Cys Phe Val Leu Pro Gly Gly
        195                 200                 205
Asp Trp Lys Glu Tyr His Pro Pro
    210                 215
```

<210> 35450
<211> 141
<212> PRT
<213> A.fumigatus

<400> 35450

```
Leu Leu Arg Gly Cys Met Leu Thr Leu Arg Ile Ser Gly Ser Glu Leu
1               5                   10                  15
Val Ser Asp His Ala Ser Arg Asn Leu His Leu Leu Leu Ala Lys Arg
            20                  25                  30
Pro Glu Phe Asp Gln Gly Asp Tyr Glu Ala Ala Ile Arg Gly Ala Leu
        35                  40                  45
Ile Asp Glu Asp Ala Val Leu Leu Glu Thr Phe Asn Asn Leu Thr Thr
    50                  55                  60
Glu Pro Ala Val Ser Gly Ser Thr Val Ala Leu Cys Phe Val Asn Leu
65                  70                  75                  80
Thr Lys Gly Asp Leu Val Val Ala Asn Leu Gly Asp Ser His Val Ile
                85                  90                  95
Leu Ala Glu Arg Asp Asn Arg Thr Asp His Pro Ser His Ile Val Ser
            100                 105                 110
Glu Glu Gly Leu Leu Ile Pro Lys Gly Phe Trp Leu Ile Asp Ala Leu
        115                 120                 125
Ala Thr Ala Phe Lys Ile Pro Gln Thr Gly Tyr Thr Arg
    130                 135                 140
```

<210> 35451
<211> 139
<212> PRT
<213> A.fumigatus

<400> 35451

```
His Leu Pro Ser Arg Leu Leu Leu Gly Ser Leu Asn Met Ser Arg Ala
1               5                   10                  15
Leu Gly Asp Leu Gln Tyr Lys Asn Pro Ile Asn Asn Ala Gly Asp Glu
            20                  25                  30
Tyr Ser Ser Ser Lys Asn Arg Arg Ala Ser Ala Ser Thr Ser Ala Pro
        35                  40                  45
Glu Thr Arg Gly Asn Phe Leu Ser Val Glu Pro His Met Thr Gly Met
    50                  55                  60
Thr Leu Ser Pro Asp Arg Arg Tyr Leu Val Val Val Thr Ser Asp Gly
65                  70                  75                  80
Val Ser Asp Asn Ile Asp Asp Ala Thr Leu Ile His His Val Met Arg
                85                  90                  95
Leu Ser Met Arg Gly Met Arg Ala Gly Asp Ile Ala Gln Glu Ile Ala
            100                 105                 110
Thr Thr Ala Ala Ala Gln Lys Ala Lys Glu Gly Ser Asp Asn Ala Ser
        115                 120                 125
Cys Ile Val Ala Leu Leu Asp Gly Gln Asn Thr
    130                 135
```

<210> 35452
<211> 168
<212> PRT
<213> A.fumigatus

<400> 35452
Val Trp Glu Ser Leu Phe Ala His Phe Ser Val Trp Ser Ser Asp Thr
1 5 10 15
Pro Arg Phe Ala Ala Pro Ala Asn Pro Glu Lys Leu Glu Gln Ala Leu
20 25 30
Tyr Pro Pro Phe Ala Asn Ile Leu Gln Gly Asp Val Gln Gly Ile Val
35 40 45
Gln Ser Glu Arg Asn Arg Gly Leu Gly Thr Ser Leu Ser Ala Asn Val
50 55 60
Cys Ala Glu Phe Met Pro Tyr Val Phe Gln Leu Phe Ala Ala Leu Leu
65 70 75 80
Glu Ala Asn Pro Ser Gly Ser Leu Pro Asn Tyr Tyr Gln Asn Leu Ile
85 90 95
Ala Pro Met Leu Met Pro Val Met Trp Glu Ser Lys Gly Asn Ile Pro
100 105 110
Ala Leu Val Arg Leu Leu Ser Ser Ile Ile Pro Arg Gly Ser Gln Phe
115 120 125
Ile Leu Glu Asn Gln Gln Leu Val Arg Ile Leu Gly Ile Phe Gln Lys
130 135 140
Leu Ile Ser Thr Lys Ala Asn Glu Cys Phe Gly Phe Tyr Leu Leu Glu
145 150 155 160
Ser Val Val Glu Asn Phe Pro Gln
165

<210> 35453
<211> 66
<212> PRT
<213> A.fumigatus

<400> 35453
Cys Arg Ser Arg Pro Ser Glu Lys Pro Leu Leu Leu Ser Lys Ser Ile
1 5 10 15
Ser Asn Thr Ala Val Ile Leu Arg Leu Ile Arg Leu Gln Val Gln Gly
20 25 30
Gly Arg Pro Phe Gln Glu Asp Arg Cys Thr Phe Val Leu Pro Asp Gln
35 40 45
Phe Pro Ser Gln Thr Asn Asp Lys Leu Thr Tyr Phe Ala Val Tyr Asp
50 55 60
Gly Gln
65

<210> 35454
<211> 435
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(6),(7),(8),(9),(10),(11),(12),(14),(15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35454

```
Ser Thr Gly Gly Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Xaa Xaa Pro
1               5                  10                  15
Ala Trp Asp Phe Arg Gly Pro Asp Pro Leu Cys Ala Glu Leu His Gly
            20                  25                  30
Arg Ile Gln Leu Pro Met Ser Val Asn Leu Cys Arg Ser Phe Gly Asn
        35                  40                  45
Leu Leu Asn Asn Ile Gly Gln Glu Thr Lys Tyr Asp Ile Leu Val Ser
    50                  55                  60
Lys Ala Leu Gln Phe Leu Thr Ser Val Ala Gly Met Pro Glu His Ala
65                  70                  75                  80
Ser Val Phe Gln Ala Glu Glu Thr Leu Gly Gln Ile Val Glu Lys Val
                85                  90                  95
Val Leu Pro Asn Val Ser Leu Arg Glu Ser Asp Glu Glu Leu Phe Glu
            100                 105                 110
Asp Glu Pro Ile Glu Phe Ile Arg Arg Asp Leu Glu Gly Ser Asp Ser
        115                 120                 125
Glu Thr Arg Arg Arg Ala Ala Thr Asp Phe Leu Arg Arg Leu Ala Glu
    130                 135                 140
Gln Phe Glu Gly Pro Val Thr Lys Val Val Leu Arg Tyr Ser Asp His
145                 150                 155                 160
Tyr Leu Ala Glu Tyr Ser Lys Ser Pro Ala Thr Asn Trp Lys Ala Lys
                165                 170                 175
Asp Thr Ala Val Tyr Leu Phe Ser Ala Ile Ala Ala Lys Gly Val Ala
            180                 185                 190
Thr Ala Ser His Gly Val Thr Ala Thr Asn Pro Leu Val Ser Ile Thr
        195                 200                 205
Asp Phe Phe Gln Lys Asn Leu Ala Ala Asp Leu Val Val Asp Glu Ser
    210                 215                 220
Ala His Pro Ile Leu Lys Val Asp Ala Ile Lys Tyr Leu Tyr Leu Phe
225                 230                 235                 240
Arg Ser Ile Ile Thr Lys Asp Gln Trp Gln Glu Val Leu Pro Leu Leu
                245                 250                 255
Val Lys His Leu Gly Ser Pro Asn Phe Val Val Tyr Thr Tyr Ala Ala
            260                 265                 270
Ile Ala Val Glu Arg Val Leu Tyr Leu Ala Asp Ser Gln Gly Gln Pro
        275                 280                 285
Ile Ile Ala Pro Ala Thr Val Thr Pro Leu Ala Lys Asp Leu Leu Gln
    290                 295                 300
His Ile Phe Ser Leu Ile Gln Lys Asp Pro Ala Pro Glu Lys Val Gln
305                 310                 315                 320
Glu Asn Glu Phe Leu Met Arg Cys Ala Met Arg Val Leu Ile Val Ile
                325                 330                 335
Lys Glu Asp Val Val Pro Tyr Thr Asp Ile Val Leu Gln His Leu Ile
            340                 345                 350
Asn Ile Thr Asp Val Ile Ser Lys Asn Pro Ser Asn Pro Arg Phe Tyr
        355                 360                 365
Tyr Phe His Phe Glu Ala Met Gly Ala Phe Ile Arg Tyr Gly Asn His
    370                 375                 380
Phe Ser Leu Ile Ser Arg Phe Gly Val Leu Thr His Pro Asp Ser Leu
385                 390                 395                 400
His Arg Pro Ile Leu Arg Ser Ser Asn Lys Arg Ser Thr His Leu Ser
                405                 410                 415
Arg Ile Ser Phe Lys Ala Thr Phe Lys Val Leu Cys Asn Gln Lys Gly
            420                 425                 430
Thr Gly Gly
```

435

<210> 35455
<211> 97
<212> PRT
<213> A.fumigatus

<400> 35455
Gly Asp Leu Leu Asp Tyr Phe Leu Tyr Tyr Ile His Trp Pro Lys Val
1 5 10 15
Cys Leu Lys Gly Ser Ile Arg Lys Leu Thr Ser Ser Phe Ile Phe Asn
20 25 30
Asn Ile Pro Gln Ile Val Trp Tyr Ala Pro Phe Thr Ala Val Val Ile
35 40 45
Thr Gln Gln Phe Trp Val Gly Ala Asn Gly Leu Phe Asn Gly Leu Tyr
50 55 60
Leu Ser Arg Leu Leu Tyr Arg Ile His Met Ile Phe Lys Asp Tyr Pro
65 70 75 80
Ser Thr Glu Gln Gln Pro Ala Leu Cys Leu Tyr Val Ile His Leu Thr
85 90 95
Tyr

<210> 35456
<211> 144
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (141)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35456
Arg Gly Trp Arg Leu Leu Lys Asn Glu Tyr Leu Gln Tyr Leu Cys Gln
1 5 10 15
Ile Gln Ala Asn Glu Pro His Met Asn Arg Gln Tyr Ser Leu Thr Ile
20 25 30
Ser Arg Val Glu Asp Ala Arg Leu Val Phe Cys Ile Glu Thr Ser Thr
35 40 45
Tyr Ile Arg Lys Ser Leu Trp Tyr Val Lys His Ala Gly Asn Ser Ile
50 55 60
Ile Ile His Tyr Ser Lys Met Leu His His Cys Trp Pro Thr Ile Asp
65 70 75 80
Pro Leu Leu Phe Ser His Gln Asp Arg Arg Ser Thr Glu Thr Gln Trp
85 90 95
Ser Ala Lys Ile Ala Met Lys Ile Gln Ala Glu Lys Ala Ile Val Phe
100 105 110
Lys Ser Val His Ile Cys Thr His Pro Tyr Pro Tyr Lys Arg Asp Arg
115 120 125
Glu Tyr Phe Ser Lys Lys Ile Asp Trp Arg Arg Glu Xaa Thr Tyr Lys
130 135 140

<210> 35457
<211> 68
<212> PRT

<213> A.fumigatus

<400> 35457
Ser Leu His Phe Leu Ile Arg Leu Gln Asn Tyr Lys Arg Tyr Ile Ala
1 5 10 15
Ala Val Asp Ser Ala Pro Leu Leu Lys Phe Asp Gly Ser Ile Ala Leu
20 25 30
Gly Leu Pro Met Leu Ser Phe Phe Ser Ser Cys Leu Pro Thr Lys Arg
35 40 45
Lys Glu Trp Arg Lys Trp Asn Glu Ile Glu Gly Leu Arg Pro Phe Phe
50 55 60
Phe Phe Ala Ile
65

<210> 35458
<211> 151
<212> PRT
<213> A.fumigatus

<400> 35458
Thr Asn Ala Val Ile Glu Glu Ala Ser Arg Leu Asp Gln Phe Pro Ser
1 5 10 15
Trp Asp Ala Pro Asp Asn Leu Leu Leu Met Gln Thr Phe Glu Trp His
20 25 30
Met Pro Ala Asp Gln Ala His Trp His Arg Leu Arg His Ile Leu Pro
35 40 45
Ser Leu Lys Glu Ile Gly Val Asp Asn Ile Trp Ile Pro Pro Gly Cys
50 55 60
Lys Gly Met Asp Pro Cys Gly Asn Gly Tyr Asp Val Tyr Asp Leu Tyr
65 70 75 80
Asp Phe Gly Glu Phe Asp Gln Lys Gly Ser Arg Ala Thr Lys Trp Gly
85 90 95
Thr Lys Glu Glu Leu Leu Glu Leu Thr Ala Ala Ala Arg Asp Leu Gly
100 105 110
Ile Gly Val His Trp Asp Ala Val Leu Asn His Lys Ala Gly Ala Asp
115 120 125
Phe Thr Glu Arg Phe Leu Ala Val Gln Val Asp Pro Glu Ser Met Tyr
130 135 140
Pro Phe Ser Arg Glu Val Gly
145 150

<210> 35459
<211> 210
<212> PRT
<213> A.fumigatus

<400> 35459
Tyr Thr Ala Leu Gly Arg Asn Val Glu Ile Ser Arg Pro Lys Glu Ile
1 5 10 15
Glu Gly Trp Val Gly Phe Asp Phe Lys Gly Arg Gly Asp Cys Tyr Ser
20 25 30
Ser Met Lys Tyr Arg Trp Tyr His Phe Ser Gly Val Asp Trp Asp Glu
35 40 45
Ser Gln Lys Lys Asn Ala Val Tyr Lys Ile Val Gly Pro Asn Lys Asp
50 55 60
Trp Ala Asn Asp Val Ser His Glu Phe Gly Asn Tyr Asp Tyr Leu Met

```
65                  70                  75                  80
Phe Ala Asn Leu Asp Tyr Ser Asn Ala Glu Val Arg Arg Asp Leu Leu
                85                  90                  95
Asn Trp Gly Glu Trp Ile Gly Thr Gln Leu Pro Leu Ser Gly Met Arg
            100                 105                 110
Leu Asp Ala Ala Lys His Met Ser Ala Ala Phe Gln Arg Asp Phe Val
        115                 120                 125
Asp His Val Arg Lys Thr Gln Gly Pro Asp Phe Phe Val Val Ser Glu
    130                 135                 140
Tyr Trp Arg Cys Asp Leu Lys Glu Leu Leu His Phe Leu Glu Ile Met
145                 150                 155                 160
Glu His Arg Val His Leu Tyr Asp Ala Val Leu Val Asp Arg Phe Ser
                165                 170                 175
Lys Ile Ser Leu Thr Pro Glu Ala Asp Leu Arg Gly Ile Leu Asp Gly
            180                 185                 190
Thr Leu Val Gln Ser Lys Pro Gln His Ala Ile Val Ser Phe Leu Leu
        195                 200                 205
Val Phe
    210
```

<210> 35460
<211> 164
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (164)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35460

```
Ser Tyr Tyr Lys Ile Lys Asp Asn Pro Val Ser Ser Gly Val Ile Phe
1               5                   10                  15
Thr Gly Ser Gly Glu Ala Ser Ile Gln Gln Ser Val Arg Ala Ala Ala
            20                  25                  30
Gly Phe Arg Phe Ser Gln Lys Pro Gly Ser Ser Thr His Thr Glu Ser
        35                  40                  45
Ser Gly Ile Ile Ser Thr Arg Glu Thr Ala Ser Val Arg Ala Ala Ser
    50                  55                  60
Leu Leu Ala Leu Val Phe Thr Ile Leu Thr Arg Gln Ile Gly Phe Ile
65                  70                  75                  80
Arg Tyr Gly Asn Arg Arg His Pro Ser Gly Leu Ala Cys Ile Met Ser
                85                  90                  95
Asn Ala Gly Pro Ser Gln Lys Arg Met Phe Val Gly Gln Gln His Ala
            100                 105                 110
Gly Glu Gln Trp Thr Asp Ile Leu Glu Trp His Ser Gly Thr Val Thr
        115                 120                 125
Ile Asp Arg Arg Gly Tyr Gly Ile Phe Pro Val Ser Lys Val Ser Val
    130                 135                 140
Ser Val Trp Val Asn Ala Gln Ala Glu Arg Arg Glu Ser Leu Lys Val
145                 150                 155                 160
Thr Cys Thr Xaa
```

<210> 35461
<211> 143

<212> PRT
<213> A.fumigatus

<400> 35461
Val Pro Val Ala Ser Phe Phe Lys Pro Leu Ala Tyr Ala Leu Ile Leu
1 5 10 15
Leu Gln Asn Lys Gly Gln Pro Cys Ile Phe Trp Gly Asp Leu Tyr Gly
20 25 30
Ile Arg Gly Gly Lys His Pro Thr Lys Arg Ser Cys Gly Gly Arg Leu
35 40 45
Pro Ile Leu Thr Lys Ala Arg Lys Leu Tyr Ala Tyr Gly Glu Gln Arg
50 55 60
Asp Tyr Phe Asp Glu Arg Asn Cys Ile Gly Ala Arg Cys Leu Thr Phe
65 70 75 80
Gly Pro Arg Phe His His Thr Asp Lys Thr Asn Arg Ile Tyr Ser Leu
85 90 95
Trp Gln Pro Ala Ala Ser Leu Gly Phe Ser Leu Tyr His Glu Gln Arg
100 105 110
Arg Pro Ile Ala Glu Ala His Val Arg Trp Ser Ala Ala Cys Arg Arg
115 120 125
Ala Met Asp Gly Tyr Ser Arg Val Ala Leu Arg Asn Gly His Asp
130 135 140

<210> 35462
<211> 84
<212> PRT
<213> A.fumigatus

<400> 35462
Leu Arg Gly Ala Met Ala Arg Leu Ala Asp Gln Ser Val Asp Leu Asn
1 5 10 15
Leu Lys Leu Met Lys Trp Arg Ile Ser Pro Asp Leu Asp Leu Glu Lys
20 25 30
Ile Lys Arg Thr Arg Cys Leu Leu Leu Gly Ala Gly Thr Leu Gly Ser
35 40 45
Tyr Val Ala Arg Asn Phe Met Val Arg Leu Pro Ile Ile Leu Leu Asn
50 55 60
Ile His Ser Pro Cys Cys Trp Ser Ile Gly Leu Gly Ser Tyr Glu Asp
65 70 75 80
Asn Ile Cys Gly

<210> 35463
<211> 173
<212> PRT
<213> A.fumigatus

<400> 35463
Ala Trp Gly Val Thr Lys Ile Thr Phe Val Asp Asn Gly Asn Val Ser
1 5 10 15
Phe Ser Asn Pro Val Arg Gln Ser Leu Phe Asn Phe Lys Asp Cys Leu
20 25 30
Glu Gly Gly Ala Arg Lys Ala Thr Arg Ala Ala Gln Ala Leu Ser Glu
35 40 45
Ile Tyr Pro Gly Val Glu Thr Thr Gly His Val Leu Ser Val Pro Met
50 55 60

```
Ala Gly His Leu Ile Thr Asp Thr Glu Lys Thr Arg Lys Glu Phe Gly
65                  70                  75                  80
Ile Leu Lys Ala Ile Val Asp Asp His Asp Val Ile Phe Leu Leu Met
                85                  90                  95
Asp Thr Arg Glu Ser Arg Trp Leu Pro Thr Val Ile Gly Lys Ala Ala
            100                 105                 110
Gly Lys Ile Val Ile Asn Ala Ala Leu Gly Phe Asp Ser Phe Val Val
        115                 120                 125
Met Arg His Gly Val Arg Asn Asp Ala Asp Pro Thr Ser Glu Leu Gly
    130                 135                 140
Cys Tyr Phe Cys Asn Asp Val Val Ala Pro Met Asn Val Ser His His
145                 150                 155                 160
Ser Gln Val Ser Cys Leu Tyr Ala Thr Asp Phe Phe Asn
                165                 170
```

<210> 35464
<211> 179
<212> PRT
<213> A.fumigatus

```
<400> 35464
Ala Thr Ile Pro Lys Cys Arg Val Phe Met Arg Leu Thr Ser Leu Ile
1               5                   10                  15
Lys Ser Val Arg Asp Gln Thr Leu Asp Gln Gln Cys Thr Val Thr Arg
            20                  25                  30
Pro Gly Val Ala Thr Ile Ala Ser Ala Leu Ala Val Glu Leu Leu Ile
        35                  40                  45
Ser Leu Leu Gln His Pro Gln Gly Ala Ala Ala Pro Ala Ala Leu Pro
    50                  55                  60
Gly Asp Asp Arg Gly Ser His Pro Leu Gly Leu Val Pro His Gln Ile
65                  70                  75                  80
Arg Gly Phe Leu Ser Ser Phe Glu Asn Ile Ser Val Ile Gly Arg Ser
                85                  90                  95
Tyr Asp Cys Cys Ser Ala Cys Ser Ile Asn Val Val Asn Ala Tyr Asn
            100                 105                 110
Glu Gln Gly Trp Glu Phe Val Met Lys Ala Leu Asn Glu Pro Gly Tyr
        115                 120                 125
Val Glu Glu Leu Ser Gly Leu Arg Glu Val Ser Arg Asn Lys Pro Leu
    130                 135                 140
Leu Thr Tyr Pro Val Phe Leu Val Phe His Phe Pro Cys Pro Arg Gln
145                 150                 155                 160
Ile Thr Gln Pro Gln Pro Glu Ile Ser Gly Thr Gly His Lys Gln Gly
                165                 170                 175
Asn Phe Ser
```

<210> 35465
<211> 89
<212> PRT
<213> A.fumigatus

```
<400> 35465
Asp Leu Cys Arg Ala Ala Leu Gln Phe Ser Phe Asp Thr Leu Arg Thr
1               5                   10                  15
Gly Gly His Phe Ile Cys Lys Phe Tyr Gln Gly Val Glu Asp Lys Glu
            20                  25                  30
```

```
Leu Glu Arg Gln Phe Lys Ala Leu Phe His Arg Val His Arg Ile Lys
        35                  40                  45
Pro Glu Ser Ser Arg Asn Val Arg Ala Gly His Phe Glu Tyr Cys Tyr
    50                  55                  60
Lys Ser Ser Arg Thr Asp Leu Arg Arg Asn Leu Gly Lys Arg Thr Leu
65                  70                  75                  80
Leu Ala Ser Thr Glu Gly Ile Thr Arg
                85
```

<210> 35466
<211> 91
<212> PRT
<213> A.fumigatus

<400> 35466

```
Tyr Tyr Ile Asp Arg Ile Pro Thr Asn Gln Asn Leu Ser Gln Thr Pro
1               5                  10                  15
Ser Ile Gly Val Tyr Leu Thr Lys Lys Gly Pro Ser Thr Met Phe Phe
            20                  25                  30
Ser Ser Cys Pro Thr Lys Thr Ile Ile Leu Glu Ile Asn Asn Thr Thr
        35                  40                  45
Ser Ser Leu Ile Phe Lys Arg His Ser Ser Ser Lys Arg Trp Gln Ala
    50                  55                  60
Arg Gln Ile Lys Asp His Phe Thr Arg Ala Ala Ala Val Gln Gly Leu
65                  70                  75                  80
Lys Ser Arg Ala Ala Phe Lys Leu Leu Gln Val
                85                  90
```

<210> 35467
<211> 154
<212> PRT
<213> A.fumigatus

<400> 35467

```
Leu Cys Gln Val Ala Ala Thr Arg Thr Gln Pro Asn Gly Arg Val Leu
1               5                  10                  15
Gly Val Asp Ile Ile Pro Ala Gln Pro Pro Lys Gly Val Ser Thr Ile
            20                  25                  30
Gln Gly Asn Phe Leu Ala Pro Asp Ile Gln Ala Tyr Val Arg Glu Phe
        35                  40                  45
Leu Arg Asp Pro Cys Arg Gly Arg Leu Arg Ser Pro Gly Ser Cys Asp
    50                  55                  60
Gly Asp Glu His Asn Ile Thr Thr Ser Ser Ser Thr Ala Gly Leu Glu
65                  70                  75                  80
Gln Asn Arg Glu Cys Ile Gly Gln Asn Asp Ala Val Ser Glu Arg Thr
                85                  90                  95
Val Asp Val Val Leu Ser Asp Met Cys Ala Pro Trp Phe Gln Thr Thr
            100                 105                 110
Gly Phe Trp Lys Arg Ser Leu Ser Asp Pro Tyr Asn Arg Met Met Asn
        115                 120                 125
Thr Ser Gly Val Asn Phe Arg Asp His Ala Gly Ser Met Val Leu Gln
    130                 135                 140
Gln Met Ser His Leu Ser Tyr Ile Phe Asp
145                 150
```

<210> 35468

<211> 163
<212> PRT
<213> A.fumigatus

<400> 35468
Ile His Ser Gly Leu Pro Pro His Gly Leu Arg Pro Arg Gly Lys Ser
1 5 10 15
Arg Ala Gly Pro Pro Ser Arg Gln Thr Arg Gly Ser Leu Lys Pro Pro
20 25 30
Leu Pro Arg Arg Gly Cys Leu Pro His Leu Pro Leu Pro Leu Arg Gly
35 40 45
His Tyr Gln Ala Gln Leu His Gln Ala Gly Gly Leu Arg Ala Pro Glu
50 55 60
Ala Gly Val Pro Glu Gly Asn Gln Pro Leu Asp Pro Ala His Pro Arg
65 70 75 80
Gly Asp Arg Ala Ser His Leu Pro His Arg Gln Arg Arg Arg Pro His
85 90 95
Pro His Leu His Pro His Pro Ser Arg Arg Arg Pro Val Gln Pro Arg
100 105 110
Pro His Arg Ala Asp His Asp Gly Pro Arg Arg Val Pro Ala Arg Gln
115 120 125
Gln Pro Ala His Ala Arg Asp Pro Arg Ala Arg Leu Gly Gly Cys Arg
130 135 140
Arg Arg Asp Pro Arg His Gly Gly Leu Ser Arg Gly Pro Cys Gly Pro
145 150 155 160
Gly Leu Ala

<210> 35469
<211> 330
<212> PRT
<213> A.fumigatus

<400> 35469
Arg Ser Cys Gly Ser Arg Asp Gly Ser Leu Leu Tyr Val Phe Pro Leu
1 5 10 15
Glu Thr Arg Gly Pro Leu Ile Val Val Ser Val Gln Asn Pro Ser Ile
20 25 30
Pro Ser Thr Thr Ala Pro Ser Arg Thr Leu Ser Pro Ser Ser Thr Ile
35 40 45
Ser Tyr Arg Tyr Ala Leu Asp Leu His Asp Thr Thr Ala Ser Leu Leu
50 55 60
Thr Arg Gln Lys Asn Ile Asn Asp Ala Ala Ser Asp Glu Tyr Thr Gln
65 70 75 80
Ala Phe Leu Pro Thr Ala Ser Ala Leu Glu Glu Lys Ala Ala Gln Ala
85 90 95
Leu Gln Ala Gly Lys His Glu Glu Ala Ser Asn Leu Leu Cys Arg Ala
100 105 110
Ala Val Val Tyr Arg Ile Ser Arg Phe Pro Tyr Val Asp Ile Thr Lys
115 120 125
Pro Asn Ser Ile Lys Arg Val Ala Phe Glu Arg Gln Lys Gln Ala Tyr
130 135 140
Leu Lys Ala Thr Ser Leu Trp Thr Gln Pro Ile Arg Glu Val Thr Val
145 150 155 160
Pro His Thr Tyr Arg Thr Gly Asn Asp Gly Ala His Ile Pro Ile Tyr
165 170 175

```
Ile Arg Thr Pro Ala Gly Ala Asp Gln Ser Asn Pro Val Pro Ile Val
            180                 185                 190
Leu Ile Met Thr Gly Leu Asp Gly Tyr Arg Pro Asp Asn Ser Gln Arg
        195                 200                 205
Thr His Glu Ile Leu Ala Arg Gly Trp Ala Ala Val Val Ala Glu Ile
    210                 215                 220
Pro Gly Thr Ala Asp Cys Pro Ala Asp Pro Ala Asp Pro Ala Ser Pro
225                 230                 235                 240
Asp Arg Leu Trp Asp Ser Val Leu Ser Tyr Leu Asp Gln Arg Pro Glu
                245                 250                 255
Leu Asn Thr Ala Lys Met Val Val Trp Gly Leu Ser Ala Gly Gly Tyr
            260                 265                 270
Tyr Ala Ile Arg Ala Ala His Thr His Arg Asp Arg Leu Leu Gly Ala
        275                 280                 285
Ile Ala His Gly Pro Gly Cys His Tyr Tyr Leu Asp Pro Glu Trp Leu
    290                 295                 300
Ala Lys Val Asn Asp His Glu Tyr Pro Phe Glu Tyr Ala Ser Leu Ala
305                 310                 315                 320
Arg Val Gln Lys Lys Asn Lys Leu Thr Gly
                325                 330
```

<210> 35470
<211> 207
<212> PRT
<213> A.fumigatus

<400> 35470

```
Leu Ile Ala Ile Pro Thr Thr Arg Ser Arg Asn Ser Val Phe Leu Tyr
1               5                   10                  15
Cys Pro Arg Ser Val Ile Leu Leu Ser Ser Leu Thr Met Arg Thr Ser
            20                  25                  30
Val Gln Pro Thr Ser Val Leu Leu Ala Leu Met Ala Ile Pro Phe Ala
        35                  40                  45
Ser Ala Glu Lys Val Leu Gly Ala Tyr Ile Phe Ala Arg His Gly Asp
    50                  55                  60
Arg Thr Pro Lys Val Leu Gly Asn Thr Gln Leu Thr Asp Leu Gly Tyr
65                  70                  75                  80
Lys Glu Val Phe Leu Thr Gly Ser Tyr Tyr His Asp Arg Tyr Ile Asn
                85                  90                  95
Ser Ser Ser Leu His Tyr Ile Gln Gly Ile Ser Glu Glu Ile Val Asn
            100                 105                 110
Leu Asn Gln Ile Ser Val Ser Ala Pro Ser Asp Asn Val Leu Gln Asn
        115                 120                 125
Ser Ala Thr Gly Phe Leu Gln Gly Val Tyr Pro Pro Val Gly Arg Met
    130                 135                 140
Ala Ser Gln Thr Leu Gly Asn Gly Thr Thr Val Glu Ala Pro Leu Asn
145                 150                 155                 160
Gly Tyr Gln Leu Ile Pro Leu Ala Leu Ile Glu Thr Gly Thr Asn Ser
                165                 170                 175
Glu Ser Asn Thr Trp Leu Gln Asp Ala Thr Gln Cys Gln Asn Ala Lys
            180                 185                 190
Val Ser Ser Asn Asn Tyr Tyr Ser Ser Ala Leu Tyr Lys Asp Leu
        195                 200                 205
```

<210> 35471
<211> 83

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (67)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35471
Ala Ala Asp Glu Leu Arg Glu His Lys Asp Ile Gly Ser Phe Ile Gly
1 5 10 15
Asn Val Pro Gln Glu Leu Cys Gln Ser Ala Ser Phe Asn Ser Thr Asn
20 25 30
Val Lys Cys Pro Asn His Arg Ala Phe Ala Ser Ile Asn Ser His Pro
35 40 45
Phe Arg Ile Thr Pro Thr Ile Pro Pro Val Cys Met Val Ser Asp Pro
50 55 60
Thr Ala Xaa Lys Arg Glu Phe Ile Ile Gly Lys Thr Ser Asn Pro Met
65 70 75 80
Asn Pro Val

<210> 35472
<211> 63
<212> PRT
<213> A.fumigatus

<400> 35472
Cys Gly Ala Met Ser Ser Gln Met Ser Pro Gln Ala Met Ser Pro Val
1 5 10 15
Gly Thr Ser Ile Ala Ser Asn Ser Thr Asp Leu Ala Gly Lys Val Lys
20 25 30
Thr Arg Leu Ile Ala Lys Arg Pro Ser Val Ile Ile Cys Phe Ser Ser
35 40 45
Leu Val Glu Ala Arg Thr Arg Phe Val Gln Cys Gln Val Val Pro
50 55 60

<210> 35473
<211> 67
<212> PRT
<213> A.fumigatus

<400> 35473
Leu Leu Lys Met Ala Arg Leu Lys Gln Met Glu Leu Ser Ala Pro Phe
1 5 10 15
Asp Leu Ser His His Phe Ser Ser Thr Thr Val Arg Arg Glu Ser Ser
20 25 30
Asn Leu Lys Arg Leu Tyr Lys Tyr Tyr Val Ile Pro Gly Met Gly Asn
35 40 45
Leu Ser Gly Gly Met Gln Gly Glu Leu Phe Leu Ile Val Ser Leu Asn
50 55 60
Gln Cys Lys
65

<210> 35474
<211> 362

<212> PRT
<213> A.fumigatus

<400> 35474
Arg Phe Arg Pro Phe Ser Arg Gly Cys Arg Ile Gly Gln Asn Pro Thr
1 5 10 15
Gly Gly Thr Met Ser Ile His Arg Arg Lys Glu Ile Tyr Ala Leu Cys
20 25 30
Gln Arg Tyr Asp Val Ile Ile Val Glu Asp Asp Pro Tyr Trp Asn Leu
35 40 45
Gln Tyr Pro Ser Ala Gln Arg Leu Ala Ala Arg Tyr Arg Asn Thr Pro
50 55 60
Ile Asp Glu Ser Leu Thr Thr Gln Asn Gly Asn Ala His Gly Asn Ser
65 70 75 80
Ser Gly Tyr Pro Phe Leu Asp Ser Leu Val Pro Ser Phe Met Ser Leu
85 90 95
Asp Thr Asp Gly Arg Val Ile Arg Leu Asp Thr Phe Ser Lys Thr Ile
100 105 110
Ala Pro Gly Cys Arg Leu Gly Trp Ile Thr Ala Gln Pro Ala Val Ile
115 120 125
Glu Arg Ile Thr Arg Leu Thr Glu Thr Ser Thr Gln Phe Pro Ser Gly
130 135 140
Phe Val Gln Ala Met Val Ala Gly Met Ile Leu Gly Gln Gln Ala Asp
145 150 155 160
Glu Asp Val Arg Gly Pro Lys Ser Lys Gly Lys Ser Gly Trp Lys Met
165 170 175
Asp Gly Trp Val Arg Trp Leu Glu Gly Leu Arg Gly Ser Tyr Glu Arg
180 185 190
Arg Met Gln Ala Met Cys Ile Thr Leu Glu Glu Gly Lys Tyr Val Ile
195 200 205
Lys Gly Asp Gly Ser Glu Pro Ser Glu Ser Ser Glu Glu Ser Gly Trp
210 215 220
Glu Val Ile Asp Lys Val Gln Met Tyr Asp Phe Thr Trp Pro Met Gly
225 230 235 240
Gly Met Phe Ala Trp Val Lys Val Leu Phe Asn Thr His Pro Leu Tyr
245 250 255
Asp Lys Tyr Ser Leu Glu Thr Leu Ser Lys Ala Leu Trp Val His Met
260 265 270
Thr Gln Glu Pro Phe Leu Cys Leu Met Val Pro Gly Asp Leu Phe Ala
275 280 285
Pro Ser Gln Lys Ala Met Asp Gln Ala Trp Gln Tyr Phe Arg Leu Cys
290 295 300
Phe Ala Pro Met Pro Glu Lys Asp Val Ala Val Ile Thr Asn Arg Leu
305 310 315 320
Val Glu Gly Phe Arg Ala Phe Trp Gln Arg Lys Asp Leu Asp Gly Leu
325 330 335
Asp Asp Thr Glu Glu Leu Leu Gln Lys Phe Arg Asn Leu Gln Val Glu
340 345 350
Gly Met Gly His Met Met Gly Ile Gly Cys
355 360

<210> 35475
<211> 345
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (81)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35475

```
Ile Ser Val Ser Lys Ala Thr Gly Ile Met Thr Ser Val Ile Asn Ser
1               5                  10                  15
Leu Ser Asp Thr Asp Leu Ala Glu Glu Ile Glu Ala Ile Asn Ala Ile
            20                  25                  30
Tyr Asp Pro Asp Thr Val Thr Val His Phe Ser Ala Thr Ser Ala Ser
        35                  40                  45
Ala Ala Thr Ala Asn Ser Thr Leu Asn Leu Gly Ser Ser Asp Pro Gly
    50                  55                  60
Glu Ser Leu Asn Thr Thr Val Lys Leu Gln Ile Pro Asp His Pro Asn
65                  70                  75                  80
Xaa Ser Phe Phe Leu Gly Phe His Ala Ser Tyr Pro Asp Thr Pro Pro
                85                  90                  95
Lys Ile Leu Gly Thr Ala Ser Thr Gly Ala Arg Gly Glu Arg Lys Ile
            100                 105                 110
Ala Val Asp Val Leu Glu Asp Ile Val Gly Arg Thr Tyr Gln Pro Gly
        115                 120                 125
Ala Val Cys Leu Phe Asp Val Ile Asn Glu Ala Val Glu Ala Phe Arg
    130                 135                 140
Glu Leu Ser Leu Gly Gly His Asn Ser Ser Ser Asn Thr Asn Gln Asp
145                 150                 155                 160
Ser Glu Lys Arg Gly Ala Glu Ala Glu Thr Arg Ala Thr Pro Ala Arg
                165                 170                 175
Val Ala Ala Asp Ile Ala Thr Leu Ala Leu Gln Asp Pro Phe Gly Leu
            180                 185                 190
Asp Ser Pro Pro Glu Trp Val Leu Ser Asp Val Val Thr Glu Lys Lys
        195                 200                 205
Ser Val Phe Val Gly Arg Ala Ala His Val Thr Ser Leu Glu Gln Ala
    210                 215                 220
Gln Gly Tyr Leu Asp His Leu Leu Ala Thr Asp Lys Lys Val Ala Ala
225                 230                 235                 240
Ala Thr His Asn Ile Ser Ala Trp Arg Ile Arg Gln Gln Lys Pro Ala
                245                 250                 255
Asn Gly Lys Gly Glu Ser Ala Glu Met Ile Val Gln Asp Cys Asp Asp
            260                 265                 270
Asp Gly Glu Thr Ala Ala Gly Gly Arg Leu Leu His Leu Met Gln Leu
        275                 280                 285
Met Asp Val Trp Asp Val Val Val Val Val Ser Arg Trp Tyr Gly Gly
    290                 295                 300
Ile Leu Leu Gly Pro Asp Arg Phe Arg Ile Ile Asn Ala Val Gly Arg
305                 310                 315                 320
Asp Ala Leu Ile Lys Gly Gly Phe Val Lys Glu Ser Thr Gly Ala Ala
                325                 330                 335
Glu Lys Gly Arg Lys Lys Gly Lys Arg
            340                 345
```

<210> 35476
<211> 779
<212> PRT
<213> A.fumigatus

<400> 35476

```
Asp Ser Leu Ala Asp Met Leu Ser Val Leu Gly Met Thr Tyr Gly Asp
1               5                  10                  15
Glu Glu Lys Leu Glu Thr Leu Lys Tyr Arg Leu Leu Thr Lys Ala Glu
            20                  25                  30
Asp Leu Gly Ser Trp Gly His Glu Tyr Ile Arg His Leu Ala Leu Glu
        35                  40                  45
Ile Gly Gln Glu Tyr Gln Asn Arg Leu Asn Ala Glu Lys Asp Val Gln
    50                  55                  60
Asp Leu Ile Asp Leu Ser Leu Ser Leu Val Pro Tyr Phe Leu Ser His
65                  70                  75                  80
Asn Ala Glu Ala Asp Ala Val Asp Leu Leu Ser Glu Leu Glu Ile Ile
                85                  90                  95
Glu Glu Ile Pro Arg Phe Leu Asp Glu Asn Thr Tyr Ser Arg Val Cys
            100                 105                 110
Leu Tyr Met Val Ser Met Val Asn Leu Leu Thr Tyr Pro Glu Asp Gln
        115                 120                 125
Gln Phe Leu Arg Thr Ala His Glu Ile Tyr Val Arg Tyr Lys Glu Leu
    130                 135                 140
Thr Lys Ala Ile Val Leu Ala Ile Arg Leu Asn Asp Thr Asp Leu Ile
145                 150                 155                 160
Lys Ser Asp Ile Asn Ala Thr Ser Asp Pro Val Leu Lys Asn Gln Met
                165                 170                 175
Ala Phe Leu Val Ala Arg Gln Gln Ile Trp Leu Asp Met Pro Glu Glu
            180                 185                 190
Glu Glu Asn Thr Ser Phe Met Asp Cys Leu Asn Asn Ile Thr Ile Ser
        195                 200                 205
Lys His Phe Lys Ser Leu Gly Lys Glu Leu Asp Ile Leu Glu Pro Lys
    210                 215                 220
Asn Pro Glu Asp Ile Tyr Lys Thr His Leu Glu Ser Ser Arg Gly Ala
225                 230                 235                 240
Gly Leu Thr Asn Val Asp Ser Ala Arg His Asn Leu Ala Ser Ala Phe
                245                 250                 255
Val Asn Ala Phe Val Asn Ala Gly Phe Gly Lys Asp Asn Leu Met Leu
            260                 265                 270
Gly Asp Asp Asp Lys Gly Ser Trp Ile Trp Lys Thr Lys Asp Asp Gly
        275                 280                 285
Met Leu Ser Thr Thr Ala Ser Phe Gly Met Leu Leu Ser Lys Asp Thr
    290                 295                 300
Asp Thr Gly Leu Asp Arg Ile Asp Lys Phe Thr Tyr Ala Thr Glu Glu
305                 310                 315                 320
Gln Ile Lys Ala Gly Ala Leu Leu Gly Thr Gly Met Ile Gly Ser Gly
                325                 330                 335
Val Arg Leu Glu Ala Asp Pro Val Leu Ala Leu Leu Gly Asp Pro Glu
            340                 345                 350
Val Trp Gln Glu Lys Ser Val Pro Val Arg Val Ala Ala Ile Met Gly
        355                 360                 365
Leu Gly Leu Ala Tyr Ala Gly Ser Asn Lys Glu Glu Leu Leu Glu Ile
    370                 375                 380
Leu Leu Pro Val Val Glu Asp Val Ser Leu Asp Met Gln Leu Ser Ala
385                 390                 395                 400
Met Ala Ala Val Ser Leu Gly Leu Ile Phe Val Gly Ser Ser Asn His
                405                 410                 415
Gln Val Ser Glu Ala Ile Ala Thr Thr Leu Met Asp Glu Glu Arg Gln
            420                 425                 430
Lys His Leu Lys Asp Lys Trp Thr Arg Phe Met Ala Leu Gly Leu Ala
```

```
        435                 440                 445
Leu Leu Tyr Phe Gly Arg Gln Glu Glu Val Asp Val Ile Leu Asp Ile
    450                 455                 460
Leu Lys Ala Val Asp His Pro Met Ala Lys Pro Thr Ser Val Leu Ala
465                 470                 475                 480
Ser Val Cys Ala Trp Ala Gly Thr Gly Thr Val Leu Lys Leu Gln Glu
                485                 490                 495
Leu Leu His Ile Cys Asn Asp Leu Ile Glu Glu Asn Asp Glu Lys Lys
            500                 505                 510
Gly Asp Glu Leu Val Gln Ser Tyr Ala Val Leu Cys Leu Ser Leu Ile
        515                 520                 525
Ala Met Gly Glu Glu Val Gly Gln Asp Met Ile Leu Ile Gln Phe Gly
    530                 535                 540
His Leu Met His Tyr Gly Ala Ser Asn Ile Arg Lys Ala Val Pro Leu
545                 550                 555                 560
Ala Met Gly Leu Ile Ser Pro Ser Asn Pro Gln Met Lys Val Tyr Asp
                565                 570                 575
Thr Leu Ser Arg Tyr Ser His Asp Asn Asp Asn Asp Val Ala Ile Asn
            580                 585                 590
Ala Ile Phe Ala Met Gly Leu Cys Gly Ala Gly Thr Asn Asn Ala Arg
        595                 600                 605
Leu Ala Gln Leu Leu Arg Gln Leu Ala Ser Tyr Tyr His Arg Asp Gln
    610                 615                 620
Asn Ser Leu Phe Met Val Arg Ile Ala Gln Gly Leu Leu His Met Gly
625                 630                 635                 640
Lys Gly Thr Met Thr Leu Asn Pro Phe His Thr Asp Arg Gln Val Leu
                645                 650                 655
Ser Arg Val Ala Ala Ala Gly Leu Leu Thr Val Val Val Ser Leu Ile
            660                 665                 670
Asp Ala Lys Gln Phe Ile Leu Ala Glu His His Tyr Leu Leu Tyr Phe
        675                 680                 685
Leu Ile Thr Ala Met Tyr Pro Arg Phe Leu Val Thr Leu Asp Glu Asp
    690                 695                 700
Leu Gln Pro Leu Thr Val Asn Val Arg Val Gly Gln Ala Val Asp Val
705                 710                 715                 720
Val Gly Gln Ala Gly Arg Pro Lys Thr Ile Thr Gly Trp Gln Thr Gln
                725                 730                 735
Ser Thr Pro Val Leu Leu Ser Tyr Gly Glu Arg Ala Glu Leu Glu Asp
            740                 745                 750
Glu Gln Tyr Ile Pro Leu Ser Thr Thr Leu Glu Gly Leu Val Ile Leu
        755                 760                 765
Arg Lys Val Gly Leu Ser Asp Asp Thr Ser Ala
    770                 775
```

<210> 35477
<211> 79
<212> PRT
<213> A.fumigatus

<400> 35477

```
Ala Ala Ser Thr Asp Leu Ser Ser Leu Ser Phe Tyr Arg Pro His Pro
1               5                   10                  15
Asn Arg Asp Gln Leu Ala Arg Tyr Pro Ser Glu Met Ala Lys Glu Gly
            20                  25                  30
Glu Arg Ser Ala Pro Ala Asp Lys Gly Lys Gly Lys Val Asp Asp Val
        35                  40                  45
```

```
Lys Asp Leu Pro Gly Ala Lys Lys Thr Gln Asn Asp Glu Lys Thr Gln
    50                  55                  60
Ala Asn Gly Lys Lys Lys Glu Glu Glu Ser Lys Glu Gly Met Ser
65                  70                  75

<210> 35478
<211> 74
<212> PRT
<213> A.fumigatus

<400> 35478
Asp Leu Asn Leu Leu Thr Asp Asp Val Asn Pro Gly Val Phe Leu His
1               5                   10                  15
Gln Glu Pro Asp Thr Thr Leu Tyr Ala Pro Ala Leu Asp Ala Ile Lys
            20                  25                  30
Asn Phe Ile Lys Thr Ser Thr Ser Ser Met Thr Ala Val Pro Lys Pro
        35                  40                  45
Leu Lys Phe Leu Arg Pro His Tyr Asp Glu Leu Thr Glu Leu Tyr Glu
    50                  55                  60
Lys Trp Pro Ala Gly Ala Val Lys Val Gly
65                  70

<210> 35479
<211> 62
<212> PRT
<213> A.fumigatus

<400> 35479
Arg Asp Leu Ile Asn Thr Leu Ser Ala Ala Val Arg Asp Tyr Lys Gln
1               5                   10                  15
Leu Pro Arg Thr Phe Leu Ala Tyr Leu Phe Thr Val Leu Thr Gln Thr
            20                  25                  30
Glu Thr Asn Ser Pro Gly Thr Arg Gln Lys Trp Arg Lys Lys Ala Arg
        35                  40                  45
Gly Gln Leu Pro Pro Thr Arg Ala Arg Ala Arg Leu Met Met
    50                  55                  60

<210> 35480
<211> 102
<212> PRT
<213> A.fumigatus

<400> 35480
Phe Pro Cys Thr Ser Ala Tyr Val Gly Phe Asn Val Leu Asn Leu Leu
1               5                   10                  15
Cys Ser Phe Gln Pro Lys Leu Thr Ala Leu Asn Val Lys His Gln Ile
            20                  25                  30
Thr Thr Ala Asp Ile Phe His Asn Lys Val His Pro Ser Phe Arg Leu
        35                  40                  45
Glu Thr Gly Val Lys Val Glu Lys Glu Trp Met Ala Phe Leu Ile Ser
    50                  55                  60
Asp Gln Glu Asp Thr Leu Phe Gly Phe Ser Ala Leu His Phe Ile Ile
65                  70                  75                  80
Leu Asn Asp Glu Leu Leu Leu Gln His Leu Asp Gly Ile Lys Leu Leu
                85                  90                  95
Gly Ala Leu Cys Leu Cys
```

100

<210> 35481
<211> 186
<212> PRT
<213> A.fumigatus

<400> 35481
His Ser Ile Val Ser Pro Gly Leu Leu Ile Phe His Arg Val Thr Arg
1 5 10 15
Phe Glu Val Ser Arg Glu Asn Thr Thr Phe Ser Ser Ser Asp His Leu
20 25 30
Ala Thr Met Asp Gly Asp Asp Leu Ile Ala Ser Val Tyr Arg Lys Ile
35 40 45
Glu Arg Glu Lys Ala Leu Ile Thr Ala Ala Ser Asn Met Arg Gln Ser
50 55 60
Thr Asp Asn Pro Leu Val Gln Gln Arg Val Asp Ala Asn Ile Arg Asp
65 70 75 80
Gly Arg Lys Asn Ile Ala Tyr Leu Glu Glu Lys Met Arg Glu Leu Gln
85 90 95
Leu Arg Gln Met Lys Gln Glu Gly Ala Ser Pro Thr Asp Lys Arg Leu
100 105 110
Pro Pro Asn Pro Asp Gly Ser Ala Pro Val Pro Pro Pro Lys Asp Tyr
115 120 125
Ala Pro Gly Tyr Ser Gly His Glu Arg Glu Tyr Gly Asp Ala Ser Gly
130 135 140
Ala Tyr Pro His Gly Gly Ala Gly Thr Met Pro Ser Gly Ala Pro Phe
145 150 155 160
Ala Asp Pro Arg Pro Phe Ala Pro Val Pro Lys Ala Arg Pro Asn Tyr
165 170 175
Thr Lys Leu Gly Arg Phe Leu Leu Leu Val
180 185

<210> 35482
<211> 171
<212> PRT
<213> A.fumigatus

<400> 35482
Ile Cys Asp Ser Leu Ala Glu Cys Gly Leu Thr Cys His Ala Gln Cys
1 5 10 15
Thr His Leu Val Pro Asp Phe Cys Gly Met Ser Met Glu Ala Ala Asn
20 25 30
Gln Ile Leu Glu Thr Leu Ile Arg Ala Lys Asn His Asn Lys Ser Ala
35 40 45
Ser Val Ser Ser Gly Leu Ser Gly Arg Thr Leu Arg Pro Gly Gly Pro
50 55 60
Pro Gln Ala Pro Gln Asp Asn Val Ala Leu Ala Tyr Pro Gln Lys Pro
65 70 75 80
Val Glu Gly Ala Tyr Gly Ala Pro Gln Arg Gln Pro Ser Ala Glu Ala
85 90 95
Ile Ser Ala Ala Thr Asn Thr Tyr Ile Pro Pro Gln Ser Pro Thr Ala
100 105 110
Ala Gln Arg Gln His Ile Pro Pro Arg Thr Ser Ser Ser Gln Ser Pro
115 120 125
Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Thr Gly Leu Arg Thr

```
    130                 135                 140
Pro Gln Gln Ala Ser Gly Thr Leu Asp Arg Phe Ser Leu His His Ser
145                 150                 155                 160
Val Arg Asn Met Cys Pro Cys Leu Pro Cys Leu
                165                 170
```

<210> 35483
<211> 154
<212> PRT
<213> A.fumigatus

<400> 35483

```
Val Ser Val Tyr His Ile Phe His Tyr Ile Ser Ala Leu Thr Tyr Phe
1               5                   10                  15
Ile Ala Lys Gln Leu Lys Asp Arg Arg Pro Phe Asp Ile Gly Leu Asn
            20                  25                  30
Arg Gln Gly Ala Val Arg Gln Lys Lys Glu Glu Val His Glu Lys Gln
        35                  40                  45
Gly His Lys Phe Val Thr Gln Gln Phe Tyr Asn Ile Met Arg Cys Ala
    50                  55                  60
Leu Cys Gly Asp Phe Leu Lys Tyr Ala Ala Gly Met Gln Cys Ala Asp
65                  70                  75                  80
Cys Lys Tyr Thr Cys His Arg Lys Cys Tyr Pro Lys Val Val Thr Lys
                85                  90                  95
Cys Ile Ser Lys Ala Asn Tyr Glu Thr Asp Pro Asp Glu Glu Lys Ile
            100                 105                 110
Asn His Arg Ile Pro His Arg Phe Glu Gly Phe Ser Asn Ile Ser Ala
        115                 120                 125
Asn Trp Cys Cys His Cys Gly Tyr Leu Leu Pro Phe Gly Arg Lys Ser
    130                 135                 140
Ala Lys Arg Cys Thr Gly Met Ser Ser Leu
145                 150
```

<210> 35484
<211> 122
<212> PRT
<213> A.fumigatus

<400> 35484

```
Asp Arg Leu Leu Thr Gly Asp Arg Leu Arg Ile Asp Leu Ile Lys Tyr
1               5                   10                  15
Asp Thr Pro Tyr Leu Gly Pro Lys Ile Gln Leu Met Leu Ser Gln Leu
            20                  25                  30
Glu Phe Lys Leu Ser Val Glu Lys Gln Tyr Lys Ala Gly Ile Glu Lys
        35                  40                  45
Met Val Arg Leu Tyr Gln Asp Glu Gly Asp Arg Lys Ser Arg Gln Asp
    50                  55                  60
Ala Glu Gly Arg Arg Ile Glu Ser Asn Gln Lys Ile Gln Leu Leu Lys
65                  70                  75                  80
Gln Ala Leu Lys Arg Tyr Glu Asp Leu His Val Asp Ile Glu Ser Ala
                85                  90                  95
Glu Ala Pro Asp Gly Met Leu Arg Ala Leu Pro Leu Leu Val Val Trp
            100                 105                 110
Pro Leu His Ser Ala Val Thr Asp Phe Val
        115                 120
```

<210> 35485
<211> 209
<212> PRT
<213> A.fumigatus

<400> 35485
Thr Asp Glu Ser Leu Ser Thr Pro Asn Leu Arg Lys Pro Leu Thr Gly
1 5 10 15
Leu Leu Thr Leu Arg Ile His Ala Val Glu Asp Val Asp His Ala Ala
20 25 30
Ser Ser Arg Phe Ser Arg Gly Pro Glu Thr Phe Val Val Val Lys Val
35 40 45
Glu Asp Ala Ile Lys Ala Arg Thr Lys Ala Thr Arg Thr Asp Lys Trp
50 55 60
Gln Asp Glu Pro Phe Asn Ile Glu Ile Asp Lys Ala Asn Glu Ile Glu
65 70 75 80
Leu Thr Val Tyr Asp Lys Ser Gly Asp Arg Pro Thr Pro Ile Gly Met
85 90 95
Leu Trp Val Arg Ile Ser Asp Ile Ala Glu Glu Met Arg Arg Lys Lys
100 105 110
Ile Glu Ser Glu Phe Asn Ala Ser Gly Trp Val Ser Ala Asp Lys Met
115 120 125
Glu His Gly Ala Ala His Gly Arg Gln Asp Ala Gly Gly Ala Pro Gly
130 135 140
Ser Ser Asn Arg Pro Pro Ser Gly Gly His Ser Gly Gly Pro Gly Gln
145 150 155 160
Gly Tyr Ala Gly Gly Ala Pro Gly Gly Ala Ser Ala Cys Pro Val Leu
165 170 175
Ile Asp Ser Trp Phe Ala Leu Glu Pro Val Gly Arg Ile His Leu Thr
180 185 190
Leu Ser Phe Gly Glu Tyr Leu Tyr Thr Thr Phe Phe Thr Thr Ser Ala
195 200 205
His

<210> 35486
<211> 271
<212> PRT
<213> A.fumigatus

<400> 35486
Gly Cys Leu Arg Cys Pro Ser Glu Thr Ala Ile Ser Arg Gly Tyr Gln
1 5 10 15
Arg Arg Asn Gln His Leu Tyr Ser Ser Ser Val Thr His Ser Gly Ser
20 25 30
Ala Ser Ala His Thr Ser Ala Asn Phe Phe Leu Ala Lys Pro Arg Ser
35 40 45
Arg Arg Arg Arg Cys Cys Cys Arg Ser His Arg Thr Ala Tyr Ala Pro
50 55 60
Ala Ser Phe Arg Tyr Ala Arg Ser Ile Phe Leu Ala Pro Leu Gly Ala
65 70 75 80
Gln His Val Pro Leu Leu Thr Leu Pro Leu Asp Pro Asn Arg Pro Val
85 90 95
Gln Pro Pro Pro Ser Ser His Ala His Tyr Asp Pro Ala Ala Tyr Ala
100 105 110
Ser Tyr Gln Gln Ala Ile Pro Pro Gln Ala Met Gln Lys Met Gly Ala

```
        115                 120                 125
Pro Tyr Gly Met Pro Gln Gln Gln Gln Gln Ala Val Ala Pro Met
    130                 135                 140
Gln Gln Gln Val Ala Val Lys Glu Glu Ile Pro Pro Gln Gln Pro Lys
145                 150                 155                 160
Val Arg Ile Gly Leu Asp His Phe Asn Phe Leu Ala Val Leu Gly Lys
                165                 170                 175
Gly Asn Phe Gly Lys Val Met Leu Ala Glu Thr Lys Ser Thr Lys Lys
            180                 185                 190
Leu Tyr Ala Ile Lys Val Leu Lys Lys Glu Phe Ile Ile Glu Asn Asp
        195                 200                 205
Glu Val Glu Ser Thr Lys Ser Glu Lys Arg Val Phe Leu Ile Ala Asn
    210                 215                 220
Lys Glu Arg His Pro Phe Leu Leu Asn Leu His Ala Cys Phe Gln Thr
225                 230                 235                 240
Glu Thr Arg Val Tyr Phe Val Met Glu Tyr Ile Ser Gly Gly Asp Leu
                245                 250                 255
Met Leu His Ile Gln Arg Gly Gln Phe Gly Leu Lys Arg Ala Gln
            260                 265                 270
```

<210> 35487
<211> 138
<212> PRT
<213> A.fumigatus

<400> 35487

```
Lys Lys Thr Asp Ala Glu Ser Gly Glu Glu Ser Ala Arg Asp Glu Gln
1               5                   10                  15
Arg Asn Arg Ser Gly Gly Gly Leu Lys Asp Asp Thr Lys Ala Glu Asp
            20                  25                  30
Ala Arg Val Asp Asn His Thr Lys Ala Ala Ser Lys Val Ile Gly Asn
        35                  40                  45
Arg Arg Gly Ala Gln Ser Ser Glu Glu Ser Ala Ser Arg Gln Gln Gly
    50                  55                  60
Asp Asp His Arg Arg Leu Arg Gly Cys Asp Ile Arg Val Val Val Val
65                  70                  75                  80
Arg Ile Asp Val Ala Gly Gly Glu Glu Leu Ala Pro Val Trp His Gly
                85                  90                  95
Lys Asp Ala Ala Asp Gly Ala Gly Ile Ile Ala Met Cys Ser Pro Leu
            100                 105                 110
Val Ser Gly Cys Ala Lys Val Ser Glu Ala Glu Arg Leu Thr Arg Thr
        115                 120                 125
Glu Ser His Gln Thr Gln Arg Thr Asn Gln
    130                 135
```

<210> 35488
<211> 297
<212> PRT
<213> A.fumigatus

<400> 35488

```
Tyr Arg His His Gln Arg His Pro Cys His Ala Ile Leu Ala Gln Ala
1               5                   10                  15
Leu Leu His Arg Leu His Gln Ser Gly Arg Gln Leu Pro Gly Tyr His
            20                  25                  30
Ile Leu Ala Ile Val Asp Asp Arg Leu Pro Val Val Cys Trp His Phe
```

```
        35                  40                  45
Leu Arg Ser Ser Gly Arg Arg Ala Gly Cys Arg Leu Leu Trp Thr Pro
    50                  55                  60
Pro Trp Tyr Asp Tyr Gln Leu Gly Arg Leu Leu Leu Trp Cys His Pro
65                  70                  75                  80
Ser Asp Arg Arg His Cys Asp Ser Val Val Arg Arg Gly Gln Ile Leu
                85                  90                  95
Arg Arg Ile Arg Arg Arg Ser Ser Phe Ser Asp Trp Tyr Val Pro His
            100                 105                 110
His Leu Phe Val His Pro Gly Gly Arg Val Leu Thr Gly Pro Val Pro
        115                 120                 125
Leu Tyr Gln Ser Glu Thr Ala Pro Lys Trp Ile Arg Gly Thr Ile Val
    130                 135                 140
Gly Ala Tyr Gln Leu Ala Ile Thr Leu Gly Leu Leu Ile Ala Ala Ile
145                 150                 155                 160
Val Asn Asn Ala Thr Lys Asp Arg Met Asp Thr Gly Cys Tyr Arg Ile
                165                 170                 175
Pro Val Ala Ile Gln Phe Ala Trp Ala Ile Ile Leu Val Thr Gly Met
            180                 185                 190
Leu Val Leu Pro Glu Thr Pro Arg Phe Leu Ile Lys Lys Asp Lys His
        195                 200                 205
Glu Ala Ala Ala Arg Ala Leu Ser Arg Leu Arg Arg Met Asp Val Asn
    210                 215                 220
Asp Pro Ala Leu Ile Glu Glu Leu Ser Glu Ile Gln Ala Asn His Glu
225                 230                 235                 240
Tyr Glu Leu Ser Met Gly Thr Ala Ser Tyr Leu Glu Ile Leu Arg Gly
                245                 250                 255
Thr Ile Gly Lys Arg Leu Ala Thr Gly Cys Gly Ile Gln Ala Leu Gln
            260                 265                 270
Gln Leu Ala Gly Val Asn Phe Ile Cys Met Ser Ser Phe Leu Phe Val
        275                 280                 285
Leu Glu Leu Thr Ala His Met Cys Val
    290                 295
```

<210> 35489
<211> 172
<212> PRT
<213> A.fumigatus

```
<400> 35489
Ser Glu Ser Pro Met Met Gln Trp Ala Pro Arg Leu Leu Pro Ser Ser
1               5                   10                  15
Leu Val Cys Ser Leu Arg Leu Val Gly Phe Cys Ser Gly Lys Ser Leu
            20                  25                  30
Gly Leu Thr Asp Leu Gly Thr Thr Ala Asp Gln Arg Thr Ala His Ser
        35                  40                  45
Tyr Asp Thr Gly Thr Ile Ser Gly Ile Leu Ala Met Pro Tyr Trp Arg
    50                  55                  60
Lys Leu Phe Ser Thr Gly Tyr Ile Asn Pro Asp Asp Asn Tyr Pro Asp
65                  70                  75                  80
Ile Thr Ser Ser Gln Ser Ser Met Ile Val Ser Leu Leu Ser Ala Gly
                85                  90                  95
Thr Phe Phe Gly Ala Leu Gly Ala Ala Pro Val Ala Asp Tyr Phe Gly
            100                 105                 110
Arg Arg Leu Gly Met Ile Ile Asn Ser Gly Val Phe Cys Phe Gly Val
        115                 120                 125
```

```
Ile Leu Gln Thr Ala Ala Thr Ala Ile Pro Leu Phe Val Ala Gly Arg
    130                 135                 140
Phe Phe Ala Gly Phe Gly Val Gly Leu Leu Ser Ala Thr Gly Met Phe
145                 150                 155                 160
Leu Ile Ile Phe Leu Ser Ile Leu Val Ala Val Cys
                165                 170
```

<210> 35490
<211> 155
<212> PRT
<213> A.fumigatus

<400> 35490

```
Ile Arg Ala Gln His Gly Tyr Gly Lys Leu Pro Arg Asp Ser Ser Arg
1               5                   10                  15
His His Arg Gln Ala Phe Gly Tyr Arg Leu Arg Tyr Pro Gly Ser Ala
            20                  25                  30
Ala Val Gly Arg Cys Gln Leu His Leu Tyr Val Leu Ile Ser Phe Arg
        35                  40                  45
Thr Arg Thr His Ser Ser Tyr Val Cys Leu Val Tyr Tyr Gly Thr Thr
    50                  55                  60
Phe Phe Lys Ala Ser Gly Ile Ser Asn Pro Phe Ile Ile Thr Leu Ile
65                  70                  75                  80
Thr Asn Ile Val Asn Val Met Ser Thr Phe Pro Gly Leu Tyr Met Val
                85                  90                  95
Glu Lys Trp Gly Arg Arg Pro Leu Leu Met Phe Gly Ala Phe Gly Met
            100                 105                 110
Gly Leu Asn Gln Phe Ile Cys Pro Ile Val Gly Leu Ser Pro Phe Ser
        115                 120                 125
Lys Trp Ala Lys Lys Thr Gly Ser Pro Trp Gly Asp Phe Asn Phe Phe
    130                 135                 140
Phe Ser Arg Ser Arg Glu Pro Gly Val Gly Leu
145                 150                 155
```

<210> 35491
<211> 130
<212> PRT
<213> A.fumigatus

<400> 35491

```
Thr Gly Ser Arg Ala Glu Ala Ala Ser Ser Arg Pro Arg Ala Pro Leu
1               5                   10                  15
Cys Leu Gln Gly Met Ser Leu Thr Asp Leu Phe Ser Leu His Leu Gly
            20                  25                  30
Thr Ser Asn Asp Ile Arg Arg Leu Leu Ser Arg Leu Pro Val Pro Tyr
        35                  40                  45
Leu Pro Thr Ala Ile Pro His Asn Ile Ser Ser His Gln Asp Ile Gln
    50                  55                  60
Thr Leu Leu Gln Asp Glu Ser Pro Leu Phe Tyr Lys Val Thr Gly Pro
65                  70                  75                  80
Pro Lys Ser Asn Thr Met Ser Arg Ser Cys Asn His Leu Tyr Gly Ala
                85                  90                  95
Arg Val Glu Trp Cys Ala Pro Phe Leu Leu Ala Ala Leu Gly Asn Val
            100                 105                 110
Arg His Thr Val His Gly Asp Lys Phe Pro Gly Ser Arg Ser Pro Val
        115                 120                 125
```

Thr Leu
130

<210> 35492
<211> 111
<212> PRT
<213> A.fumigatus

<400> 35492
Val Asp Arg Ser Leu Ser Ser Ala Ser Ser Phe Ser Gln Pro Met Gln
1 5 10 15
Glu Leu Val Thr Glu Ala Gly Trp Gly Ala Val Trp Ser Arg Pro Gly
20 25 30
Leu Asp Arg Lys Ser Arg Ser Leu Leu Asn Thr Gly Met Leu Cys Ala
35 40 45
Leu Asn Arg Gly Ala Glu Leu Ala Val His Val Arg Gly Ala Leu Asn
50 55 60
Asn Gly Leu Ser Glu Val Glu Ile Arg Glu Ala Leu Leu Gln Val Ala
65 70 75 80
Ile Tyr Val Gly Met Pro Ala Gly Leu Glu Gly Phe Arg Ile Ala Glu
85 90 95
Lys Val Leu Ser Glu Ile Arg Glu Glu Gln Gly Pro Gly Ser Gly
100 105 110

<210> 35493
<211> 115
<212> PRT
<213> A.fumigatus

<400> 35493
Leu Ala Val Ala Ile Val Gly Tyr Gly Gly Ala Ala Pro Trp Val Arg
1 5 10 15
Gly Ala Val Val Val Asp Leu Gly Lys Arg Met Asn Arg Ile Leu Asp
20 25 30
Ile Asn Pro Glu Asp Cys Thr Cys Leu Val Glu Pro Gly Val Ser Tyr
35 40 45
Tyr Ala Leu Tyr Glu Glu Ile Gln Arg Arg Gly Tyr Lys His Leu Trp
50 55 60
Ile Asp Val Pro Asp Leu Gly Gly Gly Ser Val Leu Gly Asn Ala Leu
65 70 75 80
Asp His Gly Val Gly Tyr Thr Pro Tyr Gly Asp His Trp Ala Met His
85 90 95
Ser Gly Leu Glu Val Val Thr Pro Thr Gly Glu Val Val Arg Thr Gly
100 105 110
Met Val Phe
115

<210> 35494
<211> 143
<212> PRT
<213> A.fumigatus

<400> 35494
Asp Leu Phe Cys Asp Pro Glu Ser Leu Glu Ala Cys Arg His Ala Asp
1 5 10 15
Val Asn Cys Asn Leu Gln Gln Ser Phe Ala Asp Leu His Leu Arg Lys

```
            20                  25                  30
Pro Ile Val Glu Arg Ala Thr His Met Asp Arg Gln Phe Gly Ala Ala
        35                  40                  45
Val Glu Arg Ala Lys His Thr Ser Val Glu Gln Arg Pro Gly Phe Ala
    50                  55                  60
Val Gln Ala Gly Thr Gly Pro Asp Gly Ala Pro Thr Gly Leu Gly His
65                  70                  75                  80
Gln Leu Leu His Arg Leu Gly Glu Gly Arg Cys Gly Gly Gln Gly Ser
                85                  90                  95
Val Asp Leu Gly Pro Ser Gly Asp Phe Gly Ala Asp Ser Glu Ala Leu
            100                 105                 110
Ile Glu Glu Ala Leu Val Arg Val Gly Gln Gly Gly Phe Leu Phe Cys
        115                 120                 125
His Asp Cys Gly Arg Thr Asp Leu Ala Val Ala Ser Val Gln Asn
    130                 135                 140
```

<210> 35495
<211> 237
<212> PRT
<213> A.fumigatus

<400> 35495

```
Thr Ala Phe Tyr Leu Arg Thr Ala Pro Pro Met Ser Gln Pro Val Ala
1               5                   10                  15
Val Val Thr Gly Ala Ser Ser Gly Met Gly Leu Ala Val Thr Lys His
            20                  25                  30
Leu Val Ala Lys Gly Trp Arg Val Ala Met Ala Asp Ile Asp Ala Asp
        35                  40                  45
Ser Gly Arg Lys Val Ala Ala Glu Ile Gly Asp Gln Val Leu Phe Cys
    50                  55                  60
Arg Thr Asp Val Thr Ser Tyr Pro Gln Gln Ala Ser Leu Phe Glu Thr
65                  70                  75                  80
Ala Phe Ala Trp Gly Gly Asp Arg Leu Asp Leu Tyr Ala Ala Asn Ala
                85                  90                  95
Gly Ile Ala Asp Thr Gln Phe Leu Cys Asn Asn Asp Tyr Arg Tyr Asp
            100                 105                 110
Glu Asn Gly Leu Arg Leu Pro Val Ser Leu Gln Thr Leu Asp Val Asn
        115                 120                 125
Leu Thr Ala Val Ile Gln Gly Val Trp Leu Phe Lys His Tyr Ala Arg
    130                 135                 140
Arg Asn Lys Val Ala Gly Gly Lys Val Val Ile Thr Ser Ser Ser Ala
145                 150                 155                 160
Gly Leu Tyr Pro Met Glu Ser Asp Pro Ile Tyr Thr Ala Ser Lys His
                165                 170                 175
Ala Leu Val Gly Leu Thr Arg Ala Leu Gly Pro Val Leu Gln Arg Gln
            180                 185                 190
Asn Ile Gln Val Asn Ala Ile Cys Pro Ala Phe Val Pro Thr Gly Leu
        195                 200                 205
Cys Pro Lys Glu Met Leu Gly Arg Phe Pro Lys Glu His Met Ile Pro
    210                 215                 220
Ser Ser Lys Thr Met Ala Phe Leu Asp Arg Leu Trp Asn
225                 230                 235
```

<210> 35496
<211> 332
<212> PRT

<213> A.fumigatus

<400> 35496
Lys Pro Gly Gly Ser Pro Gly Glu Gln Thr Cys Ser Ala Val Val Gln
1 5 10 15
Asp Ala Ala Thr Ala Ser Ser Pro Ser Ala Ala Ser Val Asp Ala Gly
20 25 30
Thr Ser Gln Ile Ser Ser Thr Asp Thr Ser Thr Ala Ser Leu Ser Asp
35 40 45
Glu Gln Glu Leu Ala Ser Glu Val Ile Glu Gly His Gly Leu Cys Glu
50 55 60
Lys Pro Glu Leu Ala Ala Leu Gln Arg Pro Arg Arg Asn Thr Asp Lys
65 70 75 80
Gly Ala Ser Glu Asp Thr Pro Ala Pro Pro Val Glu Gly Lys Ala Pro
85 90 95
Leu Ala Val Thr Leu Gly His Glu Pro Gln Thr Gln Gly Gly Ser Pro
100 105 110
Lys Leu Thr Arg Pro Ala Gly Thr Ser Asp Val Ser Lys Thr Pro Asp
115 120 125
Asp Asp Leu Ser Ala Ala Thr Pro Pro Ser Ala Arg Ala Ser Asp Ser
130 135 140
Thr Ala Asp Gly Lys Pro Ser Arg Ser Ala Pro Val Thr Ala Gln Ser
145 150 155 160
Ser Arg Lys Val Ala Thr Gly Leu Val Ser Pro Ala Arg Glu Pro Ser
165 170 175
Leu Pro Glu Arg Ala Arg Thr Arg Pro Val Pro Val Pro Leu Ser Leu
180 185 190
Asn Thr Ala Gly Gln Gln Ser Phe Gly Ala Thr Ser Pro Gly Ser Ala
195 200 205
Thr Pro Gly Ser Ser Gly Thr Glu Arg Ala Ala Val Gln Arg Ile Ser
210 215 220
Arg Pro Ser Thr Ser Val Ala Ser Ser Thr Tyr Thr Lys Ser Arg Arg
225 230 235 240
Ser Asp Ser Phe Gly Ser His Arg Glu Lys Arg Pro Val Thr Ala Gly
245 250 255
Ser Thr Thr Ser Gln Val Ser Ser Lys Leu Lys Gly Leu Ile Ser Arg
260 265 270
Gln Thr Asp Ser Ala Thr Phe Leu Val Arg Ser Ser Ser Glu Thr Ser
275 280 285
Arg Ala Ser Ala Val Thr His Asp Ser Val Tyr Asp Asp Thr Ser Gly
290 295 300
Leu Asp Glu Leu Ile Gln Ser Glu Glu Thr Ile His Tyr Thr Leu Thr
305 310 315 320
Pro Lys Thr Val Arg Asp Met Glu Val Trp Ser Thr
325 330

<210> 35497
<211> 156
<212> PRT
<213> A.fumigatus

<400> 35497
Thr Tyr Pro Asp Gly Val Ala Asn Pro Tyr Lys Ser Val Glu Leu Asp
1 5 10 15
Val Glu Ile Gly Ala Asp Ala Arg Asp Trp Ser Ser Val Gln Ala Ala
20 25 30

```
Glu Lys Leu Lys Pro Val Glu Thr Asp Leu Arg Arg Ile Glu Glu Met
        35                  40                  45
Val Ala Glu Ile Val Asn Glu Met Glu Tyr Leu Arg Ala Arg Glu Gln
    50                  55                  60
Lys Leu Arg Asp Thr Asn Glu Ser Thr Asn Glu Arg Val Lys Trp Phe
65                  70                  75                  80
Ala Phe Gly Thr Met Gly Met Leu Val Gly Leu Gly Val Trp Gln Val
                85                  90                  95
Val Tyr Leu Arg Ala Tyr Phe Arg Tyr Val Asp Phe Pro Val Ser Trp
            100                 105                 110
Arg Val Asp Gly Val Val Ala Asn Cys Cys Ser Cys Cys Glu Gln Val
        115                 120                 125
Glu Ala Ser Tyr Leu Arg Ser Ser Arg Val Val Phe Trp Ser Pro Leu
    130                 135                 140
Val Met Trp Thr Arg Leu Ser Trp Leu Ile Leu Arg
145                 150                 155
```

<210> 35498
<211> 107
<212> PRT
<213> A.fumigatus

<400> 35498

```
Thr Arg Arg Gly Ile Asn Asn Val Val Glu Pro Pro Ser Leu Ile Lys
1               5                   10                  15
Tyr Thr Asp Arg Thr Ser His Asn Leu Leu Cys Arg Pro Ile Tyr Ser
            20                  25                  30
Ser Thr Met Gly Ser Ser Pro Gln Ser Ser Thr Arg Ala Leu Leu Gly
        35                  40                  45
Leu Leu Phe Leu Leu Leu Val Gln Leu Ser Ser Ala Leu Lys Phe Asp
    50                  55                  60
Leu His Ala Ser Ser Gly His Asn Glu Arg Cys Ile Arg Asn Phe Val
65                  70                  75                  80
Phe Lys Asp Gln Leu Val Val Val Thr Ala Ile Val Ser Gly Gln Arg
                85                  90                  95
Gly Asp Gly Gln Val Val Asn Met His Val Cys
            100                 105
```

<210> 35499
<211> 68
<212> PRT
<213> A.fumigatus

<400> 35499

```
Glu Ser Thr Tyr Val His Ile His Asn Leu Pro Ile Thr Ser Leu Pro
1               5                   10                  15
Ala His Asn Ser Cys His Asn Asp Gln Leu Val Leu Lys Asp Lys Ile
            20                  25                  30
Pro Tyr Thr Ser Leu Val Val Pro Ala Ala Gly Val Gln Val Glu Phe
        35                  40                  45
Gln Gly Gly Gly Glu Leu Asp Lys Glu Gln Glu Gln Lys Thr Glu Glu
    50                  55                  60
Cys Pro Arg Ala
65
```

<210> 35500

<211> 194
<212> PRT
<213> A.fumigatus

<400> 35500
Thr Arg Pro Thr Thr Leu Arg Ser Leu Gly Pro Pro Lys Ala Gly Asp
1 5 10 15
Tyr Val Ala Ala Lys Phe Thr Glu Asp Gly Asp Trp Tyr Arg Ala Arg
20 25 30
Val Arg Arg Asn Asp Arg Glu Lys Gln Gln Ala Glu Val Val Tyr Ile
35 40 45
Asp Tyr Gly Asn Ser Glu Ile Leu Pro Trp Ser Arg Leu Arg Pro Leu
50 55 60
Ser Gln Pro Gln Phe Ser Val Gln Lys Leu Arg Ala Gln Ala Ser Asp
65 70 75 80
Ala Val Leu Ser Phe Val Gln Phe Pro Val Ser Ala Asp Tyr Leu Gln
85 90 95
Asp Ala Val Ser Tyr Leu Glu Glu Leu Thr Tyr Gly Arg Thr Leu Val
100 105 110
Ala Asn Val Asp Tyr Val Ala Ser Asp Gly Thr Met His Val Thr Leu
115 120 125
Leu Asp Pro Ser Val Ser Lys Ser Leu Asp Gln Ser Ile Asn Ala Glu
130 135 140
Ile Val Arg Glu Gly Leu Ala Met Val Pro Arg Lys Leu Lys Ala Trp
145 150 155 160
Glu Arg Ala Ala Ser Glu Thr Leu Ser Asn Leu Arg Ser Ile Glu Asp
165 170 175
Glu Ala Lys Gln Glu Arg Arg Gly Met Trp Glu Tyr Gly Asp Leu Thr
180 185 190
Glu Asp

<210> 35501
<211> 506
<212> PRT
<213> A.fumigatus

<400> 35501
Val Ala Gly Asn Leu Ala Pro Arg Pro Ala Lys Arg Phe Asn Ala Gly
1 5 10 15
Ala Lys Glu Gln Pro Gly Gly Pro Phe Gly Asp Glu Ala Tyr Gln Phe
20 25 30
Val Glu Ala Arg Phe Leu Gln Arg Lys Val Gln Val Ser Leu Leu Gly
35 40 45
Val Thr Pro Gln Gly Gln Leu Ile Ala Thr Val Leu His Pro Asn Gly
50 55 60
Asn Ile Ala Lys Phe Leu Leu Glu Ala Gly Leu Ala Arg Cys Phe Asp
65 70 75 80
His His Ser Thr Leu Leu Gly Pro Glu Met Ala Ala Phe Arg Arg Ser
85 90 95
Glu Lys Glu Ala Lys Asp Asn Arg Lys Gly Met Phe Ala Gly Leu Val
100 105 110
Ala Lys Gly Pro Ala Gly Gly Ala Ala Gly Gln Asp Tyr Ile Val Ser
115 120 125
Arg Val Leu Asn Ala Asp Thr Leu Ile Leu Arg Asn Lys Ala Gly Glu
130 135 140

```
Glu Lys Lys Ile Ser Leu Ser Ser Val Arg Gln Pro Lys Pro Ser Asp
145                 150                 155                 160
Pro Lys Gln Ala Pro Phe Gln Ala Asp Ala Lys Glu Phe Val Arg Lys
                165                 170                 175
Arg Leu Ile Gly Lys His Val Lys Val Thr Ile Asn Gly Lys Lys Pro
            180                 185                 190
Ala Thr Glu Gly Tyr Glu Glu Arg Asp Val Ala Thr Val Met Gln Gly
        195                 200                 205
Asn Thr Asn Val Ala Leu Ser Leu Val Glu Ala Gly Tyr Ala Ser Val
    210                 215                 220
Ile Arg His Arg Gln Asp Asp Glu Asp Arg Ser Pro Asp Tyr Asp Ser
225                 230                 235                 240
Leu Leu Ile Ala Glu Ala Glu Ala Gln Lys Asp Gly Lys Gly Met Trp
                245                 250                 255
Ser Pro Lys Pro Ser Lys Pro Lys Gln Tyr Gln Asp Tyr Ser Glu Ser
            260                 265                 270
Leu Gln Lys Ala Lys Met Glu Val Ser Ile Leu Gln Arg Gln Lys Arg
        275                 280                 285
Val Pro Ala Ile Val Asp Phe Val Lys Ser Gly Ser Arg Phe Thr Val
    290                 295                 300
Leu Val Pro Arg Glu Asn Ala Lys Leu Thr Leu Val Leu Ser Gly Ile
305                 310                 315                 320
Arg Ala Pro Arg Ser Ala Arg Asn Pro Gly Glu Ala Gly Glu Pro Phe
                325                 330                 335
Gly Gln Glu Ala His Asp Leu Ala Asn Lys Arg Cys Met Gln Arg Asp
            340                 345                 350
Val Glu Ile Asp Ile Glu Thr Ile Asp Lys Val Gly Gly Phe Ile Gly
        355                 360                 365
Thr Leu Tyr Val Asn Lys Glu Asp Phe Ala Lys Val Leu Leu Glu Glu
    370                 375                 380
Gly Leu Ala Thr Val His Thr Tyr Ser Ala Glu Gln Ser Gly His Ala
385                 390                 395                 400
Thr Glu Tyr Leu Ala Ala Glu Gln Lys Ala Lys Glu Ala Arg Lys Gly
                405                 410                 415
Leu Trp His Asp Trp Asp Pro Ser Lys Glu Ala Glu Glu Ala Glu Glu
            420                 425                 430
Glu Ala Ala Asn Gly Ser Asn Gly Ala Glu Gly Glu Thr Thr Glu Arg
        435                 440                 445
Arg Lys Asp Tyr Arg Asp Val Met Val Thr Tyr Val Asp Pro Ala Ser
    450                 455                 460
Gly Lys Ile Lys Ile Gln Gln Ile Gly Thr Gly Thr Ser Ala Leu Thr
465                 470                 475                 480
Glu Leu Met Ser Ala Phe Arg Ser Phe His Leu Asn Lys Ala Asn Asp
                485                 490                 495
Thr Pro Leu Pro Trp Pro Thr Gln Gly Arg
            500                 505
```

<210> 35502
<211> 93
<212> PRT
<213> A.fumigatus

<400> 35502

```
Phe Phe Leu Glu Ser Asp Val His Tyr Val Asp Asp Tyr Leu Phe Thr
1               5                   10                  15
Ser Val Pro Lys Val Thr Asn Tyr Tyr Phe Thr Asp Ile Pro Thr Thr
```

```
            20                  25                  30
Gln Lys Asn Gln Gly Tyr Tyr Tyr Gln Arg Gly Ala Phe Ser Gly Ile
        35                  40                  45
Leu Leu Cys His Leu Ile Arg Leu Ala Ser Thr Lys Ser Asn Gln Gln
    50                  55                  60
Pro Leu Asp Gly Gln Thr Thr Phe Ser Asp Arg Phe Pro Pro Ile Phe
65                  70                  75                  80
Ser Ile Ala Asn Leu Arg Tyr Ser Pro Tyr Thr Thr Glu
                85                  90
```

<210> 35503
<211> 324
<212> PRT
<213> A.fumigatus

<400> 35503

```
Ala Leu Ser Asn Ser His Cys Pro Ser Thr Pro Leu Ala Gln Leu Thr
1               5                   10                  15
Leu Thr His Cys Ala Phe Cys Gly Thr Ala Thr Cys Pro His Asp Cys
            20                  25                  30
Met Thr Val Ala Leu Asn Arg Pro Phe Val Ala Asp Leu Arg Gln Pro
        35                  40                  45
Gly Val Thr Gly Arg Arg Cys Gly Pro Thr Ile Val Glu Met Ile Gly
    50                  55                  60
Ala Asp Asp Lys Pro Gln Ala Leu Pro Pro Tyr Ser Gly Pro Pro Pro
65                  70                  75                  80
Pro Gln Met His His Arg Ile Pro Pro Glu Ala Ala His Gly Leu Val
                85                  90                  95
Asn Ala Pro Gly Ala Tyr Asp Gln Pro Trp Arg Pro Tyr Pro Pro Ser
            100                 105                 110
Phe Glu His His His Ala Glu Gln Arg Arg Ala Ser Asn Pro Pro Gln
        115                 120                 125
Pro Ser Leu Pro Pro His Gly Tyr Pro Val Ile Pro Asn Arg Glu Leu
    130                 135                 140
Pro Gln Leu Pro Pro Glu Gly Pro Tyr Gly Arg Pro Asn Ser Leu Pro
145                 150                 155                 160
Ala Pro Ser Leu Thr Pro Thr Glu Ser His Ala Pro Thr Phe Arg Pro
                165                 170                 175
Met Asn Gly Ala Ser His Asp Ser Ile Pro His Ser Ala Pro Thr His
            180                 185                 190
Pro Gly Pro Pro Pro His Ser Ala Pro Ser Glu Phe Arg Pro Arg Met
        195                 200                 205
Thr Tyr Pro Pro Gln Glu Gln Ser Ser Asn Gly Glu Thr Pro Pro Ala
    210                 215                 220
Pro Pro Pro Ala Pro His Thr Met Pro Pro Ala Gln Phe Pro Thr Pro
225                 230                 235                 240
Ile Pro His Ile Ser His Thr Pro Ala Pro Tyr Glu Pro Asn Tyr Tyr
                245                 250                 255
Gln Asn Gln Ala Phe Gly Met Arg Gln Arg Lys Ala Ala Arg Ala Gln
            260                 265                 270
Gln Val Ile Thr Val Phe Phe Ser Asn Trp Arg Arg Gly Asn Lys Leu
        275                 280                 285
Thr Phe Ile Phe Phe Pro Leu Ser Lys Arg Pro Ala Ile Ser Val Glu
    290                 295                 300
Gln Glu Lys Pro Ser Val Met Lys Gly Gly Leu Pro Ala Ala Ile Ala
305                 310                 315                 320
```

Arg Arg Thr Ile

<210> 35504
<211> 175
<212> PRT
<213> A.fumigatus

<400> 35504
Leu Leu Ser Ser Val Gly Trp Leu Leu Asp Thr Asp His Gln Ala Arg
1 5 10 15
Gln Glu Lys Ala Thr Gln Gln Ile Leu Asp Lys Ile Gln Tyr Leu Glu
20 25 30
Asp Lys Leu Asp Glu Arg Leu Thr His Phe Gln Thr Val Gln Met Glu
35 40 45
His Gly Met Thr Leu Ser Lys Ile Ser Asn Glu Val Gly Leu Lys Glu
50 55 60
Pro Lys Ile Leu Ala Val Lys Asp Ala Thr Arg Ser Met Pro Pro Lys
65 70 75 80
Gln Thr Leu Asp Arg Leu Leu Lys Pro Ser Ala Thr Asp Ile Leu Leu
85 90 95
Glu Ser Glu Ser Lys Ser Gly Asp Gly Met Gln Pro Leu Asp Ser Asn
100 105 110
Asp Pro Pro Gly Gln Ser Tyr Val Glu Arg Glu Asp Gly Glu Leu Ser
115 120 125
Ile Pro Val Glu His Thr Thr Ala Ala His Lys Leu Leu Ser Trp Pro
130 135 140
Ser Ile Arg Asn Leu Leu Tyr Pro Arg Glu Tyr Asp Glu Asp Tyr Val
145 150 155 160
Met Lys Arg Leu His His Gly Ala Gly Arg Gly Ser Ala Met Cys
165 170 175

<210> 35505
<211> 80
<212> PRT
<213> A.fumigatus

<400> 35505
Met Arg Arg Glu His Thr Ile Ser His Gly Ala Pro Thr His Arg Pro
1 5 10 15
Ser Ser Ile Ile Thr Pro Ser Ser Asp Gly Pro Pro Thr Pro Leu Asn
20 25 30
Leu Pro Cys Pro Leu Thr Gly Ile Leu Ser Tyr Arg Ile Glu Ser Cys
35 40 45
Leu Ser Tyr Leu Pro Lys Asp Arg Met Val Gly Gln Ile Val Cys Leu
50 55 60
Leu Leu Val Ser Pro Arg Gln Ser Arg Met Arg Arg Leu Phe Val Leu
65 70 75 80

<210> 35506
<211> 219
<212> PRT
<213> A.fumigatus

<400> 35506
Asn Gly Gly Gly Ile Ile Thr Arg Leu Met Thr Asp Asp Glu Asn Gly

```
1               5                   10                  15
Glu Ser Leu Gly Gly Gln Val Phe Ile Ser Arg Glu His Tyr Ile Arg
            20                  25                  30
His Val Glu Asn Leu Leu Arg Arg Thr Arg Gly Lys Glu Leu Pro Gly
        35                  40                  45
Thr Phe Asn Ser Thr Ile Ile Asn Asp Leu Phe Leu Glu Gln Ser Lys
    50                  55                  60
Pro Trp Glu Lys Leu Thr Ser Glu His Val Arg Glu Val Trp Glu Ala
65                  70                  75                  80
Ala Lys Ala Phe Val Lys Ile Ala Val Thr Glu Val Thr Asp Met Ser
                85                  90                  95
Thr Ser Ser Ala Ile Leu Met Glu Val Phe Asp Pro Ser Leu Asp Asn
            100                 105                 110
Ile Leu Lys Ser Leu Glu His Lys Thr Gly Glu Met Phe Arg Ala Tyr
        115                 120                 125
Arg Glu Gly His Pro Ile Thr Tyr Asn His Ser Phe Thr Asp Ser Leu
    130                 135                 140
Gln Gln Thr Arg Gln Asp Ile Leu Met Pro Arg Leu Ser Tyr Ala Ile
145                 150                 155                 160
Arg Arg Phe Phe Gln Val Pro Gln Leu Thr Ser Ser Gln Cys Leu Asp
                165                 170                 175
Asp Thr Phe Asp Leu Leu His Leu Arg Asp Ser Leu Met Glu Ser Leu
            180                 185                 190
Lys Ala Asp Thr Ala Arg Phe Ala Ala Leu Gln Ala Leu Asp Cys Met
        195                 200                 205
Arg Ala Tyr Tyr Glu Val Arg Arg Leu Ala Trp
    210                 215

<210> 35507
<211> 64
<212> PRT
<213> A.fumigatus

<400> 35507
Glu Ile Glu Ser Lys Thr Arg Gly Met Tyr His Thr Lys Gly Gly Thr
1               5                   10                  15
Ile Asn Ser Ala Cys Asn Ile His Trp Pro Lys Leu Ile Glu His His
            20                  25                  30
Arg Thr Arg Gln Ala Asn Thr Arg Ile Cys Leu Leu Ser His Glu Tyr
        35                  40                  45
Gly Pro Leu Met Pro Gly Ile Gln Ser Phe Gln Val Asp Ala Val Val
    50                  55                  60

<210> 35508
<211> 160
<212> PRT
<213> A.fumigatus

<400> 35508
Ala Met Arg Phe Ala Tyr Ile Glu Ser Leu Pro Ser Val Leu Ser Asn
1               5                   10                  15
Pro Ser His Phe Leu Thr Leu Ser Cys Ser Thr Leu Leu Leu Leu Leu
            20                  25                  30
Pro Leu Val Ser Ile Lys Leu Tyr Lys Trp Leu Asp Val Leu Leu Ser
        35                  40                  45
Val Thr Ile Ser Ile Ser Met Cys Val Leu Gly Val Arg Leu Val Lys
```

```
    50                  55                  60
Thr Leu Gly Ser Met Leu Leu Met Ser Tyr Ser Gly Pro Gly Val Ser
65                  70                  75                  80
Asp Val Ile Lys Asp Ile Glu Ala Asp Pro Ser Val Phe Gly Ile Asp
                85                  90                  95
Asp Ala Arg Phe Trp Gln Val His Tyr Gly Leu Cys Met Ala Asn Leu
            100                 105                 110
Lys Ile Arg Val Ser Gly Ser Glu Glu Asn Leu Val Arg Leu Arg Glu
        115                 120                 125
Arg Ile Ser Ser Leu Ile Lys Asn Arg Leu Gly Gly Gly Tyr Gly Thr
    130                 135                 140
Gly Gly Gln Lys Trp Glu Val Ser Leu Gln Phe Thr Val Asp Asn Ser
145                 150                 155                 160
```

<210> 35509
<211> 85
<212> PRT
<213> A.fumigatus

```
<400> 35509
Tyr Leu Pro Pro Leu Gly Ile Ala Val Arg Leu Trp Gln Leu Gly Ile
1               5                   10                  15
Glu Met Arg Pro Ile Leu Ala Lys Glu Ser Leu Trp Val Tyr Pro Leu
            20                  25                  30
Phe Ala Gly Val Gly Gly Ser Phe Gly Tyr Trp Leu Gln Gly Val Glu
        35                  40                  45
Asp Arg Gln Leu Lys Ile Leu Ala Gln Arg Arg Glu Ala Ile Leu Glu
    50                  55                  60
Lys Arg Arg Arg Arg Asp Glu Arg Glu Gly Thr Leu Glu Ala Gly Ala
65                  70                  75                  80
Leu Ala Ala Thr Ser
                85
```

<210> 35510
<211> 334
<212> PRT
<213> A.fumigatus

```
<400> 35510
Gly Leu Ala Leu Ala Thr Pro Leu Tyr Pro Met Ala Ala Met Leu Thr
1               5                   10                  15
Asn Val Asn Ser Trp Thr Gly Val Arg Glu Met Gly Ser Val Val Asn
            20                  25                  30
Cys Ala Leu Thr Leu Phe Asn Ser Lys Lys Asp Ser Lys Ala Gln Phe
        35                  40                  45
Ala Phe Glu Ala Lys Glu Pro Glu Lys Leu Thr Ala Ala Val Thr Glu
    50                  55                  60
Val Glu Gly Pro Lys Lys Lys Phe Asn Lys Leu Pro Glu Ile Phe Asp
65                  70                  75                  80
Lys Leu Arg Leu Arg Ser Pro Lys Thr Val Pro Gly Leu Asn Pro Glu
                85                  90                  95
Cys Phe Met Pro Gly Lys Tyr Ser Tyr Asp Phe Glu Met Ile Leu His
            100                 105                 110
Ser Gly Leu Pro Glu Ser Thr Phe Ile Glu Gly Thr Ile Val Arg Tyr
        115                 120                 125
His Leu Lys Ala Ser Val Thr Cys His Ser Met Leu Arg Gly Met Tyr
```

```
    130                 135                 140
Lys Ser Ile Glu Val Asp Ala Val Arg Cys Pro Thr Asn Ala Tyr Val
145                 150                 155                 160
Glu Asp Ser Val Gly Gly Asn Trp Ala Leu His Val Asp Arg Val Leu
                165                 170                 175
His Ala Asp Ile His Leu Arg Arg Lys Gly Ile Ala Leu Glu Asp His
            180                 185                 190
Leu Pro Gly Ser Phe Lys Tyr Lys Gly Tyr Asn Asn Thr Lys Phe Arg
        195                 200                 205
Lys Leu Gln Val Phe Leu Val Glu Asp Val Arg Tyr Phe Met Arg Asp
    210                 215                 220
Gly Thr Gln Ala Gly Lys Ala Pro Tyr Lys Lys Leu Leu Ile Tyr Glu
225                 230                 235                 240
Asn Ser Gly His Arg Pro Asp Val His Pro Gln Gln Glu Glu Val Ser
                245                 250                 255
Glu Glu Glu Leu Asn Ile Phe Glu Ala Thr Ser Thr Arg Val Pro Leu
            260                 265                 270
Ser Ser Thr Asn Ser Asp Thr Pro Asp Gly Asp Ala Phe Pro Pro Ser
        275                 280                 285
Glu Thr Met Gly Phe Asp Phe Glu Leu Asp Met Pro Lys Cys Ile Ser
    290                 295                 300
His Arg Gly Ala Pro Asp Phe Arg Tyr Met His Tyr Asp Thr Lys Ile
305                 310                 315                 320
Arg Ser Val Met Val Ser His Phe Phe Gln Val Arg Leu Pro
                325                 330

<210> 35511
<211> 89
<212> PRT
<213> A.fumigatus

<400> 35511
Asp Phe Glu Asp Ser Trp Leu Glu Gly Thr Ser Arg Ala His Ile Thr
1               5                   10                  15
Ser Gly Phe Ile Leu Phe Phe His Pro Phe Asp Ser Lys Met Glu Ser
            20                  25                  30
Ala Ile Asp Met Tyr Trp Phe His Asn Asp Thr Ser Thr Val Val Thr
        35                  40                  45
Gln Ile Leu Arg Asp Leu Asp Glu Lys Arg Lys Leu Ala Ile Val Leu
    50                  55                  60
Glu Leu Thr Glu Pro Ala Phe Ser Phe Pro Arg Pro Arg Ala Thr Asp
65                  70                  75                  80
Leu Leu Cys Phe Gly Ala Ala Ala Arg
                85

<210> 35512
<211> 98
<212> PRT
<213> A.fumigatus

<400> 35512
Trp Ile Asn Thr Phe Arg Arg Arg Arg Val Lys Phe Phe Arg Ser Thr
1               5                   10                  15
Lys Val Pro Ile His Phe Leu Arg Leu Phe Tyr Pro Pro Leu Ser Val
            20                  25                  30
Ile Val His Gly Gly Leu Val Ala Val Tyr Ile Val Ser Ala Arg Tyr
```

```
        35                  40                  45
Gln Ala Gly Pro Asp Met Ser Asp Pro Ala His Pro Gln Pro Gly Ala
    50                  55                  60
Pro Trp Tyr Ile Thr Lys Lys Cys Thr Val Ala Ala Asn Lys Asn Asn
65                  70                  75                  80
Ile Asn Tyr Cys Arg Gln Ser Lys Ala Leu Phe Ala Phe Thr Ile Ile
                85                  90                  95
Ile Met
```

<210> 35513
<211> 399
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (282)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35513

```
Ser Leu Arg Pro Ser Trp Phe Arg Ala Thr Met Glu Ile Ala Pro Pro
1               5                   10                  15
Glu Ser Asp Thr Val Arg Leu Asn Lys Thr Tyr Ala Leu Gln His Glu
            20                  25                  30
Arg Asp Thr Gln Asp Thr Met Asp Val Gln Thr Ala Pro Arg Ser Ile
        35                  40                  45
Pro Ser Thr Glu Ser Ser Asn Asn Tyr Ser Asn Ala Ile Leu Gln Asp
    50                  55                  60
Ala Glu Pro Gln Pro Ser Leu Asp Ala Thr Thr Glu Gln Val Trp Val
65                  70                  75                  80
Gln Arg Ala Leu Ala Glu Met Thr Asp Met Leu Leu Leu Leu Arg Arg
                85                  90                  95
Asp Gly Thr Val Leu Tyr Ala Ser Pro Ser Cys Lys Trp Ile Thr Gly
            100                 105                 110
Tyr Glu Ser Lys Gln Ile Glu Arg Asp Ala Leu Ser Arg Phe Ile His
        115                 120                 125
Asp Asp Asp Lys Ser Val Phe Thr Arg Gln Leu Glu Glu Cys Ile Ala
    130                 135                 140
Thr Ala Arg Pro Leu Arg Cys Gln Phe Arg Phe Tyr Lys Pro Asn Asn
145                 150                 155                 160
Thr Phe Cys Val Ile Asp Ala His Gly His Pro His Ile Lys Asn Glu
                165                 170                 175
Asn Asn Thr Cys Asn Gly Val Phe Leu Val Cys Arg Pro Tyr Pro Thr
            180                 185                 190
Lys Ser Ser Ala Leu Leu Asp Ser Phe Leu Glu His Lys Ile Glu Asn
        195                 200                 205
Ile Arg Leu Asn Gln Arg Ile Ser Gln Leu Arg Ala Glu Glu Glu Glu
    210                 215                 220
Asp Thr Asn Ala Ser Arg Gln Ala Tyr Leu Lys Gln Ile Ser Gly Pro
225                 230                 235                 240
Phe Ala Gln Arg Gln Asn Cys Leu Pro Phe Gly Thr Tyr Asp Ala Thr
                245                 250                 255
Gly Ser Gly Glu Glu Asn Glu Ser Ser Asp Thr Val Asn Thr Asp Asp
            260                 265                 270
Gly Glu Pro Gly Ser Leu Leu Glu Ser Xaa Met Arg Gln Ala Gln Asp
```

```
        275                 280                 285
Met Thr His Ile Asp Gly Ile Glu Met Met Thr Gly Leu Arg Tyr Arg
    290                 295                 300
Glu Gly Glu Arg Ser His Gly Leu Ser Thr Gly Met Arg Gln Gly Cys
305                 310                 315                 320
Leu Val Asn Cys Asp Ile Asp Thr Ala Thr Ile Glu Gln Gln Val Gln
                325                 330                 335
Ser Ala Gln Glu Ile Asp Arg Arg Lys Arg Leu Lys Gly Glu Tyr Leu
            340                 345                 350
Cys Thr Asp Cys Gly Thr Ser Asp Ser Pro Glu Trp Arg Lys Gly Pro
        355                 360                 365
Asp Gly Pro Lys Thr Leu Cys Asn Ala Cys Gly Cys Lys Ser Pro Arg
    370                 375                 380
Arg Tyr Pro Cys Cys Cys Ser Thr Glu Thr Asp Cys Phe Pro Gln
385                 390                 395

<210> 35514
<211> 62
<212> PRT
<213> A.fumigatus

<400> 35514
Ala Gln Leu Lys Ile Ile Gly Thr Ile Leu Lys Glu Leu Asn Phe Val
1               5                   10                  15
Ser Asn Tyr Leu Ser Tyr Thr Ile Asn Glu Gly Asp Phe Ser Val Ile
            20                  25                  30
Ala Thr Pro Gly Asn Ser Asp Thr Ile His Val Val Val Lys Lys Leu
        35                  40                  45
Phe Ile Arg Gln Ile Leu Ser Ser His Lys Gly Ser Ser Ala
    50                  55                  60

<210> 35515
<211> 898
<212> PRT
<213> A.fumigatus

<400> 35515
Arg Pro Lys Ile Asp His Ala Ser Lys Leu Val Ser Gln Leu Ser Pro
1               5                   10                  15
Tyr Leu Pro Glu Ser His Ile Gln Cys Phe Arg Pro Ser Pro Phe Leu
            20                  25                  30
Tyr Asp Leu Lys Pro Ser Pro Trp Glu Lys Leu Thr Tyr Lys Leu Thr
        35                  40                  45
Ser Ser Leu Leu Ser Leu Gly Ser Asn Phe Pro Pro Leu Arg Ser Thr
    50                  55                  60
Thr Leu Ser Ala Ile Asn Glu Tyr Leu Tyr Ser Cys Ala Asp Ala Ile
65                  70                  75                  80
Asp Ala Ile Thr Pro Leu Gln Arg Tyr Asp Ser Ala Gly Asp Lys Phe
                85                  90                  95
Gly Ser Val Gln Glu His Lys Arg Ile Leu Ser Leu Ala Val Ser Leu
            100                 105                 110
Val Gly Phe Leu Glu Ala Ser Ala Gln Phe Pro Ser Leu Trp Ser Ala
        115                 120                 125
Ser Glu Lys Leu Gln Ile Val Glu His Val Arg Ser Met Leu Ser Glu
    130                 135                 140
Ser Phe Met Val Ala Ile Glu Thr Ala Ser Ser Thr Val Arg Asn Ala
```

```
145                 150                 155                 160
Ser Leu Ala Asp Pro Thr Leu Arg Asp Trp Arg Arg Tyr Thr Arg Gln
                165                 170                 175
Tyr Ala Ala Asn Arg Arg Pro Leu Gly Ala Met Leu Leu Gln Gln Gly
            180                 185                 190
Phe Met Arg Phe Val Lys Ser Cys Ala Thr Ser Leu Val Gly Ala Gln
        195                 200                 205
Asn Leu Ser Asp Glu Glu Leu Leu Asp Asp Tyr Met Asn Gly Val Gly
    210                 215                 220
Ile Ala Arg Ser Ser Asp Asp Ala Glu Ile Thr Leu Ile Asp Arg Ile
225                 230                 235                 240
Thr Glu Ile Ile Ala Asp Glu Ile Gln Leu Leu Glu Asp Gly Ser Asp
                245                 250                 255
Tyr Leu Gln Leu Gly Ser Pro Leu Gln Lys Gln Leu Thr Phe Ser Val
            260                 265                 270
Lys Ala Phe Ala Leu Ile Gly Tyr Leu Asn Cys Val Ile Leu Ser Gly
        275                 280                 285
Asn Ala Ala Asn Ser Gly Ala Phe Leu Ser Trp Leu Glu Asp Thr Leu
    290                 295                 300
Ala Asp Pro Asn Gln Met Ala Ser Leu Glu Leu Ala Thr Ala Thr Leu
305                 310                 315                 320
Lys Ser Ile Ala Ile Ile Ser Arg Met Ser Leu Ala Ser Ala Ser Ser
                325                 330                 335
Gly Ser Arg Ser Leu Leu Arg Phe Ile Ile Glu Gly Cys Val Leu Gly
            340                 345                 350
Glu Tyr Thr Gly Ser Val Ala Gly Lys Cys Leu Ala Gln Val Leu Gly
        355                 360                 365
Ile Leu Ser Gln Asp Ala Val Ile Thr Thr Leu Tyr Ser Leu Gly Asn
    370                 375                 380
Ala Leu Ser Pro Gly Ser Gly Ser Asp Lys Tyr Tyr His Ser Gln Leu
385                 390                 395                 400
Leu Asn Glu Asn Ala Arg Gln Ala Asp Ser Val Ser Ser Val Pro Pro
                405                 410                 415
Pro Ile Gly Ile Gly Ser Thr Val Ser Ile Ser Ala Ile Gly Asp His
            420                 425                 430
Asp Asn Ala Thr Cys Arg Asn Ile Leu Arg Ala Ile Val Thr Ile Ala
        435                 440                 445
Val Ser Ser Asn Asp Glu Lys Ile Ser Ala Leu Ala Gln Ser Met Leu
    450                 455                 460
Leu Gln Lys Ile Gly Lys Val Asn Ile Ala Val Asp Ala Leu Ile Ile
465                 470                 475                 480
Arg Glu Thr Ala Ser Leu Ser Leu Ser Thr Gly Gln Ala Asp Phe Gln
                485                 490                 495
Leu Leu Leu Lys Phe Tyr Asp Arg Ala Tyr Gln Asp Ser Ile Ala Arg
            500                 505                 510
Asn Phe Ser Asp Val Thr Asn Ala Val Lys Gly Ala Met Ala Tyr Ile
        515                 520                 525
Ser Leu Thr Leu Arg Arg Asp Ser Pro Leu Phe Arg Val Tyr Leu Val
    530                 535                 540
His Leu Leu Glu Cys Ile Val Asn Lys Gly Asp Ala Val Ser Glu Ser
545                 550                 555                 560
Glu Arg Gln Lys Glu Val Val Leu Ala Pro Glu Ala Ile Ser Phe Leu
                565                 570                 575
Leu Arg Pro Leu Ala Leu Leu Ile Ser Ser Asp Glu Gly Gly Ala Glu
            580                 585                 590
Thr Gln Gln Thr Asp Val Ile Tyr Asp Glu Asp Val Thr Ala Leu Phe
```

595 600 605
Arg Asp Ala Trp Phe Asn Ile Ser Val His Gly Ile Ser Thr Gln Ser
610 615 620
Ala Val Thr Arg Ser His Ile Arg Glu Leu Arg Leu Leu Ala Lys Asn
625 630 635 640
Ser Pro Pro Leu Ile Ala Glu Ser Arg Leu Glu Met Leu Glu Ser Asp
645 650 655
Val Glu Leu Asn Thr Ile Leu Arg Arg Gly Met Ser Pro Gln Arg Leu
660 665 670
Ile Glu Leu Lys Arg Ile Leu Met Ala Glu Leu Pro Asp Cys Glu Ser
675 680 685
Gly Ile Lys His Leu Asn Tyr Pro Lys Val Val Phe Leu Asn Ala Ser
690 695 700
Leu Leu Val Glu Ser Leu Arg Ala Ser Ser Gly Asn Cys Thr Lys Val
705 710 715 720
Leu Asn Tyr Phe Arg Asp Pro Ala Leu Thr Thr Ala Asp Met Ala Ser
725 730 735
Cys Met Ser Ser Ile Ala Asp Lys Val Val Ala Asp Tyr Leu Ser Leu
740 745 750
Thr Leu Ser Ala Asp Asp Glu Asn Phe Ser Val Pro Tyr Leu Ser Lys
755 760 765
Glu Leu Ala Gln Phe Phe Met Ala Cys Cys His Arg Ile Glu Arg Val
770 775 780
Gln Ser Val Ala Met Leu Cys Ala Asp Lys Ile Ile Arg Glu Cys Pro
785 790 795 800
Ser Ala Leu Cys Asp Lys His Ser Leu Phe Ala Leu Leu Glu Leu Leu
805 810 815
Thr Val Met Trp Leu Ser Cys Leu Glu Glu Glu Leu Asp Glu Phe Glu
820 825 830
Trp Lys Ala Ser Tyr Ala Ser Pro Met Gly Ile Val Lys Val Asp Leu
835 840 845
Ala Asp Asp Tyr Asn Ala Arg Lys Arg Thr Leu Asn Thr Leu Leu Glu
850 855 860
Arg Ala Lys Ala Trp Val Ala Ala Val Ile Asp Ile Ala Pro Leu Asp
865 870 875 880
Val Lys Gly Leu Leu Gln Ala Ser Thr Phe Thr Lys Ala Phe Gly Ile
885 890 895
Asp Cys

<210> 35516
<211> 75
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (57)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35516
Val Val Ser Arg Gly Gln Arg Arg Thr Glu Ser Val Phe Leu Val Tyr
1 5 10 15
Lys Arg Asn Val Tyr Trp Asp Val Val Leu Trp Trp Phe Asp Leu Arg
20 25 30
Val Val Val Glu Ala Gly Gly Leu Ala Ala Gly Lys Ile Glu Glu Gly

```
        35                  40                  45
Glu Gly Cys Ala Glu Ala Ala Val Xaa Gly Ala Cys Tyr Glu Asp Ala
    50                  55                  60
Glu Ala Thr Arg Glu Gly Asp Glu Val Phe Val
65                  70                  75
```

<210> 35517
<211> 165
<212> PRT
<213> A.fumigatus

<400> 35517

```
Pro Gly Ser Lys Arg Ala Met Lys Pro Ser Ser Met Arg Arg Val Thr
1               5                   10                  15
Val Pro Ser Pro Gly Asp Ser Lys Thr Ser Leu Ser Glu Val Ser Thr
            20                  25                  30
Phe Leu Ser Pro Thr Ala Gln Lys Ser Asn Leu Thr His Thr Gly Gly
        35                  40                  45
Glu Asn Ile Tyr Pro Leu Glu Ile Glu Glu Arg Leu Ala Ala His Pro
    50                  55                  60
Ala Ile Glu Val Ala Ser Val Ile Gly Ile Pro Asp Gln Lys Tyr Gly
65                  70                  75                  80
Glu Val Val Gly Ala Phe Leu Ala Leu Ala Ala Asp Val Ser Ala Arg
                85                  90                  95
Pro Ser Asp Glu Glu Leu Arg Ala Trp Thr Arg Glu Thr Leu Gly Arg
            100                 105                 110
His Lys Ala Pro Gln Tyr Phe Phe Val Phe Gly Glu Glu Gly Val Asp
        115                 120                 125
Arg Thr Ile Pro Val Thr Gly Ser Gly Lys Val Arg Lys Val Asp Leu
    130                 135                 140
Arg Lys Ile Ala Ala Ser Val Leu Glu Arg Arg Leu Ala Lys Thr Ala
145                 150                 155                 160
Ala Ile Lys Glu Lys
                165
```

<210> 35518
<211> 110
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (48)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35518

```
Thr Glu Ser Thr Ala Phe Val His Leu Pro His Ala Pro Pro Tyr Pro
1               5                   10                  15
Ser Ile Cys Ser Gln Arg Ser Gln Lys Asn Met Pro Ser Asn Glu His
            20                  25                  30
Leu Val Ser Leu Ala Arg Arg Phe Arg Val Leu Ile Ala Gly Ala Xaa
        35                  40                  45
Tyr Ser Gly Leu Ser Ala Ala Leu Thr Leu Leu Asp Leu Ser Arg Gly
    50                  55                  60
Gln Pro Ser Arg Phe Asn Tyr Asp Thr Glu Ile Lys Pro Pro Gln His
65                  70                  75                  80
```

```
His Ile Pro Val Asp Ile Thr Leu Val Asp Glu Lys Asp Gly Phe Cys
                85                  90                  95
Thr Pro Leu Pro Ser Thr Tyr Asn Leu Ser Ala Leu Thr Arg
            100                 105                 110

<210> 35519
<211> 130
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (119)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35519
Arg Arg Leu Gln Phe Pro Ser Thr Val Ala Asn Ala Asn Tyr His Phe
1               5                  10                  15
Ala Val Gly Asp Leu Ala Ala Trp Ser Gly Ile Lys Arg Cys Gly Ala
            20                  25                  30
Ala Met His Met Gly His Tyr Ala Gly Tyr Asn Ile His Gln Leu Met
        35                  40                  45
Leu Ala Glu Cys Ile Ala Ser Lys Pro Val Phe Gln Glu Leu Gln Glu
    50                  55                  60
Ile Pro Pro Met Ile Gly Leu Cys Leu Gly Lys Thr Ala Val Ser Tyr
65                  70                  75                  80
His Pro Val Asp Gly Val Lys Asp Gly Glu Asp Ile Leu Ala Ser Met
                85                  90                  95
Phe Gly Asp Asp Met Ala Ser Lys Val Cys Phe Pro Pro Ala Cys Gln
            100                 105                 110
Gly Leu Cys Leu Cys Lys Xaa Thr Cys Cys Trp Asn Tyr Met Pro Ala
        115                 120                 125
Val Gly
    130

<210> 35520
<211> 257
<212> PRT
<213> A.fumigatus

<400> 35520
Ser Glu Val Thr Glu Glu Arg Val Gln Glu Gln Arg Val Glu Ser Arg
1               5                  10                  15
Gly Gly Arg Gly Glu Asp Gly Thr Arg Arg Gly Ala Arg Pro Asn Arg
            20                  25                  30
Ser Val Pro Arg Arg Arg Lys Lys Trp Asp Cys Ser Glu Val Gln Glu
        35                  40                  45
Gly Ser Ser Ser Ala Gly Arg Leu Val Ala Gly Arg Leu Met Asn Arg
    50                  55                  60
Arg Gln Glu Glu Val Asn Val Pro Glu Asp Pro Arg Gln Phe Arg Asn
65                  70                  75                  80
Ala Tyr Pro Gly Ser Val Arg Gly Cys Ala Val Ala Asn Glu Leu Gln
                85                  90                  95
Ala Ser Pro Lys Pro His Pro Leu Val Ser Thr Arg Leu Thr Thr Asp
            100                 105                 110
Ser Ile Glu Arg Leu Leu Thr Thr Val Gly Lys Val Met Leu His Ala
```

```
        115                 120                 125
Lys Ala Lys Ile Ile Asp Thr Gln Gly His Ile Val Pro Ile Gly Gln
    130                 135                 140
Arg Gly Glu Leu Cys Ile Ala Gly Tyr Gln Leu Thr Lys Gly Tyr Trp
145                 150                 155                 160
Asn Asn Pro Glu Lys Thr Ala Glu Ala Leu Ile Thr Asp Ser Asp Gly
                165                 170                 175
Val Thr Trp Leu Lys Thr Gly Asp Glu Ala Ile Phe Asp Glu Glu Gly
            180                 185                 190
Tyr Cys Thr Ile Thr Gly Arg Phe Lys Asp Ile Ile Ile Arg Gly Ile
        195                 200                 205
His Phe Ser Leu Pro Asp Arg Thr Lys Ile Lys Ser Asn Pro His Arg
    210                 215                 220
Arg Arg Lys Tyr Leu Pro Ser Arg Asn Arg Arg Ala Thr Gly Cys Thr
225                 230                 235                 240
Pro Ser His Arg Gly Ser Leu Arg Asn Arg His Pro Arg Pro Glu Val
                245                 250                 255
Arg
```

<210> 35521
<211> 436
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (435)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35521

```
Asn Ala Gly Cys Arg Thr Cys Arg Ile Arg Lys Val Lys Cys Asp Glu
1               5                   10                  15
Glu Arg Ile Ile Val Asp Ser Lys Lys Glu Pro Gln Cys Arg Arg Cys
            20                  25                  30
Ser Val Ala Arg Ile Ser Cys Glu Trp Lys Gly Gly Pro Ile Pro Arg
        35                  40                  45
Arg Ser Thr Thr Gly Asn Arg Lys Ser Leu Lys Ser Gly Thr His Ala
    50                  55                  60
Ser Ser His Gly Ser Met Arg Arg Pro Ala Asp Leu Gln Thr Ala Leu
65                  70                  75                  80
Leu Pro Gly Cys Thr His Asp Ser Ser Leu Gln Ala Ala Asn Ser Leu
                85                  90                  95
Val Leu Ser Gly Ser Asp Arg Ser Arg Leu Asn Tyr Leu Gln Asp Ser
            100                 105                 110
Val Leu Val Thr Ile Leu Gly Lys Gln Trp Pro Trp Ser Thr Val Ser
        115                 120                 125
Tyr Thr Tyr His Arg Val Ala Val Lys Glu Pro Met Val Met Ser Met
    130                 135                 140
Ile Leu Ala Thr Thr Ala Ser Glu Ile His Arg Ser Arg Leu His Asp
145                 150                 155                 160
Ser Asp Ser Thr Cys Leu Tyr Ser Ala Ala Gly Asp Phe Ser Asp Ile
                165                 170                 175
Asp Gly Arg Val His Tyr Gly Thr Ala Leu Ser Arg Leu Arg Glu Ala
            180                 185                 190
Leu Ala Glu Gly Val Lys Thr Ser Ser Lys Leu Glu Ala Val Phe Ile
```

```
        195                 200                 205
Thr Leu Trp Leu Met Ile Asp Tyr Glu Asn Arg Phe Gly Ser Gly Ala
    210                 215                 220
Ser Thr Ile Asn Ile His Leu Gln Gly Ile Glu Ser Ile Leu His Asn
225                 230                 235                 240
His Ile Leu Pro Leu Leu Lys Tyr Glu Asp Cys Ser Ala Ala Ala Ile
                245                 250                 255
Thr Ala Glu Ser Pro Gly Ala Ala Gly Leu Leu Phe Asp Asn Ser Ala
            260                 265                 270
Glu Gly Ala Ser Leu Thr Glu Arg Val Ala Arg Ser Pro Val Asp Ser
        275                 280                 285
Val Ala Gly Pro Ser Ala Gly Lys Leu Val Tyr Thr Ala Val Pro Leu
    290                 295                 300
Phe Leu Leu Trp Thr Leu Tyr Phe Phe Thr Pro Gly Ala Leu Phe Phe
305                 310                 315                 320
Gly Pro Gly Ala Val Tyr Glu Pro Gly Phe Glu Lys Val Asn Asp Asp
                325                 330                 335
Leu Tyr Arg Leu Phe Arg Leu Phe Leu His Ala Glu Asp Glu Asn Thr
            340                 345                 350
Arg Leu Asn Leu Glu Asn Leu Tyr Arg Ile Ser Arg Gln Ser Pro Ser
        355                 360                 365
Lys Phe Trp Gly Glu Ala Tyr Pro Ala Lys Ala Gln Leu Asp Asp Leu
    370                 375                 380
Glu Asn Tyr Pro Gly Leu Ala Leu Tyr His Lys Ser His Val Val Gln
385                 390                 395                 400
Phe Arg Ile Thr Glu Leu Phe Arg Gln Ala Arg Gly Thr Pro Trp Asn
                405                 410                 415
Glu Ala Pro Tyr Gln Gln Thr Val Val Phe Ala Thr Glu Arg Lys Ser
            420                 425                 430
Val His Xaa Asn
        435
```

<210> 35522
<211> 269
<212> PRT
<213> A.fumigatus

```
<400> 35522
Pro Phe Gln Ile Trp Ser Asn Pro Glu Leu Ala Tyr Glu Glu His Lys
1               5                   10                  15
Ala His Asp His Ile Cys Glu Leu Phe Asn Thr Leu Glu Gly Tyr Glu
            20                  25                  30
Val Arg Arg Lys Ala Tyr Gly Leu Ser Thr Ala Leu Glu Ile Glu Tyr
        35                  40                  45
Lys His Gly Ala Gly Gly Arg Val Val Val Phe Asn Ala Glu Tyr Asp
    50                  55                  60
Ala Leu Pro Asn Ile Gly His Ala Cys Gly His Asn Leu Ile Ala Thr
65                  70                  75                  80
Ser Ser Ile Ala Ala Phe Ile Ala Thr Cys Glu Ala Leu Lys Ile His
                85                  90                  95
Cys Pro Glu Gly Leu Gly Tyr Thr Val Arg Leu Leu Gly Thr Pro Ala
            100                 105                 110
Glu Glu Ser Gly Gly Gly Lys Val Arg Leu Leu Asp Asn Gly Ala Tyr
        115                 120                 125
Lys Asp Val Asp Ala Cys Leu Met Val His Pro Met Pro Leu Ile Pro
    130                 135                 140
```

```
Asn Ala Pro Asp Leu Leu Cys Ile Ala Ala Thr Val Pro Gly Gly Phe
145                 150                 155                 160
Leu Ala Asn Asp Lys Val Arg Val Thr Phe Thr Gly Lys Pro Ala His
                165                 170                 175
Ala Ala Ala Ala Pro Trp Glu Gly Ile Asn Ala Leu Asp Ala Val Val
            180                 185                 190
Ser Ala Tyr Val Asn Ile Ser Leu Leu Arg Gln Gln Leu Arg Pro Ala
        195                 200                 205
Glu Arg Val His Gly Ile Ile Val Asn Gly Gly Asp Arg Pro Asn Val
    210                 215                 220
Ile Pro Met Ser Ala Thr Val Asp Tyr Tyr Ile Arg Ser Asp Thr Val
225                 230                 235                 240
Lys Ser Leu Lys Val Leu Thr Asn Lys Val Ile Lys Cys Phe Glu Ala
                245                 250                 255
Ala Ala Val Ala Thr Gly Cys Lys Val Asp Phe Glu Trp
            260                 265
```

<210> 35523
<211> 64
<212> PRT
<213> A.fumigatus

<400> 35523

```
Ser Glu Lys Ile His Lys Ser His Thr Ser Thr Met Gln Phe Pro Val
1               5                   10                  15
Ser Gln Gln Leu Phe Ile Gly Ser Val Arg Asn Ala Ile His Lys Tyr
            20                  25                  30
Asp Ala Gln Leu Lys Asp Ile Asn Asn Lys Val Ser Leu Thr Thr Ile
        35                  40                  45
Thr Ser Val Val Leu Ala Asn Arg Phe Arg Ser Gly Arg Ile Arg Asn
    50                  55                  60
```

<210> 35524
<211> 112
<212> PRT
<213> A.fumigatus

<400> 35524

```
Ile Pro Asp Ala Ser Tyr Asp Cys Pro Thr Asp Trp His Val Ala Glu
1               5                   10                  15
Pro Pro Pro His Met Asn Asn Ile Ile Ala Asp Pro Leu His Leu Pro
            20                  25                  30
Thr Asp Ile Met Ser Ile Arg Val Asn Asn Ile Arg Ser Asn Glu Asn
        35                  40                  45
His Gln Ala Asn Gly Lys Thr Thr Gln Ser Ser Glu Ala Arg His His
    50                  55                  60
Lys Gly Gly Ala Gln Val Gly Met Thr Gly Arg Gly Gly Phe Arg Ala
65                  70                  75                  80
Phe Leu Ser Val Val Ile Ala Ala Ala Ala Ala Ala Ala Val Thr Val
                85                  90                  95
Thr Val Ala Val Ala Val Ala Ala Thr Ala Val Ala Ala Ala Gly Ala
            100                 105                 110
```

<210> 35525
<211> 61
<212> PRT

<213> A.fumigatus

<400> 35525
Thr Leu Trp Pro Arg Ala Asn Phe Thr Thr Gly Leu Phe Thr Cys Asn
1 5 10 15
Thr Asn Pro Gln Leu Ile Gln Leu Arg Lys Asp Ser Phe Leu Ala Phe
20 25 30
Cys Phe Thr Tyr Leu Tyr Glu Cys Leu Thr Arg Val Asn Ser Asp Glu
35 40 45
Thr Ala His Ile Ser Ala Ser Ala Arg Leu Ser His Pro
50 55 60

<210> 35526
<211> 236
<212> PRT
<213> A.fumigatus

<400> 35526
Thr Asp Ser Ser Asn Phe Ala Thr Cys Cys Leu Pro Gln Thr Leu Leu
1 5 10 15
Ala Pro Cys Ser Ser Thr Gln Leu Val Ser Thr Ser Ile Leu His Pro
20 25 30
Asn Ser Leu Lys Ile Thr Met Arg Val Ser Ala Gln Leu Ile Ala Gly
35 40 45
Met Ala Phe Val Ala Ser Ala Asn Ala Gly Leu Tyr Arg Arg Ala His
50 55 60
Glu Thr Ser Thr Ser Thr Glu Val Thr Thr Thr Pro Thr Glu Thr Ala
65 70 75 80
Thr Ala Thr Pro Val Val Asp Gln Glu Val Ser Ala Thr Glu Thr Asn
85 90 95
Thr Ser Ala Thr Thr Glu Ser Glu Asp Val Ala Thr Val Val Ser Asp
100 105 110
Ala Asp Ala His Pro Thr Glu Thr Thr Ser Ile Pro Leu Ile Lys Ala
115 120 125
Thr Val Ala Val Ser Ser Ser Ala Ala Ala Ser Ser Pro Ala Ala Gly
130 135 140
Ile Ser Thr Ser Ala Ser Pro Lys Ala Thr Gly Thr Gly Asp Tyr Val
145 150 155 160
Gly Phe Val Asp Pro Asn Glu Glu Ser Ser Thr Ser Ser Ser His Ser
165 170 175
Ser Gly Ser Asp Ser Asp Ser Asp Ser Asp Ser Asp Ser Ser Ser Ser
180 185 190
Ser Ser Ser Asn Asp Asp Ala Lys Glu Ser Ser Lys Pro Thr Thr Ser
195 200 205
Arg His Thr Asn Leu Gly Ser Thr Leu Val Val Pro Gly Leu Ala Ala
210 215 220
Leu Gly Ser Leu Ala Ile Gly Leu Met Ile Leu Val
225 230 235

<210> 35527
<211> 159
<212> PRT
<213> A.fumigatus

<400> 35527
Pro Leu Pro Gln Pro Lys Pro Pro Arg Pro Pro Pro Leu Ser Thr Lys

```
1               5                   10                  15
Arg Phe Pro Pro Pro Arg Pro Thr Pro Pro Gln Gln Pro Arg Ala Arg
            20                  25                  30
Met Ser Pro Pro Ser Ser Leu Thr Arg Met Pro Ile Pro Pro Arg Arg
        35                  40                  45
Gln Ala Ser Leu Leu Ser Arg Pro Pro Ser Pro Tyr Pro Pro Pro Leu
    50                  55                  60
Leu Leu Val Pro Pro Pro Pro Ala Ser Arg Leu Val Arg Val Pro Arg
65                  70                  75                  80
Leu Leu Ala Leu Ala Thr Thr Leu Val Ser Leu Ile Leu Thr Arg Ser
                85                  90                  95
Gln Ala Pro Ala Ala Ala Thr Ala Val Ala Ala Thr Ala Thr Ala Thr
            100                 105                 110
Val Thr Val Thr Ala Ala Ala Ala Ala Ala Ala Met Thr Thr Leu Arg
        115                 120                 125
Lys Ala Leu Asn Pro Pro Arg Pro Val Ile Pro Thr Trp Ala Pro Pro
    130                 135                 140
Leu Trp Cys Leu Ala Ser Leu Leu Trp Val Val Leu Pro Leu Ala
145                 150                 155
```

<210> 35528
<211> 92
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (57)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35528

```
Ser Ile Arg Asp Gln Ser Pro Ala Phe Leu Tyr Met Asn Ser Ile Ile
1               5                   10                  15
Leu Thr Arg Leu Ala Asn Thr Cys Thr Tyr Gly Val Asn Asp Asn Asp
            20                  25                  30
Ser Phe Ser Ile Cys Ser Ser Lys Ile Met Thr Trp Lys Pro Asn Leu
        35                  40                  45
Pro Thr Val Thr Asn Asn Pro Pro Xaa Leu His Gln Leu His Thr Cys
    50                  55                  60
Ser Val Asn Leu Phe His Glu Glu Glu Glu Gly Glu Tyr Ala Pro Arg
65                  70                  75                  80
Gln Gly Leu Thr Ile Val Pro Thr Lys Pro Pro Val
                85                  90
```

<210> 35529
<211> 166
<212> PRT
<213> A.fumigatus

<400> 35529

```
Asn His Ser Ser Gln His Ser Val Trp Gly Thr Gly Glu Thr Ser Ser
1               5                   10                  15
Ala Leu Gly Val Glu Leu Thr Ile Thr Ile Phe Gln Asn Gly Gly Val
            20                  25                  30
Val Arg His His Gln Arg Leu Gly Leu Val Ser Gly Gln His Arg Thr
        35                  40                  45
```

```
Phe Leu Lys Leu Thr Arg Leu Ile Val Leu Pro Ala Tyr Arg Ala Asp
    50                  55                  60
Gln Ala Ala Ser Val Ser Pro Ala Lys Glu Val Thr Lys Val Ala Leu
65                  70                  75                  80
Arg Leu Lys Tyr Gln Ile Glu Gln Val Ile Pro Phe Glu Ile Asp Glu
                85                  90                  95
Asn Ser Ile Thr Lys Pro Asn Ser Arg Ile Ile Thr Asp Glu Val Ile
            100                 105                 110
Gln Thr Ala Arg Gln Ala Gly Gly Asp Asp His Lys Asp Cys Val Val
        115                 120                 125
Tyr Cys Leu Leu Val Cys Leu Arg Trp Phe Lys Leu Gln Ala Glu Ala
    130                 135                 140
Glu Leu Trp Glu Ser Asp Leu His Leu Arg Arg Ala Leu Ala Cys Glu
145                 150                 155                 160
Val Thr Ala Lys Arg Met
                165
```

<210> 35530
<211> 290
<212> PRT
<213> A.fumigatus

<400> 35530

```
Glu Lys Arg Pro Asp Leu Ser Glu Lys Val Arg Ala Asn Asn Ala Phe
1               5                   10                  15
Ser Ile Glu Ser Glu Glu Asp Gln Asp Ser Leu Met Lys Asp Ala Leu
            20                  25                  30
Leu Gln Arg Tyr Ser Ile Ile Leu Asp Gly Glu Pro Thr Thr Pro Ala
        35                  40                  45
Asn Val Ile Glu Arg Ala Val Asp Leu His Ala Leu Arg Val Ile Gly
    50                  55                  60
Ser Ser Gly Tyr Gln Lys Cys Ile Lys Tyr Leu Trp Arg Gly Trp Phe
65                  70                  75                  80
Cys Gln Glu Glu Gly Asn Pro Thr Asn Phe Val Pro Tyr His Asp Lys
                85                  90                  95
Asp Asn Thr Asp Phe Arg Ile His Phe His Pro Asp Arg Met Arg Ala
            100                 105                 110
Pro Leu Tyr Gln Asn Ala Cys Gln Ile Leu Phe Ser Leu Ile Tyr Leu
        115                 120                 125
Leu Leu Tyr Thr Ile Val Ile Asn Thr Val Asn Ala Thr Gly Asp Leu
    130                 135                 140
Asp Val Val Glu Gly Ile Leu Tyr Val Met Thr Leu Ser Tyr Ile Cys
145                 150                 155                 160
Asp Glu Leu Thr Lys Leu Trp Lys Val Gly Arg Asp Tyr Phe Asp Phe
                165                 170                 175
Trp Asn Ala Phe Asn Ser Thr Leu Tyr Thr Ile Leu Ala Val Ser Phe
            180                 185                 190
Phe Leu Arg Val Ala Ala Leu Thr Arg Ser Ser Ser Val Glu Asp Glu
        195                 200                 205
Gln Arg Lys Thr Leu Asn Gln Leu Ser Tyr Asn Phe Leu Ala Met Ala
    210                 215                 220
Gly Pro Met Phe Trp Met Arg Met Met Leu Tyr Leu Asp Ser Phe Lys
225                 230                 235                 240
Phe Phe Gly Ala Met Phe Val Val Leu Arg Val Met Met Lys Glu Ser
                245                 250                 255
Leu Ile Phe Phe Ala Leu Leu Phe Val Ile Ile Gly Gly Phe Phe Gln
```

```
            260                 265                 270
Ala Phe Tyr Gly Ser Leu His His Gly Ala Gly Arg Ile Arg Arg Trp
        275                 280                 285
Arg Tyr
    290

<210> 35531
<211> 88
<212> PRT
<213> A.fumigatus

<400> 35531
Pro Ile Leu Thr Val Pro Lys Asp Pro Pro Ser Asn Arg Phe Arg Leu
1               5                   10                  15
Cys Thr Gly Tyr Ile Asp Leu Ser Lys Arg Arg Val Ser Pro Glu Asp
            20                  25                  30
Val Val Lys Cys Glu Glu Arg Tyr Asn Lys Ser Lys Ala Val His Ser
        35                  40                  45
Ile Met Arg His Val Ala Glu Ala Thr Gln Thr Pro Leu Glu Glu Leu
    50                  55                  60
Tyr Gln Lys Ile Gly Trp Pro Leu Asn Arg Lys Tyr Gly His Ala His
65                  70                  75                  80
Asp Ala Phe Lys Ile Ser Ile Thr
                85

<210> 35532
<211> 176
<212> PRT
<213> A.fumigatus

<400> 35532
Asp Gln Pro Val Arg Leu His Phe Phe Asp Arg Met Thr His Leu Ile
1               5                   10                  15
Asn Arg Asn Pro Asp Val Trp Gln Asp Val Glu Phe Pro Ser Glu Ala
            20                  25                  30
Val Lys Lys Glu Leu Thr Gln Tyr Ile Ser Lys Lys Leu Thr Pro Ser
        35                  40                  45
Pro Thr Lys Val Arg Ala Asp Ile Glu Val Thr Cys Phe Gly Tyr Glu
    50                  55                  60
Gly Ile Asp Ala Val Lys Asn Ala Leu Arg Thr Ala Glu Ala Asn Asn
65                  70                  75                  80
Thr Pro Glu Asn Gln Ile Lys Val Lys Leu Val Ala Pro Pro Leu Tyr
                85                  90                  95
Val Leu Thr Ser Gln Cys Leu Asp Lys Asn Leu Gly Ile Lys Leu Leu
            100                 105                 110
Glu Glu Ala Ile Glu Arg Ile Asp Ser Glu Ile Lys Lys Ala Gly Gly
        115                 120                 125
Gly Cys Val Val Lys Met Ala Pro Lys Ala Val Thr Glu His Asp Asp
    130                 135                 140
Ala Ala Leu Gln Glu Leu Met Asp Lys Arg Glu Arg Glu Asn Met Glu
145                 150                 155                 160
Val Ser Gly Asp Glu Ser Met Ser Glu Ser Asp Glu Gly Val Pro Glu
                165                 170                 175

<210> 35533
<211> 368
```

<212> PRT
<213> A.fumigatus

<400> 35533
His Glu Thr Ala Val Lys Ser Asp Asn Glu Ser Cys Gln Lys Ala Met
1 5 10 15
Phe Ser Asn Ala Lys Leu Arg Leu Leu Met Ser Leu Val Arg Phe Glu
20 25 30
Arg Leu Gly Met Glu Asp Val Pro Gly Ala Ser Trp Val Val Pro Ser
35 40 45
Ser Leu Asn Ser Gln Glu Leu Arg His Thr Arg Ser Ile Ile Glu Gln
50 55 60
Cys Leu Thr Glu Pro Val Thr Glu Asn Ser Asp Arg Asp Leu Ser Gln
65 70 75 80
Leu Ile Arg Arg Lys Ser Gly Asn Asn Thr Arg Arg Asp Arg Asp Asp
85 90 95
Gln Met Ala Asn Val Asp Phe Gly Ser Asp Ser Glu Gly Asp Asp Asn
100 105 110
Val Pro Asp Gly Pro Leu Phe Pro Pro Asn Pro Arg Ser Arg Ala Asn
115 120 125
Ala Leu Glu Gln Leu Lys Lys Gln Arg Lys Lys Arg Arg Lys Gln Ala
130 135 140
Gly Glu Glu Glu Glu Pro Asp Glu Glu Asp Leu Glu Ala Arg Arg Arg
145 150 155 160
Ala Arg Leu Glu Asn Ala Leu Ala Arg Gln Ala Lys Ile Lys Ser Asp
165 170 175
Leu Tyr Ile His Ala Ser Asp Glu Glu Thr Asp Glu Glu Ala Asp Gln
180 185 190
Glu Phe Phe Arg Leu Glu Glu Gln Arg Arg Lys Glu Gln Ala Glu Arg
195 200 205
Ile Arg Lys Ala Leu Leu His Gly Val Val Glu Glu Val Ser Glu Asn
210 215 220
Ser Arg Lys Lys Ser Ser Gly Arg Lys Arg Gln Ser Asp Gln Tyr Thr
225 230 235 240
Ala Ser Thr Ala Asp Ser Gln Ser Lys Arg Gln Arg Arg Leu Gln Gln
245 250 255
Thr Glu Gly Leu Asp Gly Asn Asp Asp Leu Val Val Ala Gly Thr Glu
260 265 270
Ala Arg Ser Pro Asp Ser Leu Gly Gln Gly Ser Pro Ser Leu Lys Gly
275 280 285
Ala Asn Asp Val Glu Asp Thr Leu Val Thr Ser Glu Glu Asn Glu Leu
290 295 300
Asp Phe Asp Asp Asp Leu Ala Phe Ser Arg Asn Arg Thr Arg Asp Lys
305 310 315 320
Val Leu Ser Ala Glu Asn Asp Asp Ser Asp Thr Glu Pro Pro Ala Pro
325 330 335
Asp Thr Ile Asp Glu Asp Gly Glu Glu Ala Ala Ala Val Ala Ala Pro
340 345 350
Pro Arg Arg Arg Val Arg Ala Gly Phe Val Ile Glu Ser Asp Ser Glu
355 360 365

<210> 35534
<211> 718
<212> PRT
<213> A.fumigatus

<400> 35534

```
Gln Arg Thr Val Glu Leu Leu Val Pro Leu Thr Trp Pro Leu Glu Val
1               5                  10                  15
His Ser Glu Met Thr Val Asn His His Arg His Thr Pro Tyr Leu Gln
            20                  25                  30
Gln Ala Gln Val Leu Tyr Lys Arg Gly Ile Leu Ser His Gly Ser Gly
        35                  40                  45
Ser Ile Leu Arg Thr Ile Ile Arg Ile Gly Leu Pro Ser Met Ala Val
    50                  55                  60
Pro Arg Ser Glu Arg Thr Thr Arg Asp Glu Gly Ile Leu Lys Leu Met
65                  70                  75                  80
Leu Tyr Phe Leu Arg Asn Ile Ala Val Ile Ser Pro Asn Ala Arg Leu
                85                  90                  95
Ala Ala Glu Gly Asp Glu Glu Glu Thr Ser Arg Ser Ala Thr Ile Asn
            100                 105                 110
Ala Phe Gln Asn Gln Asp Ala Phe Ala Leu Leu Leu Thr Met Cys Ser
        115                 120                 125
Asn Val Gly Glu Asp Phe Ser Leu Gln Asp Val Val Leu Leu Glu Ile
    130                 135                 140
Leu Phe His Ile Val Lys Gly Val Asn Val Glu Lys Leu Phe Met Asn
145                 150                 155                 160
Asp Ala Gln Arg Lys Ala Lys Arg Thr Asp Glu Leu Gly Glu Leu Leu
                165                 170                 175
Gln Lys Glu Ser Ser Leu Arg Arg Glu Tyr Ala Lys Asn Ala Pro Thr
            180                 185                 190
Arg His Gly Arg Phe Gly Thr Met Ile Trp Val Lys Arg Asp Asp Ala
        195                 200                 205
Lys Val Ser Thr Val Ser Gly Gln Asp Val Leu Lys Asp Ser Gln Thr
    210                 215                 220
Thr Leu His Lys Met Asp Gln Ser Lys Lys Trp Asn Lys Pro Gln Ile
225                 230                 235                 240
Arg Arg Arg Ala Ala Glu Val Thr Ala Asn Asn Asp Phe Asn Thr Pro
                245                 250                 255
Val Asn Ile Asn Ser Thr Ala Thr Lys Asn Leu Arg Met Phe Val Glu
            260                 265                 270
Glu Phe Leu Asp Ser Gly Phe Asn Pro Leu Phe Thr His Val Arg Lys
        275                 280                 285
Ala Ile Glu Arg Glu Ala Asp Arg Val Met Asp Ile Asn Thr Arg Gln
    290                 295                 300
Phe Phe Tyr Thr Val Ala Trp Phe Leu Glu Ala Glu Arg Val Arg Arg
305                 310                 315                 320
Ala His Gln Arg Glu Ile Arg His Leu Gly Asp Thr Pro Leu Lys Glu
                325                 330                 335
Ile Glu Pro Asp Ser Phe Ala Leu Val Ala Ser Val Leu Asn Gln Glu
            340                 345                 350
Thr Phe Val Phe Leu Asn Arg Ser Met Gln Tyr Ser Tyr Asp Asn Lys
        355                 360                 365
Asp Val Glu Asp Leu Thr Ala Glu Met Arg Cys Phe Thr Gln Ile Leu
    370                 375                 380
Leu Thr Val Gln Glu Met Ala Gln Ser Pro Leu Glu Glu Asp Gln Glu
385                 390                 395                 400
Ile Ala Asp Asn Ile Gln Asn Arg Ile Phe Tyr Glu Glu Thr Thr His
                405                 410                 415
Asp Arg Ile Val Ala Ile Val Arg Gly Tyr Lys Asp Gln Gly Phe Gly
            420                 425                 430
Tyr Leu Asp Ala Cys Thr Glu Leu Ala His Val Phe Leu Arg Met Leu
```

```
        435                 440                 445
Glu His Tyr Ser Lys Glu Asn Val Asp Met His Val Arg Ser Arg Arg
    450                 455                 460
Arg Ala Lys Arg Lys Ala Lys Gln Ala Lys Gln Ala Asp Ile Glu Gly
465                 470                 475                 480
Asp Asp Glu Glu Glu Ala Ser Glu Glu Glu Asp Leu Met Asp Val Glu
                485                 490                 495
Arg Ile Ser Lys Glu Arg Lys Phe Asp Phe Arg Arg Phe Ala Ala Lys
            500                 505                 510
Phe Cys Asn Gln Ser Cys Val Asp Thr Phe Ile Ala Phe Thr Lys Tyr
        515                 520                 525
Tyr Arg Glu Leu Asn Val Asp Gln Leu Lys Arg Ala His Arg Tyr Phe
    530                 535                 540
Tyr Arg Ile Ala Phe Lys Gln Glu Met Ser Val Leu Leu Phe Arg Leu
545                 550                 555                 560
Asp Ile Ile Asn Leu Phe Tyr Arg Met Ile Lys Gly Pro Gly Ala Leu
                565                 570                 575
Asp Ser Asn Lys Pro Ile Phe Lys Glu Trp Glu Glu Leu Val Arg Gln
            580                 585                 590
Ile Ile Arg Arg Met Ile Lys Lys Ile Asp Gln Arg Pro Ala Leu Ile
        595                 600                 605
Thr Glu Leu Leu Phe Ser Lys Ile Asn Ser Thr Val Phe Tyr Leu Glu
    610                 615                 620
Tyr Gly His Glu Lys Gln Thr Ile Ser Ala Ser Lys Arg Pro Pro Ala
625                 630                 635                 640
Glu Leu Glu Val Glu Pro Arg Glu Ala Lys Thr Ile Asp Glu Lys Ile
                645                 650                 655
Arg Ile Val Val His Val Met Val Lys Asp Glu His Thr Asp Leu Val
            660                 665                 670
Lys Trp Val Ser Asp Val Leu Asn Ser Ala Ala Asp Glu Arg Glu Ala
        675                 680                 685
Trp Glu Ser Gln Glu Gln His Ser Gly Gly Gln Lys Ala Pro Asn Pro
    690                 695                 700
Met Ile Arg Thr Ser Ser Gly Phe Ser Trp Leu Val Val Arg
705                 710                 715
```

<210> 35535
<211> 820
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (795)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 35535
Thr Leu Lys Met Pro Ser Pro Ala Lys Lys Arg Lys Arg Glu Ala Pro
1               5                  10                  15
Asp Ser Thr Pro Gln Arg Val Arg Ser Ile Ala Ser Phe Phe Gln Gly
            20                  25                  30
Gln Ser Asn Lys Lys Ala Glu Lys Thr Glu Gln Ile Val Asp Ser Ala
        35                  40                  45
Thr Glu Ser Ala Ala Asp Glu Thr Leu Ser Asp Glu Ala Leu Ala Arg
    50                  55                  60
Lys Leu Gln Ala Glu Phe Asp Lys Glu Gly Asp Ala Pro Ala Val Glu
```

```
65                  70                  75                  80
His Glu Val Pro Asn His Lys Leu Ile Gln Glu Pro Tyr Ala Pro Thr
                85                  90                  95
Glu Ser Asp Ser Gly Pro Leu Lys Lys Val Pro Lys Thr Asn Thr Ile
            100                 105                 110
Ser Leu Gln Ser Ser Val Gly Thr Glu Asp Thr Ile Ser Leu Ser Ile
        115                 120                 125
Pro Phe Asp Gln Ser Pro Leu Thr Phe Asp Ser Thr Lys Cys Ala Ala
    130                 135                 140
Glu Leu Gln Val His Trp Ala Thr Glu Gly Gly Asn Ala Ser Tyr Ala
145                 150                 155                 160
Leu Leu Thr Arg Ala Phe Val Leu Ala Asn Ala Thr Thr Ser Arg Ile
                165                 170                 175
Arg Ile Val Asp Thr Leu Val Asn Phe Leu Arg Val Leu Ile Glu Gly
            180                 185                 190
Asp Pro Ser Ser Val Leu Pro Ala Val Trp Leu Ala Thr Asn Ser Ile
        195                 200                 205
Ser Pro Pro Tyr Asp Glu Leu Glu Leu Gly Leu Gly Gly Ser Ala Ile
    210                 215                 220
Ser Lys Ala Leu Lys Lys Val Tyr Gly Leu Asn Pro Tyr Gly Leu Lys
225                 230                 235                 240
Asn Leu Tyr Asp Lys Tyr Gly Asp Ala Gly Asp Val Ala Phe Glu Ala
                245                 250                 255
Lys Lys Arg Gln Ser Phe Thr Leu Met Lys Pro Lys Pro Leu Thr Ile
            260                 265                 270
Lys Gly Val Tyr Gln Ser Leu Arg Lys Ile Ala Thr Ser Lys Gly Ser
        275                 280                 285
Gly Ser Gln Glu Ser Lys Gln Arg Ile Val Glu Lys Leu Leu Gln Asp
    290                 295                 300
Thr Arg Gly Ala Glu Glu Ser Arg Tyr Ile Val Arg Thr Leu Val Gln
305                 310                 315                 320
Asn Leu Arg Ile Gly Ala Val Lys Thr Thr Met Leu Ile Ala Leu Ala
                325                 330                 335
Arg Ala Phe Leu Tyr Ser Lys Pro Glu Gly Ala Glu Phe Thr Ile Arg
            340                 345                 350
Ser Arg Gln Asp Leu Thr Arg Leu Lys Lys Glu Glu Leu Ala Glu Ile
        355                 360                 365
Tyr Ser Arg Ala Glu Glu Ile Val Lys Ala Ser Tyr Ala Arg His Pro
    370                 375                 380
Asn Tyr Asn Asp Leu Val Thr Cys Leu Leu Glu Ser Gly Val Thr Glu
385                 390                 395                 400
Glu Leu Leu Leu Arg Cys Gly Leu Gln Leu His Val Pro Leu Arg Pro
                405                 410                 415
Met Leu Gly Ser Ile Thr Arg Asp Leu Ser Glu Met Leu Thr Lys Leu
            420                 425                 430
Gln Gly Arg Asp Phe Ser Cys Glu Tyr Lys Tyr Asp Gly Gln Arg Ala
        435                 440                 445
Gln Val His Cys Asp Glu Lys Gly Lys Val Ser Ile Phe Ser Arg His
    450                 455                 460
Leu Glu Asn Met Thr Glu Lys Tyr Pro Asp Leu Val Ser Leu Val Ser
465                 470                 475                 480
Gln Ile Arg Gly Glu Ser Val Ser Ser Phe Ile Leu Glu Gly Glu Val
                485                 490                 495
Val Ala Val Asp Asn Lys Thr Gly Glu Leu Gln Thr Phe Gln Val Leu
            500                 505                 510
Thr Asn Arg Ala Lys Lys Asn Val Glu Ile Gly Ala Ile Asn Ile Asn
```

```
        515                 520                 525
Val Cys Leu Phe Ala Phe Asp Leu Met Tyr Leu Asn Gly Glu Pro Leu
    530                 535                 540
Leu Asp Arg Pro Phe Arg Glu Arg Arg Glu Leu Leu Arg Ser Leu Phe
545                 550                 555                 560
Val Glu Ile Pro Asn Arg Phe Thr Trp Val Lys Ser Leu Asp Ala Thr
                565                 570                 575
Ser Ala Asp Ser Glu Thr Val Leu Glu Phe Phe Lys Ser Ala Leu Glu
            580                 585                 590
Asn Lys Cys Glu Gly Ile Met Val Lys Val Leu Asp Asn Ala Pro Lys
        595                 600                 605
Thr Ser Leu Glu Gln Asn Lys Glu Ala Ser Thr Ser Asn Gly Met Asp
    610                 615                 620
Val Thr Ser Gly Glu Pro Leu Glu Lys Ala Gly Lys Gly Gly Arg Arg
625                 630                 635                 640
Lys Ala Leu Leu Ser Thr Tyr Glu Pro Asp Lys Arg Leu Glu Ser Trp
                645                 650                 655
Leu Lys Val Lys Lys Asp Tyr Ser Thr Ser Ser Glu Thr Leu Asp Leu
            660                 665                 670
Ile Pro Ile Ala Gly Trp His Gly Gln Gly Arg Lys Ala Lys Trp Trp
        675                 680                 685
Ser Pro Ile Leu Met Ala Val Arg Asn Pro Glu Thr Gly Ser Leu Glu
    690                 695                 700
Ala Val Thr Lys Cys Met Ser Gly Phe Thr Asp Lys Phe Tyr Gln Ala
705                 710                 715                 720
Asn Lys Asp Lys Tyr Ala Glu Gly Thr Pro Asn Val Ile Ser Arg Pro
                725                 730                 735
Ala Tyr Val Glu Tyr Tyr Gly Glu Pro Asp Val Trp Phe Glu Pro Gln
            740                 745                 750
Glu Val Trp Glu Met Ala Phe Ala Asp Ile Thr Leu Ser Pro Thr Tyr
        755                 760                 765
Thr Ala Ala Ile Gly Leu Val Ser Asp Glu Arg Gly Leu Ser Leu Arg
    770                 775                 780
Phe Pro Arg Phe Leu Arg Val Arg Asp Asp Xaa Ser Ile Asp Glu Ala
785                 790                 795                 800
Thr Thr Ser Asp Tyr Leu Ala Leu Leu Trp Arg Arg His Ala Glu Arg
                805                 810                 815
Lys Lys Glu Glu
            820
```

<210> 35536
<211> 115
<212> PRT
<213> A.fumigatus

<400> 35536

```
Ser Asn Pro Arg Gly Ser Ser Ile Thr Ala Thr Tyr Ala Ile Asn Leu
1               5                   10                  15
Gln Phe Tyr Leu Thr Thr Ala Asp Thr Thr Ala Gln Leu Ala Glu Ala
            20                  25                  30
Gln Gln Ala Leu Leu Ser Ala Ser Lys Ala Ser Asn Asp His Ala Glu
        35                  40                  45
Ala Thr Arg Lys Arg Ala Glu Ala Phe Lys Glu Glu Gln Glu Asp Ile
    50                  55                  60
Asp Lys Arg Leu Lys Ala Ile Thr Gly Ser Asn Ala Ser Asp Glu Ala
65                  70                  75                  80
```

```
Ala Lys Arg Phe Lys Val Ser Ile Asp Lys Leu Arg Arg Leu Glu Ile
                85                  90                  95
Ser Lys Gly Tyr Val Thr Leu Leu Arg Glu Ala Glu Glu Leu Arg Tyr
            100                 105                 110
Leu Arg Thr
        115
```

<210> 35537
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35537
```
Arg Thr Met Asp Ser Ser Thr Ser Ala Ser Ser Asn Thr His Gly Glu
1               5                   10                  15
Ala Lys Tyr Ile Asn Phe Pro Thr Leu Pro Asp Asp Ala Lys His Glu
            20                  25                  30
Asp Gly Thr Thr Ala Leu Asn Arg Tyr Ser Ser Tyr Ile Thr Arg Gly
        35                  40                  45
His Asp Phe Pro Gly Ala Arg Val Cys Tyr Pro His
    50                  55                  60
```

<210> 35538
<211> 89
<212> PRT
<213> A.fumigatus

<400> 35538
```
Ala Met Leu Phe Ala Ala Gly Ile Pro Asp Arg Glu Ala Met Ala Lys
1               5                   10                  15
Ser Pro Gln Val Gly Ile Ala Ser Val Trp Trp Glu Gly Asn Pro Cys
            20                  25                  30
Asn Met His Leu Leu Asp Leu Gly Lys Thr Val Lys Lys Ala Val Thr
        35                  40                  45
Asp Gln Gly Met Ile Gly Trp Gln Tyr Asn Thr Ile Gly Val Ser Asp
    50                  55                  60
Ala Ile Ser Met Gly Ser Glu Gly Glu Arg Ile Gln Gly Leu Arg Ser
65                  70                  75                  80
Ile Ala Thr Leu Cys Val Arg Tyr Ser
                85
```

<210> 35539
<211> 488
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (285),(287),(288),(298)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35539
```
Arg Val Phe Pro Gly Met Arg Phe Ser Leu Gln Thr Arg Glu Ile Ile
1               5                   10                  15
Ala Asp Ser Val Glu Thr Val Thr Cys Ala Gln Tyr His Asp Ala Cys
            20                  25                  30
```

```
Ile Ala Ile Pro Gly Cys Asp Lys Asn Met Pro Gly Val Val Met Gly
        35                  40                  45
Met Ala Arg His Asn Arg Pro Ser Leu Met Ile Tyr Gly Gly Thr Ile
    50                  55                  60
Gln Val Gly Tyr Ser Asn Leu Leu Arg Lys Arg Val Asn Val Ser Thr
65                  70                  75                  80
Cys Phe Glu Ala Ala Gly Ala Tyr Ala Tyr Asp Thr Leu Arg Gln Pro
                85                  90                  95
Asp Asp Gly Gly Asp Thr Ser Lys Ser Lys Asp Glu Ile Met Asp Asp
            100                 105                 110
Ile Glu Arg His Ala Cys Pro Ser Ala Gly Ala Cys Gly Gly Met Phe
        115                 120                 125
Thr Ala Asn Thr Met Ala Thr Ala Ile Glu Ser Met Gly Leu Ser Leu
    130                 135                 140
Pro Gly Ser Ser Ser Thr Pro Ala Ser Ser Pro Ser Lys Met Arg Glu
145                 150                 155                 160
Cys Val Lys Ala Ala Glu Ala Ile Lys Thr Cys Met Glu Lys Asn Ile
                165                 170                 175
Arg Pro Arg Asp Leu Leu Thr Lys Arg Ser Phe Glu Asn Ala Leu Val
            180                 185                 190
Met Thr Met Ala Leu Gly Gly Ser Thr Asn Gly Val Leu His Phe Leu
        195                 200                 205
Ala Met Ala Arg Thr Ala Asp Val Asn Leu Thr Leu Asp Asp Val Gln
    210                 215                 220
Arg Val Ser Asn Lys Ile Pro Phe Ile Ala Asp Leu Ala Pro Ser Gly
225                 230                 235                 240
Lys Tyr Tyr Met Ala Asp Leu Tyr Asp Ile Gly Gly Ile Pro Ser Val
                245                 250                 255
Gln Lys Leu Leu Ile Ala Ala Gly Leu Leu Asp Gly Asp Ile Pro Thr
            260                 265                 270
Val Thr Gly Lys Thr Leu Ala Glu Asn Val Ala Ser Xaa Pro Xaa Xaa
        275                 280                 285
Pro Gln Asp Gln Val Ile Ile Arg Pro Xaa Thr Asn Pro Ile Lys Thr
    290                 295                 300
Thr Ala Asn Leu Gln Ile Leu Arg Gly Asn Leu Ala Pro Gly Gly Ala
305                 310                 315                 320
Val Ala Lys Ile Thr Gly Lys Glu Gly Thr Lys Phe Thr Gly Lys Ala
                325                 330                 335
Arg Val Phe Asp Lys Glu Tyr Gln Leu Asn Asp Ala Leu Thr Gln Gly
            340                 345                 350
Lys Ile Pro Arg Gly Glu Asn Leu Val Leu Ile Val Arg Tyr Glu Gly
        355                 360                 365
Pro Lys Gly Gly Pro Gly Met Pro Glu Gln Leu Lys Ala Ser Ala Ala
    370                 375                 380
Leu Met Gly Ala Lys Leu Asn Asn Val Ala Leu Ile Thr Asp Gly Arg
385                 390                 395                 400
Tyr Ser Gly Ala Ser His Gly Phe Ile Val Gly His Ile Val Pro Glu
                405                 410                 415
Ala Ala Val Gly Gly Pro Ile Ala Ile Val Arg Asp Asp Asp Val Ile
            420                 425                 430
Thr Ile Asp Ala Glu Thr Asn Thr Ile Asn Met His Val Ser Asp Glu
        435                 440                 445
Glu Ile Gln Gln Arg Leu Lys Glu Trp Lys Pro Pro Val Pro His Val
    450                 455                 460
Thr Arg Gly Val Leu Ala Lys Tyr Ala Arg Leu Val Gly Asp Ala Ser
465                 470                 475                 480
```

```
His Gly Ala Met Thr Asp Leu Phe
                485

<210> 35540
<211> 147
<212> PRT
<213> A.fumigatus

<400> 35540
Tyr Phe Pro Leu Gly Ala Lys Ser Ala Met Lys Gly Ile Leu Leu Leu
1               5                  10                  15
Thr Arg Trp Thr Ser Ser Arg Val Arg Phe Thr Ser Ala Val Arg Ala
            20                  25                  30
Met Ala Arg Lys Cys Lys Thr Pro Leu Val Leu Pro Pro Arg Ala Ile
        35                  40                  45
Val Met Thr Arg Ala Phe Ser Lys Glu Arg Leu Val Lys Arg Ser Arg
    50                  55                  60
Gly Leu Met Phe Phe Ser Ile Gln Val Leu Met Ala Ser Ala Ala Leu
65                  70                  75                  80
Thr His Ser Arg Ile Phe Asp Gly Asp Glu Ala Gly Val Asp Asp Asp
                85                  90                  95
Pro Gly Arg Asp Arg Pro Ile Asp Ser Ile Ala Val Ala Ile Val Phe
            100                 105                 110
Ala Val Asn Met Pro Pro His Ala Pro Ala Leu Gly Gln Ala Cys Leu
        115                 120                 125
Ser Met Ser Ser Ile Ile Ser Ser Leu Leu Leu Leu Val Ser Pro Pro
    130                 135                 140
Ser Ser Gly
145

<210> 35541
<211> 1172
<212> PRT
<213> A.fumigatus

<400> 35541
Arg Phe Ile Leu Pro Arg Arg Ser Cys Arg His Gly Gly Phe Asn Trp
1               5                  10                  15
Asn Thr Thr Lys Phe Tyr Asn Phe Pro Asn Glu Arg Gly Leu Tyr Gly
            20                  25                  30
Cys His Asp Ile Thr Val Thr Tyr Asp Gln Arg Asn Pro Ala His Pro
        35                  40                  45
Leu Arg Asn Ile Met Lys Arg Met Phe Glu Ile Arg Glu His Tyr Pro
    50                  55                  60
Val Ala Asn Asp Gly Phe Tyr Leu Gln Thr Leu Ser Gln Leu Thr Lys
65                  70                  75                  80
Asp Val Tyr Leu Pro Gly Ser Ser Asn Thr Pro Thr Val Thr Gly Leu
                85                  90                  95
Trp Ser Val Leu Arg Ser Tyr Phe Pro Glu Val Gln Pro Glu Ala Ser
            100                 105                 110
Lys Gly Asn Asn Ser Ile Trp Leu Val Tyr His Asn Asp Asn Lys Thr
        115                 120                 125
Val Thr Tyr Gly Gly Asp Cys Lys Asn Arg Asn Thr Ala Leu Leu Ala
    130                 135                 140
Pro Tyr Lys Ser Gly Thr Lys Leu Lys Asn Val Phe Ala Pro Tyr Asp
145                 150                 155                 160
```

```
Glu Leu Thr Leu Glu Asp Gly Pro Gly Asp Ile Glu Val His Gly Thr
                165                 170                 175
Thr Glu Ser Tyr Gly Cys Ala Arg Asn Met Thr Leu Leu Pro Trp Glu
            180                 185                 190
Tyr Arg Ala Tyr Val Glu Ala Asp Arg Phe Val Glu Pro Gly Pro Thr
        195                 200                 205
Val Thr Glu Phe Val Pro Gly His Asp Ala Arg Leu Leu Ser Ala Glu
    210                 215                 220
Asp Thr Gly Glu Thr Val Asp Ile Gln Leu Gly Tyr Ser Lys Glu Met
225                 230                 235                 240
Asp Cys Thr Gly Val Thr Arg Ala Ile Ser Leu Asn Ser Thr Thr Glu
                245                 250                 255
Lys Gly Ile Thr Pro Thr Leu Asp Thr Ser Ser Val Asn Cys Gly Asn
            260                 265                 270
Ile Thr Pro Arg Thr Ser Ser His His Tyr Val Gly Glu Val Pro Thr
        275                 280                 285
Val Trp Thr Trp Ser Ala Lys Leu Lys Asn Val His His Gly Ile His
    290                 295                 300
Glu Leu Thr Val Lys Asn Val Ser Thr Thr Ser Gly Val Arg Thr Asn
305                 310                 315                 320
Ala Val Asp Arg Phe Leu Phe Arg Met Gly Thr Pro Thr Asn Pro Leu
                325                 330                 335
Ile Thr Pro Leu Ala Asn Tyr Ser Thr Ser Leu Val His Lys Ser Asp
            340                 345                 350
Asp Gly Ser Ile Tyr Ile Gln His Glu Ala Ala Gly Ala Asp Met Phe
        355                 360                 365
Arg Tyr Ser Thr Thr Phe Gly Arg Thr Trp Ser Asn Trp Thr Thr Tyr
    370                 375                 380
Thr Gly Gly Asn Thr Thr Ile Glu Ile Ala Pro Phe Thr Gly Thr Asp
385                 390                 395                 400
Ala Gln Lys Trp Lys Gly Thr His Val Arg Val Gln Tyr Phe Ser Arg
                405                 410                 415
Leu Thr Gly Ser Ser Asp Tyr Ile Gln Glu Gly Asp His Asp Trp Glu
            420                 425                 430
Asp Gly Val Pro Arg Arg Phe Pro His Leu Trp Trp Ile Gly Pro Tyr
        435                 440                 445
Asn Gln Phe Gly Tyr Asp Ala Gly Leu Asp Ser Lys Met Arg Tyr Asp
    450                 455                 460
Val Lys Glu Gly Arg Trp Lys Tyr Asp Phe Val Tyr Glu Trp Pro Ser
465                 470                 475                 480
Thr Gly Gln Ile Ser Val Trp Gly Val Gly Pro Asp Gly Leu Pro Asp
                485                 490                 495
Pro Thr Glu Val Tyr Gly Asp Val Asp Asn Ala Ser Val Val Gln Lys
            500                 505                 510
Leu Pro Pro Ser Tyr Leu Ser Ser Asn Val Ile Asn Ile Thr Thr Pro
        515                 520                 525
Pro Pro Phe Pro His Leu Gly Trp Thr Ile Ser Leu Asn Asp Ala Asn
    530                 535                 540
Leu Arg Tyr Glu Met Thr Pro Val Gly Ser Gly Trp Val Gln Leu Val
545                 550                 555                 560
Leu Phe Val Leu Leu Trp Val Val Pro Ile Leu Met Gly Leu Ala Gly
                565                 570                 575
Ala Phe Ile Phe Met Arg Thr Phe Tyr Arg Val Lys Leu Asn Thr Asp
            580                 585                 590
Gly Thr Ala Ala Lys Glu Asp Lys Leu Pro Leu Leu Trp Arg Lys Val
        595                 600                 605
```

```
Arg Ala Gln Phe Thr Gly Ala Asp Tyr Ser Glu Met Ala Ile Ser Asp
    610                 615                 620
Lys Ala Val Leu Pro Asp Ser Ala Ile Ala Gly Ala Ala Ala Gly Ala
625                 630                 635                 640
Pro Glu His Arg Arg Thr Val Leu Ile Ala Thr Met Glu Tyr Leu Ile
                645                 650                 655
Gln Asp Trp Lys Val Lys Val Lys Ile Gly Gly Leu Gly Val Met Ala
            660                 665                 670
Gln Leu Met Ser Glu His Leu Arg His Gln Asn Leu Ile Trp Val Val
        675                 680                 685
Pro Cys Val Gly Asp Ile Glu Tyr Pro Glu Asp Thr Pro Ala Glu Pro
    690                 695                 700
Met Met Val Thr Ile Leu Asp Lys Pro Tyr Leu Val Asn Val Gln Tyr
705                 710                 715                 720
His Val Val Glu Asn Ile Thr Tyr Val Leu Leu Asp Ala Pro Val Phe
                725                 730                 735
Arg Gln Gln Thr Lys Ala Glu Pro Tyr Pro Pro Arg Met Asp Asp Leu
            740                 745                 750
Asp Ser Ala Val Tyr Tyr Ser Ala Trp Asn Gln Cys Ile Ala Glu Thr
        755                 760                 765
Ile Lys Arg Phe Pro Ser Ile Asp Leu Tyr His Ile Asn Asp Phe His
    770                 775                 780
Gly Cys Leu Ala Pro Leu Tyr Leu Leu Pro Thr Arg Thr Val Pro Val
785                 790                 795                 800
Cys Leu Ser Leu His Asn Ala Glu Phe Gln Gly Leu Trp Pro Leu Arg
                805                 810                 815
Thr Gln Gln Glu Lys Lys Glu Val Cys Ser Val Phe Asn Ile Ser Ile
            820                 825                 830
Glu Thr Ala Thr Lys Tyr Cys Gln Phe Gly Asn Val Phe Asn Leu Leu
        835                 840                 845
His Thr Gly Ala Ser Tyr Leu Arg Phe His Gln Arg Gly Phe Gly Ala
    850                 855                 860
Val Gly Val Ser Lys Lys Tyr Gly Lys Arg Ser Trp Ala Arg Tyr Pro
865                 870                 875                 880
Ile Phe Trp Ser Leu Asp Lys Ile Gly Ser Leu Pro Asn Pro Asp Pro
                885                 890                 895
Ser Asp Thr Gly Ala Val Gly Asp Gly Ala Glu Thr Asn Val Ser Ile
            900                 905                 910
Pro Ser Pro Glu Asp Arg Ile Arg Asp Lys Leu Gln Ala Gln Lys Trp
        915                 920                 925
Ala Gly Leu Lys Glu Asp Pro Asn Ala Asp Leu Leu Val Phe Val Gly
    930                 935                 940
Arg Trp Ser Lys Gln Lys Gly Val Asp Leu Ile Ala Asp Val Met Pro
945                 950                 955                 960
Ala Ile Leu Ser Ala Arg Pro His Val Gln Leu Ile Cys Val Gly Pro
                965                 970                 975
Ile Ile Asp Leu Tyr Gly Lys Leu Ala Ala Ile Lys Leu Glu Arg Ile
            980                 985                 990
Met Ala Met Phe Pro Gly Arg Val Phe Ser Lys Pro Glu Phe Thr Ile
        995                 1000                1005
Leu Pro Pro Tyr Val Phe Ser Gly Ala Asn Phe Ala Leu Ile Pro Ser
    1010                1015                1020
Arg Asp Glu Pro Phe Gly Leu Val Ala Val Glu Phe Gly Arg Lys Gly
1025                1030                1035                1040
Ala Leu Gly Ile Gly Ser Arg Ile Gly Gly Leu Gly Gln Met Pro Gly
                1045                1050                1055
```

```
Trp Trp Tyr Thr Val Glu Ser Asp Ala Thr Arg His Leu Leu His Gln
            1060                1065                1070
Leu Arg Thr Ala Ile Lys Ser Ala Leu Asp Ser Asp Gln Glu Thr Arg
        1075                1080                1085
Glu Glu Met Arg Met Asn Ser Ala Lys Gln Arg Phe Pro Val Leu Glu
    1090                1095                1100
Trp Ile Gln Lys Leu Glu Thr Leu Gln Gln Thr Ala Ile Gln Ile His
1105                1110                1115                1120
His Thr Arg Asn Lys Asn Thr Gly Ala Gly Pro Met Pro Gln Pro Thr
                1125                1130                1135
Asp Leu Leu Gly Asp Ala Glu His Pro Gly Leu His Gly Glu Ser Cys
            1140                1145                1150
Trp Ile Gly Ala Ile Pro Pro Arg Thr Ala Trp Lys Thr Pro Leu Ser
        1155                1160                1165
Lys Met Glu Ala
    1170

<210> 35542
<211> 144
<212> PRT
<213> A.fumigatus

<400> 35542
Ser Arg Val Glu Gly Asp Ser Val Ile Val Ser Ile Arg Pro Gly Leu
1               5                   10                  15
Leu Asp Arg Met Leu Gln Met Asn Gly Phe Ser Phe Ala Gly Ala Pro
            20                  25                  30
Leu Thr Ile Glu Ala Tyr Gly Pro Ser Ala Asn Gly Met Thr Asp Gln
        35                  40                  45
Pro Met Leu Ser Asp Ile Ala Gln Asn Gly Gly Ala Pro Ser Thr Ala
    50                  55                  60
Asp Thr Lys Ser Lys Met Thr Ala Ile Leu Ser Lys Arg Tyr Tyr Gln
65                  70                  75                  80
Gln Thr Lys Leu Leu Asp Leu Ser Lys Leu Gly Ser Asp Pro Asp Leu
                85                  90                  95
Leu Ala Met Gly Ile Phe Asn Ser Thr Ser Thr Glu Ser Lys Phe Phe
            100                 105                 110
Pro Ala Leu Met Lys Val Trp Glu Met Ser Phe Asp Asn Ser Thr Thr
        115                 120                 125
Arg Arg Glu Ala Val Glu Ile Phe Thr Thr Gly Arg Asp Pro Arg Gln
    130                 135                 140

<210> 35543
<211> 210
<212> PRT
<213> A.fumigatus

<400> 35543
Glu Glu Arg Ser Asn Pro Ser Leu Gly Glu Asp Arg Trp Arg Phe Ser
1               5                   10                  15
Ala Pro Glu Leu Pro Asp Gly Tyr Asp Ser Tyr Leu Asn Asp Ser Asn
            20                  25                  30
Ala Ala Leu Thr Glu Leu Met Thr Pro Leu Pro Ser Val Pro Arg Ile
        35                  40                  45
Gly Ile His Thr Tyr Pro Ser Ser Asp Ser Ile Leu Thr Ser Asp Ser
    50                  55                  60
```

```
Leu Ser Ser Ile His Leu Pro Leu Lys Val Glu Glu Leu Thr Gly Asp
65                  70                  75                  80
Asn Asp Asn Met Lys Pro Tyr Pro Asp Arg Gln Pro Arg Asp Thr Ser
                85                  90                  95
Ser Leu His Gln Met Gln Arg Thr Cys Ser Asn Gly Ile Val Ala Ser
            100                 105                 110
Asp Ser Cys Ser Ser Gln Asp Asp Ala Ser Glu Met Val Asn Lys Pro
        115                 120                 125
Glu Ile Leu Ser Pro Ser Ala His Ile Leu Pro His Pro Ser Gln Ala
    130                 135                 140
Thr Glu Ser Ser Ser Gly Glu Asp Ile Tyr Pro Leu His Leu Pro Ser
145                 150                 155                 160
Pro His Gln His Glu Ala His Phe Ala Pro Leu Asn Ala Ser Thr Arg
                165                 170                 175
Gly Ser Met Glu Gly Asn Thr Pro Glu Val Gln Arg Pro Arg Arg Lys
            180                 185                 190
Leu Pro Gly Ile Pro Arg Pro Ile Arg Ala Gln Lys Asp Pro Glu Gly
        195                 200                 205
Met Val
    210

<210> 35544
<211> 65
<212> PRT
<213> A.fumigatus

<400> 35544
Gly Thr Cys Thr Arg Arg Lys Ala Phe Val Ser Lys Thr Arg Tyr Pro
1               5                   10                  15
Arg Glu Ala Ser Pro Cys Thr Leu Met Ala Val Gly Gln Ser Cys Thr
            20                  25                  30
Arg Gly Val Tyr Pro Tyr Gly Phe Lys Asn Leu Phe Gly Gln Pro Leu
        35                  40                  45
Gln Ile Asn Ser Val Val Phe Leu Phe Ser Tyr Leu Glu Leu Leu Gln
    50                  55                  60
Glu
65

<210> 35545
<211> 84
<212> PRT
<213> A.fumigatus

<400> 35545
Lys Trp Cys Met Glu Ser Glu Leu Arg Ala Arg Leu Pro Trp Gly Asp
1               5                   10                  15
Pro Arg Pro Glu Pro Pro Thr Ala Gly Glu Gln Thr Ser Pro Gly Glu
            20                  25                  30
Ala Val Glu Leu Val Gln Gly Gln Gly Ala Gly Leu Asn Phe Asp Leu
        35                  40                  45
Ile Thr Phe Arg Ser Arg Gly Asp Glu Lys Ser Val Pro Ile His Pro
    50                  55                  60
Ser Glu Lys Ile Asp Gly Ala Ser Leu His Gln Ser Ser Gln Thr Val
65                  70                  75                  80
Met Thr Arg Thr
```

<210> 35546
<211> 378
<212> PRT
<213> A.fumigatus

<400> 35546
Leu Tyr Phe His Cys Arg Thr Leu Val Gly Phe Gly Thr Arg Ser Arg
1 5 10 15
His Ile Gly Glu Gly Ala Lys Thr Gln Glu Met Ser Asn Leu Lys Asn
20 25 30
Thr Val Gly Asn Leu Lys Arg Leu Ile Gly Arg Ser Phe Asn Asp Pro
35 40 45
Asp Val Glu Ile Glu Gln Lys Tyr Thr Ser Ala Ala Ile Cys Asp Val
50 55 60
Asn Gly Gln Ala Gly Val Glu Val Ser Tyr Leu Gly Lys Lys Glu Lys
65 70 75 80
Phe Ser Ala Thr Gln Leu Ala Ala Met Tyr Leu Thr Lys Ile Arg Asp
85 90 95
Ile Thr Ser Lys Glu Leu Lys Leu Pro Val Ser Asp Val Thr Ile Ser
100 105 110
Val Pro Ala Trp Phe Thr Asp Ala Gln Arg Arg Ala Met Ile Asp Ala
115 120 125
Gly Glu Ile Ala Gly Leu Lys Val Leu Arg Leu Ile Asn Asp Thr Thr
130 135 140
Ala Thr Ala Leu Gly Tyr Gly Ile Thr Lys Leu Asp Leu Pro Gly Pro
145 150 155 160
Glu Glu Lys Pro Arg Arg Val Met Phe Val Asp Ile Gly His Ser Asp
165 170 175
Tyr Thr Ala Ser Val Val Glu Phe Arg Lys Gly Glu Leu Asn Val Lys
180 185 190
Ala Thr Ala Tyr Asp Arg His Phe Gly Gly Arg Asp Phe Asp Ile Ala
195 200 205
Leu Thr Glu His Phe Ala Asp Glu Phe Lys Glu Lys Phe Lys Ile Asp
210 215 220
Val Arg Ser Asn Pro Lys Ala Tyr Ala Arg Thr Val Ala Ala Ala Glu
225 230 235 240
Lys Met Lys Lys Val Leu Ser Ala Asn Pro Ala Ala Pro Met Ser Ile
245 250 255
Glu Ser Leu Met Glu Asp Val Asp Val Arg Ser Ile Val Lys Arg Glu
260 265 270
Glu Leu Glu Thr Met Val Lys Pro Leu Leu Glu Arg Val Thr Ile Pro
275 280 285
Ile Glu Glu Ala Leu Ala Glu Ala Lys Leu Lys Pro Glu Asp Ile Asp
290 295 300
Thr Ile Glu Met Val Gly Gly Cys Thr Arg Val Pro Ala Ile Lys Glu
305 310 315 320
Ala Ile Ser Lys Phe Phe Gly Lys Thr Leu Ser Phe Thr Leu Asn Gln
325 330 335
Asp Glu Ala Ile Ala Arg Gly Cys Ala Phe Ser Cys Ala Ile Leu Ser
340 345 350
Pro Val Phe Arg Val Arg Asp Phe Ser Val His Asp Ile Val Asn Tyr
355 360 365
Pro Ile Glu Phe Thr Trp Glu Gln Ser Ala
370 375

<210> 35547
<211> 120
<212> PRT
<213> A.fumigatus

<400> 35547
Gly Arg Leu Leu Pro Cys Glu Leu Asp Gly Val Val Asp Asn Val Val
1 5 10 15
His Gly Glu Val Thr Asp Thr Glu Asp Gly Gly Glu Asp Gly Thr Ala
20 25 30
Glu Gly Ala Thr Thr Ser Asn Gly Leu Val Leu Val Glu Gly Glu Gly
35 40 45
Gln Gly Leu Ala Glu Glu Leu Gly Asp Gly Leu Leu Asp Ser Trp Asp
50 55 60
Thr Gly Ala Ala Thr Asp His Leu Asp Arg Val Asn Val Leu Arg Leu
65 70 75 80
Glu Leu Gly Leu Ser Lys Ser Leu Phe Asn Gly Asp Gly Asp Thr Leu
85 90 95
Lys Gln Arg Leu Asp His Gly Phe Glu Leu Leu Ala Leu Asp Asp Gly
100 105 110
Ala Asp Ile Asn Val Phe His Glu
115 120

<210> 35548
<211> 199
<212> PRT
<213> A.fumigatus

<400> 35548
Leu Asp Ala His Arg Gly Ser Arg Val Ser Gly Lys Asp Leu Leu His
1 5 10 15
Leu Leu Gly Arg Gly Asn Ser Thr Gly Ile Arg Leu Gly Val Gly Thr
20 25 30
Asp Val Asn Leu Glu Leu Leu Leu Glu Leu Ile Gly Lys Val Leu Arg
35 40 45
Glu Gly Tyr Val Glu Ile Thr Thr Thr Lys Val Thr Ile Val Gly Gly
50 55 60
Ser Leu Asp Val Glu Leu Thr Leu Ser Glu Leu Asp Asn Gly Gly Ser
65 70 75 80
Val Val Ala Val Ser Asp Ile Asp Lys His His Ser Ala Gly Leu Leu
85 90 95
Leu Gly Ala Gly Glu Ile Lys Leu Gly Asp Thr Val Ala Lys Gly Gly
100 105 110
Ser Ser Gly Ile Val Asp Glu Ser Gln Asn Leu Glu Thr Gly Asn Leu
115 120 125
Thr Gly Ile Asn His Gly Ala Thr Leu Ser Ile Cys Glu Pro Ser Gly
130 135 140
Asn Ala Asp Cys Asp Val Gly Asp Arg Glu Leu Gln Leu Leu Gly Cys
145 150 155 160
Asp Val Ser Asp Leu Gly Glu Val His Gly Ser Gln Leu Arg Arg Arg
165 170 175
Glu Leu Leu Leu Leu Ala Glu Val Ala His Phe Asn Thr Ser Leu Thr
180 185 190
Val Tyr Ile Thr Asp Ser Arg
195

<210> 35549
<211> 169
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (23),(67),(126)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35549
Ala Glu Val Ser Cys Leu Tyr Ser Leu Arg Ser Asp Ile Tyr Asp Phe
1 5 10 15
Val Ser Asn Val Tyr Pro Xaa His Arg Ala Gly Ile Ala Gly Ile Asn
20 25 30
Lys Thr Val Ala Ile Ser Thr Ile Ala Glu Thr Ala Asp Gln Thr Tyr
35 40 45
Ala Ile Ala Lys Leu Asn Thr Trp Val Leu Thr Glu Met Trp Phe Ile
50 55 60
Phe Val Xaa Gly Ser Ile Pro Val Leu Arg Pro Phe Phe Val Arg Phe
65 70 75 80
Ser Gln Ser Ile Lys Ser Val Ala Gly Tyr Ser Gly Ser Arg Ser Arg
85 90 95
Thr His Thr Asp Gly Asp Arg Arg Gly Ser Arg Pro Asn Asn Glu Thr
100 105 110
Trp Ile Ser Leu Asp Gly Gln Gln Arg Ser Pro Trp Ile Xaa Asn Gly
115 120 125
Pro Arg Thr Lys Lys Gly Val Ser Gly Gly Ile His Gly Gly Ser Glu
130 135 140
Glu Asn Ile Leu Ser Ala Thr Tyr Pro Asp Gln Ile Val Val Thr Lys
145 150 155 160
Arg Thr Thr Val Met Glu Glu Pro Arg
165

<210> 35550
<211> 141
<212> PRT
<213> A.fumigatus

<400> 35550
Leu Arg Asn Ser Arg Asn Pro Ser Ser Thr Phe Trp Asp Phe Ser Arg
1 5 10 15
Val Ser Pro Gln Thr Asn Cys Thr Arg Gly Phe Arg Leu Lys Val Asp
20 25 30
Trp Ser Ser His Val Val Leu Ala Ser Ala Tyr Thr Met Asp Asp Lys
35 40 45
Leu Pro Thr Gln Ile Thr Ser Gly Gly Ile Asp Glu Asp Glu Glu Ala
50 55 60
Leu Glu Gly Tyr Val Val Asp Pro Ser Arg Tyr Ala Asn Asn Ala Ala
65 70 75 80
Gly Leu Lys Thr Thr Pro Asp Gly Arg Tyr Val Leu Ile Pro Gln Pro
85 90 95
Leu Asp Thr Pro Asp Asp Pro Leu Asn Trp Ser Ser Arg Lys Lys Trp
100 105 110
Leu Ile Val Trp Ile Met Ala Tyr Ile Ala Phe Leu Ala Asp Tyr Thr
115 120 125

```
Gly Gly Thr Ala Ile Ile Thr Ile Ile Pro Gln Ser Met
    130                 135                 140

<210> 35551
<211> 236
<212> PRT
<213> A.fumigatus

<400> 35551
Gly Pro Tyr Phe Leu Thr Lys Gly Leu Pro Leu Met Met Thr Arg Glu
1               5                  10                  15
Trp Asn Leu Ser Gln Ala Thr Val Gln Arg Ala Val Val Gly Asn Leu
            20                  25                  30
Phe Thr Ile Gly Ser Cys Gly Ile Ile Val Val Val Leu Ala Gly Tyr
        35                  40                  45
Phe Gly Arg Met Pro Val Leu Leu Leu Phe Gln Ala Val Met Val Gly
    50                  55                  60
Thr Cys Ala Trp Ser Ala Ala Ala Thr Ser Phe Glu Ser Tyr Met Ala
65                  70                  75                  80
Ala Arg Ile Ile Asn Gly Leu Phe Cys Ser Val Gly Gln Gly Gly Ala
                85                  90                  95
Leu Leu Trp Ile Lys Asp Leu Phe Phe Phe His Glu His Pro Lys Val
            100                 105                 110
Ile Asn Tyr Ile Glu Phe Phe Ile Ile Met Ser Pro Tyr Leu Gly Pro
        115                 120                 125
Leu Leu Thr Cys Phe Ile Val Thr Asp Val Ala Trp Arg Trp Ala Phe
    130                 135                 140
Trp Leu Cys Thr Cys Met Ser Ala Val Ala Phe Leu Leu Val Phe Leu
145                 150                 155                 160
Leu Asp Glu Thr Pro Phe Asp Arg Lys Gly Arg Gln Val Pro Arg Gly
                165                 170                 175
Ser Tyr Ile Ala Arg Leu Thr Gly Val Gln Gln Ala Gln Leu Trp Arg
            180                 185                 190
Glu Arg Arg Phe Leu Gln Cys Ala Met Arg Pro Ile Val Ala Ile Thr
        195                 200                 205
Arg Ile Pro Val Leu Ile Ile Leu Ile Tyr Tyr Leu Leu Asn Phe Ala
    210                 215                 220
Trp Val Ile Gly Val Asn Thr Thr Ile Gly Ile Cys
225                 230                 235

<210> 35552
<211> 202
<212> PRT
<213> A.fumigatus

<400> 35552
Leu Ala Ile Phe Leu Leu Thr Ser Ser Ser Ser Ser Ser Leu Ser Leu
1               5                  10                  15
Ser Leu Ser Phe Pro Pro Leu Phe Leu Leu Phe Leu Ser Leu Ser Leu
            20                  25                  30
Ile Val Val Leu Phe Pro Leu Leu Ser Ala Thr Met Ser Thr Ile Gln
        35                  40                  45
Asn Leu Lys Asn Phe Ile Arg His Gly Lys Gln Ala Arg Leu Val Thr
    50                  55                  60
Pro His Ala Glu Pro Thr Thr Asp Val Ser Pro Val His Ala Glu Gln
65                  70                  75                  80
```

```
Gln Arg Gln Pro Gln Gly Ser Tyr Pro Pro Ala Ala Asp Asn Leu Asp
                85                  90                  95
Ala Ile Asp Ser Lys Met Gly His Ala His Thr His Gln Gln Gln Ser
            100                 105                 110
Glu Pro Pro Gln Ser Gln Pro Gln Lys Ser Pro Glu Asn Lys Gln Val
        115                 120                 125
Arg Thr Ala Glu Ile Glu Gln Ile Val Ala Glu Glu Arg Ser Ser Arg
    130                 135                 140
Thr Lys Met Pro Lys Tyr Pro Gly Leu Glu Arg Tyr Ile Leu Leu Glu
145                 150                 155                 160
Lys Met Gly Asp Gly Ala Phe Ser Asn Val Tyr Arg Ala Lys Asp Thr
                165                 170                 175
Thr Gly Glu His Asp Glu Val Ala Ile Lys Val Val Arg Lys Phe Glu
            180                 185                 190
Met Asn Ser His Gln Val Gly Ser Gln Pro
        195                 200
```

<210> 35553
<211> 62
<212> PRT
<213> A.fumigatus

<400> 35553

```
Val Leu Tyr Asn His Asp Ser Phe Arg Pro Ala Leu Ile Ala Val Thr
1               5                   10                  15
Gly Leu Met Val Met Leu Cys Tyr Ser Trp Glu Phe Ser Asp Phe Ala
            20                  25                  30
Gly Glu Lys Gly Val Ala Ser Gly Thr Ala Glu Gly Asp Phe Ile Gly
        35                  40                  45
Pro Cys Asp Cys Ser Asp Gly Thr Pro Gln Ala Leu Ile Leu
    50                  55                  60
```

<210> 35554
<211> 325
<212> PRT
<213> A.fumigatus

<400> 35554

```
Thr Ile Asp Pro Arg Asp Thr Asn Asp Leu Phe Glu Arg Met Tyr Arg
1               5                   10                  15
Ala Ser Met Phe Tyr Gly Arg Lys Gly Leu Pro Val Ala Val Ile Ser
            20                  25                  30
Val Ile Asp Leu Ala Leu Trp Asp Leu Leu Gly Lys Ile Arg Asn Glu
        35                  40                  45
Pro Val Tyr Lys Leu Ile Gly Gly Ala Thr Arg Thr Arg Leu His Phe
    50                  55                  60
Tyr Cys Thr Gly Pro Gln Pro Ala Ala Ala Lys Ala Ala Gly Phe Ile
65                  70                  75                  80
Gly Ala Lys Val Ala Leu Pro His Gly Pro Asp Glu Gly Thr Glu Gly
                85                  90                  95
Leu Leu Lys Asn Val Glu Tyr Leu Arg Lys Gln Arg Glu Ser Val Gly
            100                 105                 110
Pro Asp Phe Pro Leu Arg Val Asp Cys Tyr Met Ser Leu Asn Val Pro
        115                 120                 125
Tyr Thr Ile Glu Leu Val Lys Arg Cys Glu Ala Glu Gly Ile Asn Ile
    130                 135                 140
```

```
Asp Trp Trp Glu Glu Cys Leu Ser Pro Asp Asp Phe Asp Gly His Ala
145                 150                 155                 160
Leu Leu Lys Arg Ala His Pro Thr Ile Lys Phe Thr Thr Gly Glu His
                165                 170                 175
Glu Tyr Ser Arg Tyr Gly Phe Arg Lys Leu Val Glu Gly Arg Asn Leu
            180                 185                 190
Asp Ile Leu Gln Pro Asp Val Met Trp Val Gly Gly Met Thr Glu Leu
        195                 200                 205
Leu Lys Ile Ser Ala Met Ala Ala Ala Tyr Asp Ile Pro Val Val Pro
    210                 215                 220
His Ala Ser Gly Pro Tyr Ser Tyr His Phe Val Val Ser Gln Thr Asn
225                 230                 235                 240
Ser Pro Phe Gln Glu Tyr Leu Ala Asn Ser Pro Asp Gly Met Thr Val
                245                 250                 255
Glu Pro Val Phe Gly Asn Leu Phe Val Asn Glu Pro Ile Pro Thr Gln
            260                 265                 270
Gly Tyr Leu Asp Val Ser Ile Leu Asp Lys Pro Gly Phe Gly Leu Glu
        275                 280                 285
Leu Asn Pro Ala Ala Pro Leu Ile Ser Ala Ala Ala Ile Leu Thr Pro
    290                 295                 300
Ala Pro Lys Lys Ser Leu Thr Leu Pro Ala Glu Asp Glu Lys Leu Ala
305                 310                 315                 320
Asn Gly Ala Thr His
                325
```

<210> 35555
<211> 73
<212> PRT
<213> A.fumigatus

<400> 35555

```
Glu His Ser Leu Gly Thr Ser Tyr Asp Phe Ile Ala Arg Leu Tyr Gly
1               5                   10                  15
Arg His Glu Asn Arg Trp Asn Asn Leu Asp Phe Thr Gln Lys Phe Ser
            20                  25                  30
Ala Phe Gly His Ser Leu Gly Val Ser Gly Pro Phe Ser Tyr Ile Leu
        35                  40                  45
Ser Leu Ile Val His Ala Lys Gly Thr Thr Gly Val Ala Gln Ala Leu
    50                  55                  60
Lys Leu Arg Leu Leu Pro Val Asn Arg
65                  70
```

<210> 35556
<211> 69
<212> PRT
<213> A.fumigatus

<400> 35556

```
Gln Val Asp Ser Ser Tyr Leu Phe Tyr Ala Ile Thr His Leu Ala Gln
1               5                   10                  15
Ser Ala Arg Met Cys Glu Glu Gly Arg Ser Asn Ser Val Lys Glu Pro
            20                  25                  30
His Ile Ala Val Ala Phe Glu Lys Lys Ile Val Cys Leu Tyr Cys Ala
        35                  40                  45
Ala Trp Glu Gly Asp Leu Glu Lys His Pro Pro Arg Thr Phe Ser Ser
    50                  55                  60
```

Gln Ile Ser Val Cys
65

<210> 35557
<211> 70
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (25)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35557
Ala Ala Leu Gly Phe Gln Cys Tyr Thr Ile Ser Ala Glu Asn Phe Glu
1 5 10 15
Met Asn Pro Asn Thr Thr Tyr Pro Xaa Ile Ser Pro Ser His Val Glu
20 25 30
Gln Arg Gly Gln Thr Met Ala Lys Val Ala Gln Leu Asn Ser Arg Leu
35 40 45
Val Lys Gly Arg Ser Asn Tyr Ser Glu Ala Asp Ala Cys Asn Thr Tyr
50 55 60
Gln Gly Lys Ala Ala Trp
65 70

<210> 35558
<211> 182
<212> PRT
<213> A.fumigatus

<400> 35558
Ser Pro Ala Ala Ser Arg Arg Arg Arg Ser Ser Glu Ser Ser Ser Asp
1 5 10 15
Glu Gln Phe Val Arg Asn Asn Ala Asn Lys Arg Ala Cys Ala Lys Gln
20 25 30
Gly Val Arg Gly Leu Tyr Asn Leu Gly Gln Thr Cys Tyr Leu Asn Val
35 40 45
Ile Leu Gln Thr Leu Leu His Asp Pro Ile Leu Asn Ala Tyr Phe Leu
50 55 60
Gly Asn Gly His Gln Ser His Asp Cys Thr Leu Gln Asp Cys Ile Gly
65 70 75 80
Cys Ala Val Ala Glu Ala Phe Ala Asp Phe Asn Ser Ser Asp Lys Ala
85 90 95
Glu Gly Phe Ala Ala Leu Asn Leu Leu Leu Ala Ser Trp Arg Ala Ser
100 105 110
Pro Val Gly Gly Leu Leu Thr Asn Cys Tyr His Ile Ile Ile Leu Thr
115 120 125
His His Arg Leu Trp Gln Val Thr Ile Ser Arg Thr Arg Thr Asn Thr
130 135 140
Thr Asn Ser Ser Ser Thr Ser Tyr Ile Arg Ala Pro Lys Asp Thr Trp
145 150 155 160
Met Thr Thr Thr Lys Gly Val Pro Ala Phe Phe Thr Lys His Phe Met
165 170 175
Ala Ser Leu Lys Val Val
180

<210> 35559
<211> 254
<212> PRT
<213> A.fumigatus

<400> 35559
Thr Leu Ala Gly Tyr His Gln Gln Asp Ala His Glu Tyr Tyr Gln Phe
1 5 10 15
Leu Val Asp Lys Leu His Thr Ser Thr Glu Gly His Val Asp Asp His
20 25 30
Asp Gln Gly Cys Ser Cys Phe Phe His Gln Thr Phe Tyr Gly Lys Leu
35 40 45
Lys Ser Ser Val Met Cys Asp Asn Cys Gly Asn Ile Thr Lys Thr Glu
50 55 60
Asp Pro Met Leu Asp Leu Ser Leu Asp Val Gln Val Gln Ala Lys Lys
65 70 75 80
Arg Ala Met Gly Gly Gly Val Gly Pro Ser Ala Thr Pro Thr Leu Asn
85 90 95
Gly Cys Leu Glu Ser Phe Thr Ser Pro Glu Arg Leu Met Ala Gly Val
100 105 110
Tyr Asn Cys Ser Glu Cys Gly Gly Thr Pro Gln Lys Ala Thr Lys Arg
115 120 125
Leu Arg Ile Lys Lys Leu Pro Ala Ile Leu Cys Met Gln Leu Lys Val
130 135 140
Cys Leu Phe Ser Leu Thr Thr Ala Val Asp Leu Ala Asn Met Thr Cys
145 150 155 160
Ser Ala Leu Ser Ile Ala Gln Gln Cys Pro Arg Lys Leu Arg Ala Gly
165 170 175
Ser Ile Ser Leu Cys Arg Ser Thr Cys Ser His Ile Gln His Ile Gly
180 185 190
Thr Gly Arg Ile Ser Thr Asn Pro Asn Ser Phe Met Ile Ser Leu Leu
195 200 205
Gln Leu Ser Thr Lys Ala Asn Trp Thr Leu Asp Thr Thr Thr Ser Thr
210 215 220
Ala Ser Arg Ala Thr Arg Phe Val Tyr Pro Leu Ser Ser Gly Leu Cys
225 230 235 240
Leu Val Ser Thr Ile Arg Arg Gln Arg Ser Thr Leu Leu Thr
245 250

<210> 35560
<211> 79
<212> PRT
<213> A.fumigatus

<400> 35560
Thr Phe Thr Phe Val His Phe Thr Ile Tyr Asp Ser Glu Asn Ile Ser
1 5 10 15
Arg Arg Ala Ala Gln Ile Leu Gly Leu Tyr His Val Leu Thr Lys Glu
20 25 30
Asp Arg Arg Asn Thr Gly Cys Pro Pro Leu Ser Ala Glu Ile Thr Arg
35 40 45
Phe Asn Pro Ala Lys Gln His Ser Tyr Phe Val Glu Ser Ile Met Arg
50 55 60
Lys Leu Leu Gln Ser Ile Leu Gly Ile Thr Lys Leu Cys Leu Gly
65 70 75

<210> 35561
<211> 126
<212> PRT
<213> A.fumigatus

<400> 35561
Ala Gly Glu Gln Ala His Ser His Pro Ser Arg Ala Pro Ala Pro Asp
1 5 10 15
Glu Ala Arg Ala Ile Ile Gly Lys Cys Ile Leu Arg Ser Pro Val Pro
20 25 30
Leu Val Thr Asp Gly Val Val Cys Gln Thr Glu Ile Lys Ser Val Leu
35 40 45
Arg Gln Cys Ile Ser Leu Val Met Val Val Lys Asp Asn Ile Met Gln
50 55 60
Leu Cys Arg Phe Phe Lys Ala Ile Ser Ser Thr Ile Asp Val Val Val
65 70 75 80
Glu His Thr Val Asn Asp Phe Ile Glu Thr Ile Ser Ser Gly Ala Ser
85 90 95
Asp Val Gln Met Ser Asn Phe Thr Leu Ser Val Leu Gln Lys Ser Val
100 105 110
Ser Pro Lys Asp Glu Ser Ala Thr Leu Ala Ala Ser Ser His
115 120 125

<210> 35562
<211> 112
<212> PRT
<213> A.fumigatus

<400> 35562
Pro Met Val Met Gln Met Ile Tyr Lys Tyr Ala Val Ile Leu Arg Ala
1 5 10 15
Tyr Phe Glu Thr Phe Gly Asp Ile Ala Thr Met Trp Lys Glu Leu Ser
20 25 30
Glu Glu Asn Ile Ile Pro Gly Leu Lys Met Ile Asp Gly Leu Ser Val
35 40 45
Glu Leu Thr Lys Asp Gln Met Ala Thr Lys Val Ala Glu Leu Ser Ser
50 55 60
Trp Ser Gln Asn Ala Ser Ala Asn Ile Val Ser Ile Gly Ser Ala Lys
65 70 75 80
Arg Lys Glu Ile Glu Gly Gly Asp Gly Arg Gly Ser Arg Glu His Cys
85 90 95
Thr Val Tyr Ala Glu Ser Pro Ala Tyr Pro Pro Ala Lys Lys Pro Ile
100 105 110

<210> 35563
<211> 91
<212> PRT
<213> A.fumigatus

<400> 35563
Ala Pro Leu Met Ala Thr Thr Glu Asp Pro Ala Val Gln Ile Ala Lys
1 5 10 15
Thr Asn Ala Lys Ser Ala Gln Ala Gln Ala Gly Leu Ala Ala Ala Lys
20 25 30
Asp Arg Leu His Thr Thr Gln Gln Thr Phe Leu Ser Thr Gln Lys Ile
35 40 45

```
Tyr Gln Glu Ala Ser Ser Thr Leu Ile Glu Gln Glu Asn Lys Leu Thr
    50                  55                  60
Ala Ile Gln Ala Glu Leu Gln Arg Gln Thr Lys Leu Glu Pro Ser Leu
65                  70                  75                  80
Val Ser Ala Ser Phe Gly Val Gln Tyr His Trp
                85                  90
```

<210> 35564
<211> 93
<212> PRT
<213> A.fumigatus

<400> 35564

```
Pro Pro Ser Glu Ala Val Glu Thr Glu Ala Val Arg Val Lys Cys Pro
1               5                   10                  15
Ile Pro Glu Lys Thr Asp Leu Asp Phe Asp Lys Ala Glu Ala Ile Met
            20                  25                  30
Leu Ser Thr Leu Ser Ala Ser Thr Gly Ile Ile Lys Asp Lys Thr Pro
        35                  40                  45
Thr Ala Val Asp Val Asp Ala Glu Val Lys Gln Trp Lys Glu Glu Phe
    50                  55                  60
Gly Asp Glu Val Ala Thr Lys Leu Glu Met Met Val His Asp Ala Met
65                  70                  75                  80
Pro Asp Tyr Glu Tyr Leu Arg Ser Arg Arg Ile Thr Val
                85                  90
```

<210> 35565
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35565

```
Asp Ala Leu Thr Lys Asn Thr Leu Asp Phe Ser Leu Thr Asn His Thr
1               5                   10                  15
Val Ser Tyr Gln Trp Tyr Trp Thr Pro Lys Asp Ala Leu Thr Asn Asp
            20                  25                  30
Gly Ser Ser Phe Val Trp Arg Trp Ser Ser Ala Trp Met Ala Val Ser
        35                  40                  45
Leu Phe Ser Cys Ser Ile Arg Val Asp Glu Ala Ser
    50                  55                  60
```

<210> 35566
<211> 63
<212> PRT
<213> A.fumigatus

<400> 35566

```
Arg Ala Thr Gln Leu Gly Phe Val Asn Leu His Thr Tyr Thr Leu Glu
1               5                   10                  15
Pro Ala Asp Asn Leu Asp Gly Cys Arg Phe Gln Pro Glu Ile Met Cys
            20                  25                  30
Leu Thr Asp Asn Ile Lys Asp Asp Ser Thr Tyr Thr Ser Val His Phe
        35                  40                  45
Pro Gly Glu Leu Gly Ile Gly Trp Lys Asn Ile Leu Arg Arg Arg
    50                  55                  60
```

<210> 35567
<211> 77
<212> PRT
<213> A.fumigatus

<400> 35567
Arg Gly Met Gly Val Ile Val Val Glu Ser Ile Cys Leu Thr Gly Asn
1 5 10 15
Val Ile Asn Val Phe Asp Ala Glu Val Met Glu Ser Glu Ser Glu Thr
20 25 30
Val Ser Ser Leu His Arg Phe Trp Cys Gly Phe Ser Thr Gly Asn Ile
35 40 45
Pro Thr Val Thr Lys Gly Met Glu Asn Pro Leu Thr Asp Leu Asp Asn
50 55 60
Lys Pro Pro Asn Arg Ile Ile Lys Ser Tyr Ile Tyr Ser
65 70 75

<210> 35568
<211> 1333
<212> PRT
<213> A.fumigatus

<400> 35568
Ala Ala Gly Trp Leu Val Ser Pro Glu Met Ala Tyr Phe Leu Pro Ser
1 5 10 15
Phe Phe Gln Lys Arg Leu Leu Arg Tyr Ala Leu Ser Arg Leu Glu Leu
20 25 30
Val Asp Thr Glu Ala Leu Asp Leu Asp Ser Leu Gly Ile Arg Trp Gly
35 40 45
Gln Arg Ser Thr Val Glu Leu Arg Asp Ile Gly Leu Arg Leu Glu Val
50 55 60
Ser Phe Tyr Arg Arg Gln Ile Ser His Thr Thr Arg Gln Ile His Pro
65 70 75 80
Pro Cys Ala Leu Arg Gly Arg Cys Ile Thr Asn Asn Tyr Asp Val Ser
85 90 95
Lys Gln Lys Leu Ala Thr Leu Leu Gln Leu Pro Ala Ser Ser Glu Leu
100 105 110
Leu Ser Ala Lys Val Gln Phe Leu Lys Ile Thr Val Pro Ala Asp Ile
115 120 125
Tyr Ser Ser Gly Ile Ile Cys Glu Ala Ser Gly Ile Asn Val His Leu
130 135 140
Gln Leu Pro Ser Glu Glu Ser Phe Ser Thr Ala Lys Asp Gly Asn Pro
145 150 155 160
Asn Ser Arg Ser Pro Ser Lys Ala Gly Thr His Asp Ser Ser Ser Asp
165 170 175
His Ile Leu Pro Thr Pro Ala Asp Leu Ala Glu Ser Phe Leu Asp Ala
180 185 190
Glu Pro Lys Glu Glu Lys Glu Glu Leu Gln Ala Ala Ile Thr Ser Arg
195 200 205
Ser Gln Met Leu Gln Arg Thr Ser Ala Ser Ile Ser Asp Asp Glu Glu
210 215 220
Glu Leu Gly Leu Gly Asn Glu Gly Val Ser Leu Pro Ser Phe Val Ala
225 230 235 240
Ala Phe Leu Lys Gly Val Ala Glu Arg Leu Gln Val Arg Val Asp Asn
245 250 255
Val Ser Ile Arg Val Asp Met Glu Met Lys Gln Glu Gly Val Val Lys

```
            260                 265                 270
Arg Glu Pro Glu Asn Lys Pro Asp Asn Val Thr Gly Leu Leu Thr Val
        275                 280                 285
Arg Glu Val Ser Val Gly Ala Val Ser Ser Ala Thr Ser Ser Ser Glu
    290                 295                 300
Gln Glu Lys Leu Phe Arg Asn Arg Pro Ile Val Ile Ser Asp Ile Asn
305                 310                 315                 320
Met Ala Leu Ile Ser Glu Pro Ile Val Phe Ser Asn Tyr Ser Arg Phe
                325                 330                 335
Ala Pro Pro Ala Ser Pro Thr Thr Pro Val Gln Pro Lys Ser Ser Glu
            340                 345                 350
Pro Ser Ser Arg Ile Pro Ser Pro Leu Pro Gly His Thr Pro Asp Ala
        355                 360                 365
Asp Ser Phe Leu Ala Met Thr Arg Ser Thr Ile Leu Glu Thr Gln Gln
    370                 375                 380
Glu His Trp Ile Gln Asp Ile Glu Glu Pro Gly Val Gly Arg Met Glu
385                 390                 395                 400
Gly Ser Ala Tyr Thr Tyr Asp Gly Arg Phe Ser Asp Ala Asp Thr Asp
                405                 410                 415
Ala Glu Asp Arg Ser Asp Gly Tyr Leu Glu Gly Ala Gln Gln Phe Leu
            420                 425                 430
Asp Asn Asp Lys Leu Leu Asp Asn Pro Ala Tyr Leu Asp Ser Val Ile
        435                 440                 445
Asp Ser Gln Leu His Asp Asp Asp Leu Glu Pro Pro Glu Asp Leu Val
    450                 455                 460
Pro Gln Asp Asp Gln Phe Pro Pro Ser Ser Ala Thr Pro Arg Pro Pro
465                 470                 475                 480
Lys Pro Glu Val His Met Tyr Arg Glu Thr Ser Pro Ser Gly Ile Asp
                485                 490                 495
Thr Glu Gln Thr Ala Pro Phe Ser His Tyr Gly Asp Gly Phe Phe Met
            500                 505                 510
Asp Arg Ser Pro His Gly Ser Gln Pro Tyr Leu Gly Pro Asp His Val
        515                 520                 525
Ala Thr Arg Asn Ala Ser His Ser Ala Ser Ser Pro Ser Gly Ser Leu
    530                 535                 540
Pro Ser Arg Glu Ile Ser Asn Arg Gln Thr Ala Pro Pro Ser Glu Ser
545                 550                 555                 560
Gly Ser Ile Gly Ser Ser Asp Phe Ala Asn Gly Gly Glu Leu Ser Glu
                565                 570                 575
Ser Lys Leu Phe Ser Thr Glu Glu Ala Gln Ser Met Tyr Met Ser Ala
            580                 585                 590
Ile Ser His Gly Ser Ser Arg Ser Phe Val Pro Asn Val Pro Gly Ala
        595                 600                 605
Trp Asp Leu Trp Glu Ser Thr Val Ala Gln Asp Met His Ala Gly Thr
    610                 615                 620
Gln Leu Thr Asp Ala Ala Asp Ala Lys Gln Asp Val Gln Asp Glu Thr
625                 630                 635                 640
Ser Ile Ser Thr Pro Lys Leu Thr Ala Gln Ala Ala Ser Ala Phe Thr
                645                 650                 655
Glu Lys Arg Ser Phe Gly Glu Gln Ser Glu Cys Leu Ser Glu Ala Arg
            660                 665                 670
Glu Pro Asp Leu Ala Pro Leu Ser Pro Thr Leu Ser Lys Leu Ser Asp
        675                 680                 685
Val Ala Lys Arg Phe Leu Arg Ile Asp Arg Ile Ser Ile Ser Ile Pro
    690                 695                 700
Val Gly Glu Asp Arg Arg His Thr Asp Glu Thr Val His Ser Ser Asp
```

```
705                 710                 715                 720
Leu Asn Leu Ala Ser Asp Ser Pro Lys Asp Ser Thr Val His Ser Gly
                725                 730                 735
His Ser Ser Ala Glu Ser Glu Phe Leu Ser Ser Thr Met Tyr Ala Ser
            740                 745                 750
Ala Arg Leu Arg Ser Asp Ser Ile Asn Ser Ala Pro Ser Phe Glu Gly
        755                 760                 765
Thr Leu Pro Arg Ser Leu Pro Arg Gln Gly Lys Lys Ala Asp His Asp
    770                 775                 780
Pro Ile Ser Lys Ser Gln Pro Gly Asp Ile Ala Val Glu Ile Ser Ala
785                 790                 795                 800
Val Asp Ile Arg Phe Asp Asn Ala Val Gly Trp Leu Val Val Lys Ile
                805                 810                 815
Gly Gln Arg Val Leu His Ala Phe Arg Asp Gly Gly Asn Val Ser Ser
            820                 825                 830
Gly Lys Pro Ala Pro Glu Ser Val Gln Thr Arg His Ser Leu Ala Leu
        835                 840                 845
Thr Leu His Asp Phe Ser Ile Lys Tyr Val Asp His Ile Pro Gly Gln
    850                 855                 860
Thr Tyr Ala Leu Asn Asp Tyr Asp Pro His Ser Ser Ser Phe Phe Gly
865                 870                 875                 880
Leu Pro His Glu Asp Ile Ile Leu Arg Ala Glu Ala Ser Gly Leu Thr
                885                 890                 895
Ala Arg Tyr Leu Ala Asp Lys Ser Ala Thr Lys Phe Ser Leu Asp Val
            900                 905                 910
Ser Lys Phe Val Phe Gly Phe Ala Trp Asp Asp Leu Ile Ser Phe Ser
        915                 920                 925
Glu Ser Leu Lys Met Arg Glu Ser Thr Arg Asp Val Leu Ala Pro Val
    930                 935                 940
Asn Gly Asp Ile Ser Leu Ser Leu Thr Lys Ser Ser Asp Ser Ala Ser
945                 950                 955                 960
Leu Thr Ile Thr Thr Leu Pro Leu Arg Leu His Leu Asn Val Gln Arg
                965                 970                 975
Leu Glu Glu Ile Phe Gly Arg Val Gly Gly Leu Ser Thr Ile Leu Glu
            980                 985                 990
Leu Gly Ser Ser Ile Ser Ser Ala Ser Thr Gly Phe Ser Thr Ala Lys
        995                 1000                1005
Asn Met Gln Arg Asp Ser Pro Arg Arg Ala Arg Gly Val His Phe Glu
    1010                1015                1020
Ser Ser Pro Pro Pro Glu Asn Ile Leu Pro Ala Asn Pro Gln Leu Ser
1025                1030                1035                1040
Trp Lys Val Asn Ala Arg Val Gly Gly Ile Val Phe Asp Val Val Gly
                1045                1050                1055
Glu Thr His Tyr Leu Arg Leu Lys Thr Thr Ala Val Lys Val Val Ser
            1060                1065                1070
Arg Phe Glu Gly Ile Gly Val Gln Ile Asp Lys Ala Lys Leu Ser Gly
        1075                1080                1085
Pro Leu Pro Leu Asp Asp Ser Arg Asp Ala Pro Ala Lys Ile Asn Leu
    1090                1095                1100
Ser Asn Ile Arg Val Glu Phe Leu Tyr Ser Pro Lys Glu Pro Asp Leu
1105                1110                1115                1120
Asp Arg Leu Leu Ala Ile Ile Thr Pro Ser Lys Asp Lys Tyr Asp Glu
                1125                1130                1135
Asp Asp Asp Ile Met Leu Asp Thr Leu Phe Arg Gln Arg Arg Gln Gly
            1140                1145                1150
Ser Val Leu Arg Thr Thr Val Ala Asp Ala Lys Ile Ile Ile Ser Arg
```

```
        1155                1160                1165
Thr Ser Asp Leu Glu Ser Leu Ser Gln Leu Glu Glu Glu Leu Gly Lys
    1170                1175                1180
Leu Ser Thr Val Ala Lys Tyr Leu Pro Glu Asp Asp Arg Pro Gly Ile
1185                1190                1195                1200
Leu Thr Leu Thr Leu Ile Arg Glu Leu Glu Cys Gln Val Tyr Leu Gly
                1205                1210                1215
Gly Pro Val Gly Asn Ile Thr Thr His Leu Arg Asn Ala Glu Ala Ala
            1220                1225                1230
Tyr Ile Ser Met Pro Ser Leu Ile Ala Ala Gln Leu Gly Thr Ile Lys
        1235                1240                1245
Val Val Arg Asn Gly Ser Glu Glu Leu Val Gly Glu Ala Leu Pro Ala
    1250                1255                1260
Ser Gly Ser Gln Gly Gln Asn Gln Ser Gln Leu Pro Ile Leu Met Ala
1265                1270                1275                1280
Arg Tyr Ile Ala Asp Glu Met Asp Pro Thr Ile Lys Ile Lys Ser His
                1285                1290                1295
Asn Leu Arg Val Glu Tyr Thr Ile Pro Ser Ile Ile Ala Phe Leu Gly
            1300                1305                1310
Leu Ser Glu Asp Gln Thr Thr Gly Asp Val Ala Ala Asn Met Ala Asn
        1315                1320                1325
Ser Leu Ala Asn Met
    1330

<210> 35569
<211> 86
<212> PRT
<213> A.fumigatus

<400> 35569
Lys Thr Val Ile Gly Tyr Leu Glu Cys Phe Cys Thr Arg Ile Leu Thr
1               5                   10                  15
Val Gly Val Pro Leu Ser Gly Arg Gly Val Val Asn Asn Met Glu Lys
            20                  25                  30
Ala Ser Glu Pro Ser Gln Thr Gln Pro Ala Pro Glu Glu Pro Val Lys
        35                  40                  45
Ser Ile Glu Asp Asp Gly Lys Gly Asp Ser Ser Ser Thr Gly Gly Val
    50                  55                  60
Thr Asp Glu Gln Trp Arg Ser Met Met Asp Val Val Leu Ala Ile Tyr
65                  70                  75                  80
Glu Phe Arg Glu Glu Glu
                85

<210> 35570
<211> 490
<212> PRT
<213> A.fumigatus

<400> 35570
Ile Pro His Asn Ala Gln Thr Tyr Asn Arg Pro Asn Ser Gln Ala Tyr
1               5                   10                  15
Glu Asp Ala Leu Val Ile Lys Val Arg Thr Thr Arg Lys Asp Phe Asp
            20                  25                  30
Ser Ile Ser Val Gly Glu Tyr Arg Gly Ala Asp Pro Leu Ser Pro Tyr
        35                  40                  45
Lys Asp Val Phe Ile Ala Glu Phe Glu Lys Leu Val Lys Gln Gly Ile
```

```
    50                  55                  60
Ile Thr Ala Glu Glu Ala Glu Leu Pro Asp Leu Gly Glu Ile Pro Glu
65                  70                  75                  80
Ala Asp Pro Leu Pro Glu Glu Glu Asp Glu Glu Asp Glu Asp Asp Asp
                85                  90                  95
Asp Glu Asp Asp Glu Asp Asp Ser Asp Asp Asp Gly Arg Arg Lys Lys
            100                 105                 110
Lys Arg Gly Pro Arg Pro Gly Trp Lys Arg Asp Ala Gly Lys Asp Asp
        115                 120                 125
Gly His Lys Ser Ala Asp Pro Glu Leu Arg Lys Lys Arg Gly Arg Pro
    130                 135                 140
Pro Arg Val Asp Thr Pro Met Glu Ala Arg Ile Lys Ala Val Leu Lys
145                 150                 155                 160
Gly Ile Arg Lys Leu Lys Gly Pro Leu Gly Met Leu Lys Val Arg His
                165                 170                 175
Phe Glu Arg Leu Pro Asp Lys Ala Thr Tyr Pro Asp Tyr Tyr Val Glu
            180                 185                 190
Ile Lys Glu Pro Ile Ala Ile Asp Ile Ile Lys Arg Lys Ser Lys Arg
        195                 200                 205
Lys Lys Tyr Asn Ser Val Asp His Phe Met Arg Asp Met Asp Leu Met
    210                 215                 220
Phe Asn Asn Ala Lys Ala Tyr Asn Gln Pro Asp Ser Gln Ile Tyr Lys
225                 230                 235                 240
Asp Ala Val Asp Leu Gln Val Glu Ala Arg Arg Leu Ala Glu Ile Glu
                245                 250                 255
Lys Arg Lys Pro Asp Ser Glu Tyr Leu Met Glu Asp Gly Arg Leu Pro
            260                 265                 270
Leu Pro Asp Gly Ile Leu Tyr Lys Gly Glu Leu Trp Lys Val Gly Asp
        275                 280                 285
Trp Val His Ile Gln Asn Pro Asn Asp Val Thr Lys Pro Ile Val Ala
    290                 295                 300
Gln Ile Tyr Arg Thr Trp Gln Asp Ser Glu Gly Glu Lys Trp Val Asn
305                 310                 315                 320
Ala Cys Trp Tyr Tyr Arg Pro Glu Gln Thr Val His His Phe Glu Lys
                325                 330                 335
His Phe Tyr Pro Asn Glu Val Val Lys Thr Gly Gln Tyr Arg Asp His
            340                 345                 350
Arg Ile Glu Glu Val Val Asp Arg Cys Phe Val Met Phe Phe Thr Arg
        355                 360                 365
Tyr Asn Arg Gly Arg Pro Arg Gly Leu Pro Pro Asp Lys Glu Val Tyr
    370                 375                 380
Val Cys Glu Ala Arg Tyr Asn Glu Glu Lys His Lys Leu Asn Lys Ile
385                 390                 395                 400
Lys Thr Trp Ala Ser Cys Leu Pro Asp Glu Val Arg Glu Lys Asp Tyr
                405                 410                 415
Glu Met Asp Leu Phe Asp Val Pro Arg Arg Ile Lys Lys Ile Pro Ser
            420                 425                 430
Pro Ile Lys His Leu Leu Lys Ser Asp Ala Lys Glu Thr Asp Asp Leu
        435                 440                 445
Pro Lys Pro Thr Trp Gly Ala Asp Asn Ala Pro Pro Ile Val Gly Ala
    450                 455                 460
Val His Arg Arg Pro Arg Asp Glu Asn Val Ser Ile Ser Thr Pro Ser
465                 470                 475                 480
Trp Ser Gly Ser Phe Val Arg Arg Pro Phe
                485                 490
```

<210> 35571
<211> 343
<212> PRT
<213> A.fumigatus

<400> 35571
Leu Gly Phe Ile Leu Leu Ser Phe Phe Arg Gln Glu Ser Pro Pro Pro
1 5 10 15
Glu Pro Thr Pro Ser Pro Pro Pro Ser Leu Pro Gln Pro Val Leu Ser
20 25 30
Thr Val Pro Pro Arg Leu Pro Ala Ile Thr Gln Pro Ser Thr Arg Pro
35 40 45
Ser Val Gly Ser Pro Gly Ser Ala Pro Ala Val Gly Ala Val Pro Val
50 55 60
Pro Ala Arg Ser Pro Ala Ala Pro Ile Pro Pro Thr Gln Gly Ser Pro
65 70 75 80
Leu Pro Ala Pro Pro Val Ala Tyr Gln Gln Pro Gln Val Pro Pro Val
85 90 95
Gln Val Tyr Gln Pro Ala Leu Gln Arg Arg Pro Ser Ala Phe Val Pro
100 105 110
Gln Thr Pro His Ser Pro Ala Tyr Gln Pro Ser Pro Val Pro His Pro
115 120 125
Tyr Ala Ala Ala Gln Pro Thr Pro Tyr Thr Pro Tyr Gln Ala Gly Arg
130 135 140
Val His Val Pro Pro Ala Ser Val Tyr Asn Pro Asn Ala Pro Arg Pro
145 150 155 160
Ile Glu Val Phe Arg Leu Ser Glu Ala Ala Asn Ala Ala Ile Pro Glu
165 170 175
Asp Ile Arg Glu Gln Phe His Cys Asp Asp Ser Gly His Val Leu Phe
180 185 190
Phe Ser Ala Pro Pro Leu Asp Ile Val Ser Ser Leu Gln Gln Lys Leu
195 200 205
Gly His Ser Leu Lys Tyr Leu Ala Ala Lys Ala Glu Arg Arg Lys Leu
210 215 220
Val Glu Gln Arg Lys Arg Lys Asp Asp Leu Glu Arg Val Glu Arg Glu
225 230 235 240
Glu Arg Val Lys Arg Leu Arg Ala Asp Glu Glu Thr Ser Leu Ala Ala
245 250 255
His Val Glu Ala Leu Thr Ala Lys Ala Ile Glu Ile Met Thr Ser His
260 265 270
Val Met Ile Gly Thr Glu Lys Ile Tyr Asp His Leu Tyr Ser Asn Gln
275 280 285
Ala Glu Thr Ala Lys Gln Ala Asp Ala Asp Ala Arg Ala Arg Arg Ile
290 295 300
Thr Ala Asp His Ile Ser Gln Glu Lys Thr Ala Gln Ile Gln Ala Tyr
305 310 315 320
Ser Asn Lys Ala Thr Thr Val Ser Leu Lys Gly Ser Ala Met Tyr Met
325 330 335
Asp Asp Ile Asp Pro Thr Ile
340

<210> 35572
<211> 107
<212> PRT
<213> A.fumigatus

<400> 35572
Leu Ser Ser Leu Tyr Ser Gly His Asp Pro Ser Arg Leu Phe Gln Arg
1 5 10 15
Ser Val Asn Lys Arg Asn Val Pro Asp Tyr Tyr Glu Ile Ile Lys Glu
20 25 30
Pro Met Ala Leu Ser Ile Leu Lys Gln Lys Ile Asn Lys Arg Glu Tyr
35 40 45
Lys Asn Phe Ala Glu Phe Val Arg Asp Cys Ala Leu Val Ser Phe Ala
50 55 60
Pro Phe Leu Leu Leu Trp Asn His Leu Val Ile Thr Phe Thr His Ala
65 70 75 80
Val Ile Phe Ser Phe Arg Ser Leu Thr Met Arg Arg His Ile Ile Gly
85 90 95
Gln Ile His Lys His Thr Arg Met Arg Ser Ser
100 105

<210> 35573
<211> 185
<212> PRT
<213> A.fumigatus

<400> 35573
Ser Gly Tyr Val Ala Leu Ser Gly Lys Arg Ser Lys Cys Arg Thr Leu
1 5 10 15
Ser Met Pro Arg Gly Pro Leu Ser Leu Arg Ile Pro Phe Lys Thr Ala
20 25 30
Leu Ile Leu Ala Ser Met Gly Val Ser Thr Arg Gly Gly Arg Pro Arg
35 40 45
Phe Phe Leu Ser Ser Gly Ser Ala Asp Leu Cys Pro Ser Ser Phe Pro
50 55 60
Ala Ser Arg Phe Gln Pro Gly Arg Gly Pro Arg Phe Phe Leu Arg Arg
65 70 75 80
Pro Ser Ser Ser Glu Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser Ser
85 90 95
Ser Ser Ser Ser Ser Ser Ser Gly Arg Gly Ser Ala Ser Gly Ile Ser
100 105 110
Pro Arg Ser Gly Ser Ser Ala Ser Ser Ala Val Met Ile Pro Cys Leu
115 120 125
Thr Ser Phe Ser Asn Ser Ala Met Asn Thr Ser Leu Tyr Gly Glu Arg
130 135 140
Gly Ser Ala Pro Arg Tyr Ser Pro Thr Asp Ile Glu Ser Lys Ser Leu
145 150 155 160
Arg Val Val Arg Thr Phe Met Thr Ser Ala Ser Ser Tyr Ala Cys Glu
165 170 175
Phe Gly Arg Leu Tyr Val Cys Ala Leu
180 185

<210> 35574
<211> 201
<212> PRT
<213> A.fumigatus

<400> 35574
Leu His Thr Tyr Ser Gly Leu Ala Arg Val His Lys Pro Arg Arg Leu
1 5 10 15
Leu Leu Lys Val Gly Arg Arg Gly Ala Val Gln Glu Ala Leu Leu Ile

```
            20                  25                  30
Leu Glu Asn Met Thr Asp Pro Asn Arg Pro Pro Phe Phe Ser Tyr Gly
        35                  40                  45
Ser Tyr Pro Ser Ser Ser Asp Phe Arg Glu Asn Glu Pro Val Tyr Ser
    50                  55                  60
Asp Trp Thr Ser Ser Gln Phe Pro Gln Ala His Phe Gly Pro Gln Ile
65                  70                  75                  80
Asn Tyr Glu Pro Ser Pro Ser Tyr Val Glu Asn Pro Ala Gly Pro Arg
                85                  90                  95
Val Gly Thr Ala Glu Arg Ser Val Asn Ser Lys Val Ala Ile Pro Arg
            100                 105                 110
Ser Ala Asn Pro Ser Ser Trp Thr Ser Ser Gly Arg Val Ser Arg Ala
        115                 120                 125
Cys Glu Asn Cys Arg Glu Gln Lys Ala Gln Cys Asn Gly His Arg Pro
    130                 135                 140
Thr Cys Gln Arg Cys Gln Glu Ser Gly Ile Arg Cys Ser Tyr Gly Asp
145                 150                 155                 160
Arg Lys Arg Glu Lys Met Ala Lys Cys Val Phe Phe Phe Phe Phe Phe
                165                 170                 175
Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Ala Ile Leu Phe Phe
            180                 185                 190
Val Leu Arg Arg Ser Arg Arg Phe Ser
        195                 200
```

<210> 35575
<211> 89
<212> PRT
<213> A.fumigatus

<400> 35575

```
Thr Pro Lys Leu Pro Ser Pro Gly Gln Arg Thr Pro Val Val Gly Pro
1               5                   10                  15
Ala Ala Gly Glu Leu Ala Gly Pro Ala Lys Thr Val Val Ser Arg Lys
            20                  25                  30
Pro Ser Val Thr Val Ile Ala Gln Pro Val Lys Asp Ala Arg Ser Arg
        35                  40                  45
Val Ser Val Ala His Met Ala Thr Ala Ser Glu Arg Arg Trp Gln Ser
    50                  55                  60
Ala Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe
65                  70                  75                  80
Phe Phe Leu Pro Phe Ser Ser Leu Phe
                85
```

<210> 35576
<211> 145
<212> PRT
<213> A.fumigatus

<400> 35576

```
Gly Val Val Gly Met Thr Ile Thr Asp Asp Ser Asp Glu Gly Lys Val
1               5                   10                  15
Ala Ser Ala Asp Asp Glu Ala Ile Ala Asp Glu Cys Ser Ser Pro Ala
            20                  25                  30
Gly Val Gly Asp Ala Asp Ile Ser Val Val Leu Asp Val Pro Leu Ser
        35                  40                  45
Ala Val Ala Arg Glu Leu Ser Ala Ala Asp Glu Gly Lys Gly Ile Ser
```

```
    50                  55                  60
Val Asp Thr Asn Gly Val Ile Val Pro Lys Tyr Pro Ser Ala Gly Ser
65                  70                  75                  80
Ile Asp Asp Ala Gly Ile Ser Val Glu Leu Asp Asp Pro Leu Ser Thr
                85                  90                  95
Val Ala Arg Glu Leu Ile Pro Val Asp Glu Ala Lys Val Ala Ser Gly
            100                 105                 110
Asp Asn Asn Gly Ala Thr Val Pro Lys Tyr Pro Ser Ala Glu Ser Thr
        115                 120                 125
Asp Asp Pro Gly Thr Ser Val Glu Ala Tyr Glu Ala Cys Gly Thr Val
    130                 135                 140
Val
145
```

<210> 35577
<211> 610
<212> PRT
<213> A.fumigatus

<400> 35577

```
Ile Phe Lys Met Gln Leu Met His Phe Asn Asn Ala Phe Ala Leu Phe
1               5                   10                  15
Ala Ile Thr Cys Ser Ala Gly Pro Ile Ala Gln Phe Ala His Lys Leu
            20                  25                  30
Arg Asp Leu Glu Gln Ser Ser Gln Ser Pro Gly His Ile Ala Tyr Ser
        35                  40                  45
Ser Leu Leu Pro Leu Asp Lys His Val Leu Ala Ala Leu Asp Glu Ala
    50                  55                  60
Asn Gly Gly Leu Asp Val Ile Pro Ile Thr Pro Ser Val Thr Ala Asp
65                  70                  75                  80
Gly Thr Gln Thr Thr Val Pro Gln Ala Ser Tyr Ala Ser Thr Glu Val
                85                  90                  95
Pro Gly Ser Ser Val Leu Ser Ala Glu Gly Tyr Leu Gly Thr Val Ala
            100                 105                 110
Pro Leu Leu Ser Pro Glu Ala Thr Leu Ala Ser Ser Thr Gly Ile Ser
        115                 120                 125
Ser Arg Ala Thr Val Asp Ser Gly Ser Ser Ser Ser Thr Glu Ile Pro
    130                 135                 140
Ala Ser Ser Ile Leu Pro Ala Glu Gly Tyr Leu Gly Thr Ile Thr Pro
145                 150                 155                 160
Leu Val Ser Thr Glu Ile Pro Leu Pro Ser Ser Ala Ala Asp Ser Ser
                165                 170                 175
Arg Ala Thr Ala Asp Ser Gly Thr Ser Ser Thr Thr Glu Ile Ser Ala
            180                 185                 190
Ser Pro Thr Pro Ala Gly Glu Glu His Ser Ser Ala Ile Ala Ser Ser
        195                 200                 205
Ser Ala Glu Ala Thr Leu Pro Ser Ser Glu Ser Ser Val Ile Val Ile
    210                 215                 220
Pro Thr Thr Pro Tyr Ser His Ser Ala Ser His Pro Ala Ser Thr Pro
225                 230                 235                 240
Ser Val Tyr Asn Ser Thr Thr Ser Thr Ser Ile His Leu Ile Lys His
                245                 250                 255
Arg Pro Thr Ala Glu Pro Ser Ser Arg Leu Phe Ala Phe Thr Pro Ile
            260                 265                 270
Ser Ile Val Ile Val Ser Pro Ser Ser Val Pro Ala Ser Thr Pro Thr
        275                 280                 285
```

```
Thr Thr Pro Ser Leu Thr Val Gly Val Val Gly Pro Leu Ser Gly Val
    290                 295                 300
Trp Thr Ala Ser Ser Ser Pro Pro Ala Thr Leu Phe Ala Thr Ala Leu
305                 310                 315                 320
Ser Glu Thr Pro Ser Leu Thr Pro Thr Val Thr Glu Thr Ala Thr Ser
                325                 330                 335
Ser Gln Thr Ala Ser Val Val Glu Pro Gln Pro Glu Thr Asp Thr Thr
            340                 345                 350
Met Ser Ser Ser Ser Ser Thr Ala Ser Thr Ser Ser His Pro Asp Ala
        355                 360                 365
Thr Pro Thr Glu Ala Ala Gly Gln Leu Arg Thr Thr Ser Ser Ala Glu
    370                 375                 380
Ser Thr Pro Thr Thr Thr Gln Ser Ala Ser Thr Ala Glu Ser Ser Ser
385                 390                 395                 400
Thr Arg Pro Ser Leu Ser Ser Ala Thr Pro Ala Pro Phe Ile Gly Glu
                405                 410                 415
Phe Thr Ser Ser Gln Leu Gln Ser Ala Ser His Thr Thr Ser Thr His
            420                 425                 430
Ser His Ile Thr Pro Val Leu Thr Pro Val Ile Val Leu Ile Thr Pro
        435                 440                 445
Gly Ala Glu Pro Thr Ala Pro Ala Thr Thr Thr Thr Thr Thr Arg His
    450                 455                 460
Pro Asp Pro Tyr Ala Asn Ala Asn Ala Asn Ala Asn Gly Asp Leu Thr
465                 470                 475                 480
Ser Ser Pro Ala Ser Gly Pro Thr Glu Gly Ala Glu Ile Thr Thr Ile
                485                 490                 495
His Ala Thr Ala Thr Ile Thr Lys Ser Val Val Val Phe Ala Ser Ser
            500                 505                 510
Ile Pro Thr Ala Glu Thr Leu Ala Pro Ala Ala Asn Thr Glu Glu Ser
        515                 520                 525
Glu Ser Gly Val Gly Ser Arg Thr Ala Leu Thr Thr Ala Thr Val Thr
    530                 535                 540
Ser Leu Pro Phe Ala Pro Tyr Arg Asp Pro Gly Asp Ala Tyr Leu Ser
545                 550                 555                 560
Ile Val Pro Val Thr Pro Gly Val Met Thr Val Thr Ser Thr Lys Thr
                565                 570                 575
Glu Thr Glu Thr Glu Thr Val Thr Lys Thr Glu Arg Glu Thr Val Thr
            580                 585                 590
Gln Thr Val Thr Glu Thr Leu Thr Glu Lys Glu Thr Val Ile Leu Arg
        595                 600                 605
Gly Ser
    610
```

<210> 35578
<211> 75
<212> PRT
<213> A.fumigatus

<400> 35578

```
Asp Ile Ser Ile Ala Asn Thr Cys Arg Gly Arg Ala Phe Val Arg Asp
1               5                   10                  15
Cys Phe Val Val Arg Arg Ser Tyr Phe Thr Leu Ile Gly Val Ile Cys
            20                  25                  30
Asp Cys His Ser Asp His Pro Leu Leu Thr Phe Gly Val Pro Pro Ser
        35                  40                  45
Val Asn Ser Glu Cys Val Gln Phe Tyr Asn Leu Asn Leu Asp Pro Ser
```

```
    50                  55                  60
Tyr Gln Ala Gln Thr Asp Gly Arg Thr Phe Ile
65                  70                  75

<210> 35579
<211> 82
<212> PRT
<213> A.fumigatus

<400> 35579
Ala Phe Arg Ile Tyr Thr His Phe Asn Arg Tyr Arg Phe Thr Lys Leu
1               5                   10                  15
Gly Pro Ser Lys His Thr His His Asp Thr Gln Ser Asp Arg Trp Cys
            20                  25                  30
Arg Trp Thr Ile Val Trp Cys Leu Asp Gly Gln Leu Val Ser Ser Ser
        35                  40                  45
Tyr Ser Leu Cys Asn Gly Ser Val Arg Asp Ser Phe Phe Asn Ala Asn
    50                  55                  60
Gly Asp Arg Asn Arg Asp Val Gln Pro Asp Cys Gln Cys Arg Arg Thr
65                  70                  75                  80
Ala Thr


<210> 35580
<211> 520
<212> PRT
<213> A.fumigatus

<400> 35580
Phe Ile Ala Ile Leu Phe Val Ser Phe Cys Val Met Arg Leu Ser Arg
1               5                   10                  15
Arg Leu Thr Val Asp Phe Lys Arg Leu Val Glu His Pro Asp Ser Ile
            20                  25                  30
Glu Gly Arg Glu Arg Gln Arg Glu Arg Asp Val Ala Arg Glu Arg Glu
        35                  40                  45
Trp Val Gly Asp Ser Arg Ser Ser Pro Glu Pro Asp Leu Arg Ser Pro
    50                  55                  60
Ile Glu Arg Phe Arg Lys Pro Pro Asn Lys Ala Phe Ser Val Thr Asp
65                  70                  75                  80
Leu Ile Ser Pro Ala Trp Cys Glu Leu Gln Tyr Trp Tyr Thr Leu Thr
                85                  90                  95
Lys His Gly Arg Lys Arg Arg Thr Pro Ala Met Lys Gln Gly Ser Thr
            100                 105                 110
Ile His Lys Thr Leu Glu Asp Glu Val His Thr Thr Val Pro Val Glu
        115                 120                 125
Ile Thr Thr Lys Glu Asp Ala Leu Ala Leu Arg Leu Trp Asn Val Ile
    130                 135                 140
Gln Gly Leu Arg Thr Leu Arg Glu Tyr Gly Leu Thr Arg Glu Leu Glu
145                 150                 155                 160
Val Trp Gly Leu Val Asp Gly Glu Leu Val Asn Gly Val Ile Asp Gln
                165                 170                 175
Leu Ser Tyr Glu Cys Pro Asp Pro Glu Leu Glu Ala Thr Ala Ala Thr
            180                 185                 190
Tyr Tyr Ala Asp Val Glu Ala Ser Arg Ala Val Met Pro Glu Tyr Gln
        195                 200                 205
Met Ser Leu Thr Asp Tyr Leu Leu Ala Pro Ser Gln Gly Gly Lys Arg
```

```
    210                 215                 220
Leu Ser Glu Met Thr Trp Lys Asp Glu Pro Asp Glu His Val Glu Asp
225                 230                 235                 240
Ala Pro Ser Thr Glu Ser Ser Glu Ala Phe Asn Ile Pro Arg Val Tyr
                245                 250                 255
Leu Thr Asp Ile Lys Thr Arg Ala Ser Gly Ser Ile Pro Thr Ile Lys
            260                 265                 270
Ser Thr Ser Phe Arg Pro Thr Leu Leu Gln Leu Gln Ile Tyr Tyr His
        275                 280                 285
Met Leu Asn His Leu Thr Thr Thr Asp Glu Val Ser Ile Glu Thr Leu
    290                 295                 300
Ala Ser Arg Tyr Asp Leu Asp Pro Gln Arg Thr Phe Thr Asp Ala Phe
305                 310                 315                 320
Ile Ala Glu Val Gly Gly Leu Asn Asp Gln Phe Phe Asp Ala Leu Ser
                325                 330                 335
Ala Ser Glu Phe Asp Pro Asp Phe Ile Pro Ser Pro Glu Asp Ala Ala
            340                 345                 350
Arg Arg Gln Ser Ile Arg Ser Ser Gly Ser Leu Pro Ser Ala Ser Gln
        355                 360                 365
Asp Ser Thr Ser Ile Leu Leu Glu His Asn Asn Leu Ser Ser Leu Trp
    370                 375                 380
Lys Phe Met Lys Asp Gln Leu Arg Leu Thr Phe Leu Pro Ser Pro Gln
385                 390                 395                 400
Pro Ser Val Ser Val Ala Pro Ser Ile Pro Ser Glu Phe Gln Pro Ser
                405                 410                 415
Met Leu Glu Pro Tyr Pro Thr Ile Ile Ser Pro Leu Leu Thr Ala Arg
            420                 425                 430
Tyr Leu Ser Ser Ala Pro Thr Ala Asp Leu His Thr Arg Val Leu Gly
        435                 440                 445
Ser Arg Ser Phe Leu Phe Asp Pro Thr Ser Met Ser Ser Tyr Leu Ser
    450                 455                 460
Asp Gln Met Asp Trp Trp Arg Gly Asn Arg Asp Pro Arg Gly Val Glu
465                 470                 475                 480
Ile Met Glu Ala Trp Lys Cys Arg Ile Cys Glu Phe Arg Glu Glu Cys
                485                 490                 495
Ser Trp Arg Gln Glu Arg Glu Trp Ser Ile Ala Arg Arg Lys Lys Gly
            500                 505                 510
Ser Lys Gly Leu Asp Ala Thr Val
        515                 520
```

<210> 35581
<211> 258
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (34)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35581

```
His Thr Phe Pro Gly Lys Ile Thr Pro Ser His Val Ser Ala Lys Pro
1               5                   10                  15
Ala Thr Arg His Cys Pro Lys Thr Ile His Trp Gly Phe Leu Leu Thr
            20                  25                  30
Pro Xaa Arg Gly Pro Phe Pro Gly Asp Pro Gln Gly Asp Leu Arg Gly
```

```
        35                  40                  45
Asn Ser Ser Gln Glu Asn Leu Ala Leu Met Phe Glu Lys Pro Glu Gly
    50                  55                  60
Glu Tyr Tyr Leu Phe Ala Gly Ala Ile Phe Leu Ala Gly Phe Trp Arg
65                  70                  75                  80
Leu Glu Asp Lys Phe Gly Met Arg Leu Ser Glu Ile His Thr Ser Gly
                85                  90                  95
Asp Val Pro Gly Phe Lys Thr Lys Leu Glu Lys Gly Met Met Asn Phe
            100                 105                 110
Phe Arg Arg Ile Arg Pro Glu Asp Pro Val Leu Arg Asn Asn Tyr Phe
        115                 120                 125
Ile Gln Val Asp Asn Glu Leu Ala Trp Ser His Ser Ile Gly Ser Glu
    130                 135                 140
Asp Ala Ala Val Val Ser Trp Asn Thr Ala Gln Lys Asn Lys Ala Ile
145                 150                 155                 160
Glu His His Tyr Phe Arg Ser Glu Arg Gln Ser Leu Arg Arg Leu Pro
                165                 170                 175
Arg Ser Gly Ala Val Val Phe Thr Ile Arg Thr Tyr Phe Glu Pro Ile
            180                 185                 190
Thr Glu Ile Val Lys Glu Pro Tyr Val Pro Gly Arg Leu Ala Ser Ala
        195                 200                 205
Ile Arg Ser Trp Asp Ala Asp Val Ala Arg Tyr Lys Gly Arg Glu Lys
    210                 215                 220
Tyr Glu Glu Val Leu Leu Glu Tyr Leu Asp Lys Lys His Ala Glu Gln
225                 230                 235                 240
Val Ala Ala Gly Leu Asp Leu Asp Arg Glu Asp Glu Val Arg Ser Tyr
                245                 250                 255
Pro Phe
```

<210> 35582
<211> 137
<212> PRT
<213> A.fumigatus

<400> 35582

```
Arg Asp Val Glu Leu Ser Thr Asn Pro Val Thr Met Asp Arg Lys Ser
1               5                   10                  15
Ala Asn Met Ile Ser Trp Phe Pro Ile Tyr Phe Pro Leu Lys Val Ser
            20                  25                  30
Ile His Ala Cys Leu Arg Asp Ile Leu Ala Ser Asn Asn Gly Leu Leu
        35                  40                  45
Asp Ala Pro Gln Cys Thr Arg Gln Trp Gly Asn Cys Cys His Tyr Asp
    50                  55                  60
Gln Ala Asp Arg Arg Pro Glu Ser Met Val Arg Val Asp Gly Arg Ser
65                  70                  75                  80
Ile Arg Ser Gly Thr His Cys Arg Cys Thr Gly Asn Arg Ile Ala His
                85                  90                  95
His Glu Arg Arg Thr Gly Gly Val Ser Ser Cys Arg Arg Cys Pro Arg
            100                 105                 110
Gln Arg Gln Trp His Arg Gln Ala Thr Glu Ile Trp Lys Ala Gln Arg
        115                 120                 125
Phe Pro Thr Ser Glu Gly Trp Asn Glu
    130                 135
```

<210> 35583

<211> 317
<212> PRT
<213> A.fumigatus

<400> 35583
His Phe Ser Ser Tyr Pro Gln Ala Ala Ser Arg Asn Leu Arg Glu Ala
1 5 10 15
Leu Ser Leu Ala Pro Glu Asn Pro Thr Val Gln Ala Ala Ile Ile Lys
20 25 30
Ile Gln Gln Glu Glu Asn Asn Gly His Tyr Leu Leu Asp Leu Cys Arg
35 40 45
Arg Tyr Thr Ser Gly Lys Asp Glu Asn Ala Gly Lys Asp Ala Ala Ile
50 55 60
Tyr Leu Arg Thr Asp Gly Leu Asn Pro Ser Glu Glu Val Ala Leu Glu
65 70 75 80
Ser Val Lys Leu Ile Leu Ala Arg Glu Pro Ser Ser Leu Ser Ser Leu
85 90 95
Gln Asp Asp Ile Ile Ser Gly Leu Val Arg Gln Asn Ala Ser Val Arg
100 105 110
Gln Tyr Phe Ser Asp Arg Leu Gln Val Ser Val Thr Thr Phe Phe Asp
115 120 125
Glu Ile Tyr Asp Arg Gly Asp Gly Ala Ala Val Cys Leu Asp Thr Val
130 135 140
Val Leu Asp His Ala Val Trp Pro Ser Glu Asp Thr Arg Leu His Cys
145 150 155 160
Glu Ser Glu Leu Phe Gln Leu Phe Ile Ala Lys Leu Met Glu Ser Gly
165 170 175
His Asp Leu Asp Gly Arg Ser Leu Lys Gly Ile Ala Arg Leu Leu Ala
180 185 190
Val Asp Ala Val Lys Leu Gln His Leu Val Asp Asp Glu Gly Leu Asp
195 200 205
Val Ile Leu Ala Ser Leu Asp Ile Arg Leu Pro Leu Glu Val Arg Asn
210 215 220
Gln Ala Thr Leu Ala Thr Val Lys Tyr Leu Glu Ser Ser Lys Gln Thr
225 230 235 240
Gly Gln Glu Arg Phe Ser Arg Leu Leu Ser Thr Lys Val Thr Asn Ala
245 250 255
Arg Asn Asp Asp His Ile Val Ala Phe Ser Ala Leu Ala Ala Val Phe
260 265 270
Pro Val Val Pro Asp Ile Ala Ala Ser Leu Phe Leu Ser Glu Ser Phe
275 280 285
Ile Ser Ser Leu Thr Pro Phe Thr Ser Lys Asn Leu Asn Ser Arg Asn
290 295 300
Val Glu Thr Ala Ile Leu Glu Leu Pro Ile Ala Pro Ala
305 310 315

<210> 35584
<211> 316
<212> PRT
<213> A.fumigatus

<400> 35584
Leu Pro Leu Pro Leu Arg Thr Arg Thr Pro Arg Leu Glu Trp Ser Cys
1 5 10 15
Pro Leu Glu Leu Cys Leu Thr Ile Leu Trp Phe Arg Leu Leu Ser Arg
20 25 30

```
Leu Leu Ser Gln Leu Lys Thr Arg Leu Gln Ser Arg Leu Leu Ser Arg
        35                  40                  45
Leu Lys Thr Arg Leu Leu Ser Arg Leu Gln Ser Arg Leu Lys Thr Arg
    50                  55                  60
Leu Leu Leu Cys His Leu Gln Arg Leu Ser Gln Arg Val Ser Pro Ala
65                  70                  75                  80
Arg Thr Leu Leu Leu Ser His Pro Pro Gly Pro Leu Leu Ser Pro Thr
                85                  90                  95
Ala Leu Phe Leu Pro Leu Cys Ser Gln Phe Leu Leu Pro Leu Asp Ser
            100                 105                 110
Leu Gln Leu Leu Ala Ser Leu Leu Ser Leu Val Ser Pro Leu Phe Leu
        115                 120                 125
Ala Ser Leu Leu Phe Pro Ala Ser Leu Leu Phe Pro Ala Ser Leu Leu
    130                 135                 140
Phe Pro Ala Ser Pro Leu Phe Pro Ala Ser Leu Leu Phe Pro Ala Ser
145                 150                 155                 160
Pro Leu Phe Pro Ala Ser Leu Leu Phe Leu Ala Ser Pro Pro Phe Pro
                165                 170                 175
Ala Ser Leu Leu Phe Pro Ala Ser Pro Leu Phe Pro Ala Ser Leu Leu
            180                 185                 190
Leu Pro Ala Ser Leu Leu Leu Pro Ala Ser Leu Leu Phe Leu Ala Ser
        195                 200                 205
Leu Leu Phe Pro Ala Ser Pro Leu Phe Pro Ala Ser Leu Leu Phe Leu
    210                 215                 220
Ala Ser Pro Pro Phe Pro Ala Ser Leu Leu Ser Leu Val Ser Pro Leu
225                 230                 235                 240
Arg Leu Ser Ser Leu Leu Phe Leu Ala Ser Pro Leu Cys Leu Ser Ser
                245                 250                 255
Pro Leu Leu Leu Ser Ser Pro Leu Phe Leu Val Asn Pro Leu Pro Ser
            260                 265                 270
Arg Arg Arg Gln Leu Arg Leu Leu Ser Leu Ala Leu Leu Pro Ser Ser
        275                 280                 285
Ser Leu Pro Pro Val Ser Trp Leu Val Ser Gly Leu Ser Cys Ser Cys
    290                 295                 300
Phe Arg Ala Ser Ile Asp Gly Leu Pro Tyr Ser Arg
305                 310                 315
```

<210> 35585
<211> 125
<212> PRT
<213> A.fumigatus

<400> 35585

```
Pro Ala Phe Cys Pro Trp Ser Ala Leu Cys Ser Trp Pro Ala Phe Cys
1               5                   10                  15
Ser Arg Pro Ala Phe Cys Ser Arg Pro Ala Phe Cys Ser Arg Pro Ala
            20                  25                  30
Leu Cys Ser Arg Pro Ala Phe Cys Ser Arg Pro Ala Leu Cys Ser Arg
        35                  40                  45
Pro Ala Phe Cys Ser Trp Pro Ala Leu Arg Ser Arg Pro Ala Phe Cys
    50                  55                  60
Ser Arg Pro Ala Leu Cys Ser Arg Pro Ala Phe Cys Ser Arg Pro Ala
65                  70                  75                  80
Phe Cys Ser Arg Pro Ala Phe Cys Ser Trp Pro Ala Phe Cys Ser Arg
                85                  90                  95
Pro Ala Leu Cys Ser Arg Pro Ala Phe Cys Ser Trp Pro Ala Leu Arg
```

```
            100                 105                 110
Ser Arg Pro Ala Phe Cys Pro Trp Ser Ala Leu Cys Ala
        115                 120                 125

<210> 35586
<211> 365
<212> PRT
<213> A.fumigatus

<400> 35586
Ala Ser Leu Gly His Gln Asp Gly Asn Val Leu Asp His Asn Leu Pro
1               5                   10                  15
Arg Tyr Asp Ala Pro Pro Asp Leu Phe Lys Arg Met Cys Leu Asn Thr
            20                  25                  30
Ile Ile Ala Val Ser His Thr Lys Val Thr Ser Gly Thr Lys Thr Leu
        35                  40                  45
Thr Ile Pro Ile Thr Leu Thr Ser Thr Ile Thr Val Thr Thr Thr Thr
    50                  55                  60
Val Glu Asp Ser Asn Thr Glu Thr Arg Val Val Val Pro Thr Gly Thr
65                  70                  75                  80
Val Pro Asn His Pro Leu Val Pro Thr Ser Val Pro Thr Ser Val Pro
                85                  90                  95
Thr Gln Asn Ala Thr Ser Ile Pro Thr Phe Val Pro Thr Gln Asn Ala
            100                 105                 110
Thr Ser Val Pro Thr Ser Val Pro Thr Gln Asn Ala Thr Thr Ile Val
        115                 120                 125
Pro Pro Pro Lys Val Val Pro Thr Gly Val Pro Gly Gln Asn Thr Thr
    130                 135                 140
Val Val Pro Pro Pro Arg Pro Ala Pro Phe Thr Asn Ser Thr Val Pro
145                 150                 155                 160
Pro Pro Val Gln Pro Val Pro Val Ala Pro Gly Gln Pro Thr Ala Pro
                165                 170                 175
Ser Gln Pro Ser Val Pro Gly Gln Pro Ser Val Pro Gly Gln Pro Ser
            180                 185                 190
Val Pro Gly Gln Pro Ser Val Pro Gly Gln Pro Ser Val Pro Gly Gln
        195                 200                 205
Pro Ser Val Pro Gly Gln Pro Ser Val Pro Gly Gln Pro Ser Val Pro
    210                 215                 220
Gly Gln Pro Ser Val Pro Gly Gln Pro Ser Val Pro Gly Gln Pro Ser
225                 230                 235                 240
Val Pro Gly Gln Pro Ser Val Pro Gly Gln Pro Ser Ala Pro Gly Gln
                245                 250                 255
Pro Ser Ala Pro Gly Gln Pro Ser Val Pro Gly Gln Pro Ser Val Pro
            260                 265                 270
Gly Gln Pro Ser Val Pro Gly Gln Pro Ser Val Pro Gly Gln Pro Ser
        275                 280                 285
Val Pro Gly Gln Pro Ser Val Pro Gly Gln Pro Ser Ala Pro Glu Gln
    290                 295                 300
Pro Ser Val Pro Gly Gln Pro Ser Val Pro Glu Gln Pro Ser Ala Pro
305                 310                 315                 320
Glu Gln Pro Ser Val Pro Gly Gln Pro Thr Ala Val Ser Pro Pro Pro
                325                 330                 335
Ala Glu Thr Ala Leu Thr Gly Ser Ala Ser Gln Phe Glu Pro Ala Ala
            340                 345                 350
Gly Leu Leu Ala Gly Ile Trp Val Val Met Leu Met Leu
        355                 360                 365
```

<210> 35587
<211> 182
<212> PRT
<213> A.fumigatus

<400> 35587
Ala Glu Cys Ala Gly Ser Val Asp Gly Arg Arg Lys His Ala Cys Glu
1 5 10 15
Ser Val Asn Asn Gly Phe Asn Gln Leu Lys Thr Gln Gly Gly Phe Thr
20 25 30
Val Pro Gln Ala Val Leu Glu Gly Pro Lys Ala Glu Phe Glu Ser Glu
35 40 45
Arg Val Ser Asn Gly Glu Thr Ile Asp Gln Ile Lys Ser Thr Tyr Thr
50 55 60
Ser Ser Phe Pro Ser Asn Phe Gly Pro Gly Ser Ala Lys Ser Ser Lys
65 70 75 80
Thr Gly Gly Tyr Ile Leu Asp Pro His Ser Ala Val Gly Val Arg Ala
85 90 95
Ala Leu Arg Ser Ile Glu Arg Asn Pro Gly Val Lys His Ile Ser Leu
100 105 110
Ser Thr Ala His Pro Ala Lys Phe Ala Ser Ala Val Asp Leu Ala Leu
115 120 125
Gly Ala Glu Asp Gly Tyr Asp Phe Thr Glu Val Leu Pro Gln Glu Phe
130 135 140
Ile Gly Leu Glu Gln Arg Glu Ser Arg Val Thr Pro Ile Arg Ala Gly
145 150 155 160
Ala Gly Trp Val Gly Val Arg Glu Val Val Lys Ala Glu Val Glu Gln
165 170 175
Glu Leu Gln Gly Leu Arg
180

<210> 35588
<211> 164
<212> PRT
<213> A.fumigatus

<400> 35588
Glu Gln Ser Gln Leu Ala Ala Ala Arg Arg Gln Trp Val Asp Gln Glu
1 5 10 15
Gln Arg Ala Ala Gln Glu Gln Arg Ala Ala Gln Ala Gln Arg Ala Gly
20 25 30
Gln Glu Gln Lys Ala Ala Gln Ala Gln Arg Ala Asp Gln Gly Gln Lys
35 40 45
Ala Gly Arg Glu Arg Arg Ala Gly Gln Glu Gln Lys Ala Gly Arg Glu
50 55 60
Gln Arg Ala Gly Arg Glu Gln Lys Ala Gly Gln Glu Gln Lys Ala Gly
65 70 75 80
Arg Glu Gln Lys Ala Gly Arg Glu Gln Lys Ala Gly Arg Glu Gln Arg
85 90 95
Ala Gly Arg Glu Gln Lys Ala Gly Arg Glu Arg Arg Ala Gly Gln Glu
100 105 110
Gln Lys Ala Gly Arg Glu Gln Arg Ala Gly Arg Glu Gln Lys Ala Gly
115 120 125
Arg Glu Gln Arg Ala Gly Arg Glu Gln Lys Ala Gly Arg Glu Gln Lys
130 135 140

```
Ala Gly Arg Glu Gln Lys Ala Gly Gln Glu Gln Arg Ala Asp Gln Gly
145                 150                 155                 160
Gln Lys Ala Gly
```

<210> 35589
<211> 271
<212> PRT
<213> A.fumigatus

<400> 35589

```
Gln Lys Cys Ala Phe Pro Ala Cys Met Ala Ala Ser His Leu Glu Tyr
1               5                   10                  15
Gly Arg Pro Ser Met Asp Ala Leu Lys His Glu His Asp Asn Pro Asp
            20                  25                  30
Thr Ser Gln Glu Thr Gly Gly Arg Leu Glu Leu Gly Ser Arg Ala Ser
        35                  40                  45
Glu Ser Ser Leu Ser Trp Arg Arg Arg Asp Gly Ser Gly Leu Thr Arg
    50                  55                  60
Asn Arg Gly Leu Leu Arg Ser Arg Gly Leu Leu Arg His Arg Gly Leu
65                  70                  75                  80
Ala Arg Asn Arg Arg Leu Leu Arg Arg Arg Gly Leu Thr Arg Asp Arg
                85                  90                  95
Arg Leu Ala Gly Asn Gly Gly Leu Ala Arg Asn Arg Arg Leu Ala Gly
            100                 105                 110
Asn Arg Gly Leu Ala Gly Asn Arg Arg Leu Ala Arg Asn Arg Arg Leu
        115                 120                 125
Ala Gly Ser Arg Arg Leu Ala Gly Ser Arg Arg Leu Ala Gly Asn Arg
    130                 135                 140
Gly Leu Ala Gly Asn Arg Arg Leu Ala Gly Asn Gly Gly Leu Ala Arg
145                 150                 155                 160
Asn Arg Arg Leu Ala Gly Asn Arg Gly Leu Ala Gly Asn Arg Arg Leu
                165                 170                 175
Ala Gly Asn Arg Gly Leu Ala Gly Asn Arg Arg Leu Ala Gly Asn Arg
            180                 185                 190
Arg Leu Ala Gly Asn Arg Arg Leu Ala Arg Asn Arg Gly Leu Thr Arg
        195                 200                 205
Asp Arg Arg Leu Ala Arg Ser Cys Arg Leu Ser Arg Gly Asn Arg Asn
    210                 215                 220
Trp Leu His Arg Gly Arg Asn Ser Ala Val Gly Glu Arg Ser Gly Pro
225                 230                 235                 240
Gly Gly Trp Asp Asn Ser Ser Val Leu Ala Gly Asp Thr Arg Trp Asp
                245                 250                 255
Asn Leu Trp Arg Trp His Asn Ser Ser Arg Val Leu Ser Arg Asp
            260                 265                 270
```

<210> 35590
<211> 74
<212> PRT
<213> A.fumigatus

<400> 35590

```
Pro Ser Glu Ala Gln Gln Trp Leu Ala Thr Trp Trp Glu Gly Cys Asp
1               5                   10                  15
Gln Gly Asn Gln Asn Asp Pro Ile Thr Ala Met Ser Val Ser Ser Met
            20                  25                  30
```

```
Gln Lys Val Arg Glu Ala Arg Ala Gly Tyr Ala Tyr Leu Val Ile Ala
        35                  40                  45
Leu Val Trp His Asn Ala Thr Gln Gly Trp Pro Ser Gln Ser Gln Lys
    50                  55                  60
Cys Asn Ala Arg Val Asp His Phe Glu Asn
65                  70
```

<210> 35591
<211> 154
<212> PRT
<213> A.fumigatus

<400> 35591

```
Leu Gln Leu Ile Trp Gly Pro Leu Cys Phe Phe Val Ala Tyr Leu Ile
1               5                   10                  15
Leu Asp Gln His Ser Leu Arg His Pro Leu Gln Leu Ile Val Cys Met
            20                  25                  30
Ser His Leu Tyr Gly Asp Thr Leu Tyr Tyr Ala Thr Ser Leu Tyr Asp
        35                  40                  45
His Tyr Val His Gly Arg Ser Tyr Cys Arg Pro Glu Ala Tyr Tyr Phe
    50                  55                  60
Trp Ile Tyr Tyr Phe Leu Met Asn Phe Ile Trp Ile Val Ile Pro Phe
65                  70                  75                  80
Cys Lys Phe Gln His Leu Gly Val Glu Ala Lys Thr Arg Ser Phe Arg
                85                  90                  95
Ser Gln Ile Thr Phe Leu Arg Val Ser Arg Gln Phe Pro Met Pro Ser
            100                 105                 110
Thr Leu Cys Ser Glu Cys Leu Gln Lys Lys Arg Leu Asp Asn Ala Arg
        115                 120                 125
His Cys Arg Thr Asp Gly Leu Pro Val Glu Ala Tyr Asp Tyr Ser Trp
    130                 135                 140
Ile Leu Ile Arg Ser Glu Tyr Gly Trp Met
145                 150
```

<210> 35592
<211> 904
<212> PRT
<213> A.fumigatus

<400> 35592

```
Val Leu Leu Asp Pro Gly Val Asp Thr Ile Ala Thr Ile Leu Ala Ile
1               5                   10                  15
Leu Arg Ile Gly Ala Ala Tyr Val Pro Leu Asp Thr Arg Ser Ser Asp
            20                  25                  30
Ala Val Leu Ser Asp Ile Leu Gln Glu Ser Gln Pro Gly Ile Val Ile
        35                  40                  45
His His Ser Ala Thr Ala Pro Arg Ser Gln Ile Leu Phe Lys Ala Ser
    50                  55                  60
Ala Lys Thr Lys Leu Val Thr Leu Asn Ala Val Pro Gln Lys Thr Ile
65                  70                  75                  80
Arg Lys Ile Gln Asp Val Ser Val Pro Glu Gly Leu Ala Met Ile Leu
                85                  90                  95
Tyr Thr Ser Gly Ser Thr Gly Ser Pro Lys Gly Ile Pro Leu Thr Asn
            100                 105                 110
Ala Asn Ile Arg Thr Pro Ile Leu Gly Val Ser Glu Arg Val Pro Leu
        115                 120                 125
```

```
Gly Arg Glu Val Val Leu Gln Gln Ser Gly Gln Gly Phe Asp Ala Ala
    130                 135                 140
Val Tyr Gln Ile Phe Ile Ala Leu Ala Asn Gly Gly Thr Leu Ile Met
145                 150                 155                 160
Val Asp Asn Arg Asp Asp Pro Ala Lys Val Ala Ala Leu Met Ala Gln
                165                 170                 175
Glu Ser Val Thr Cys Thr Thr His Ile Val Ser Glu Met Gln Ala Leu
            180                 185                 190
Leu Lys Tyr Gly Tyr Asp Glu Leu Arg Asn Cys Ser Ser Trp Arg Ile
        195                 200                 205
Ala Met Val Ala Gly Glu Ala Phe Thr Val His Leu Leu Asp Gln Phe
    210                 215                 220
Arg Ala Leu Asn Arg Pro Asp Leu Lys Val Ile Asn Ala Tyr Gly Pro
225                 230                 235                 240
Thr Glu Ala Ser Ile Cys Ser Ser Leu Gly Glu Val Ser Phe Asn Arg
                245                 250                 255
Ile Ser Ser Ser Glu Thr Ser Ile Pro Ile Gly Lys Ala Ile Pro Asn
            260                 265                 270
Tyr Gly Thr Tyr Ile Val Asp Gln His Cys Lys Pro Val Pro Leu Gly
        275                 280                 285
Trp Pro Gly Glu Val Ala Ile Ala Gly Pro Gly Val Ala Ser Gly Tyr
    290                 295                 300
Leu Asn Leu Gly Glu Leu Thr Gln Ala Lys Phe Arg Ser Thr Ala Thr
305                 310                 315                 320
Leu Gly Glu Val Leu Gly Ser Asp Cys Leu Tyr Leu Thr Gly Asp Arg
                325                 330                 335
Gly Arg Met Leu Ser Asp Gly Ser Ile Val Leu Ser Gly Arg Val Asp
            340                 345                 350
Gly Asp Asp Gln Val Lys Ile Arg Gly His Arg Val Gln Leu Gly Asp
        355                 360                 365
Val Ala Arg Ala Leu Val Gln Ala Ser Arg Gly Val Phe Ala Asp Ala
    370                 375                 380
Ala Val Ile Leu Lys Gly Asp Asp Thr Ser Asn Pro Gln Leu Val Ala
385                 390                 395                 400
Tyr Val Val Phe Ser Arg Thr Ser Asn Ile Gln Asp Gln Gln Thr Tyr
                405                 410                 415
Leu Arg Gln Leu Asn Gln Asp Leu Pro Val Pro Ala Tyr Met Arg Pro
            420                 425                 430
Ala Ile Thr Ile Pro Leu Asp Thr Leu Pro Val Thr Asp Arg Gly Lys
        435                 440                 445
Leu Asp Ser Lys Lys Leu Ala Ser Leu Pro Leu Pro Ser Ile Ser Val
    450                 455                 460
Asp Tyr Glu Glu Asp Glu Gln Leu Thr Pro Thr Glu Ala Arg Leu Arg
465                 470                 475                 480
Asp Val Trp Lys Asn Val Leu Gly Asp Ile Ala Ser Ser Ile Pro Ile
                485                 490                 495
Arg Arg Ser Ser Asp Phe Phe Ser Val Gly Gly Asn Ser Leu Ile Leu
            500                 505                 510
Leu Ala Leu Lys Ala Glu Ile Ala Gln Val Phe Gly Val Gly Leu Ser
        515                 520                 525
Val Ser Glu Leu Phe Gln Ala Ser Thr Leu Glu Leu Leu Ala Ala Arg
    530                 535                 540
Leu Asp Gly Thr Ser Leu Leu Ala Gln Ile Asn Trp Glu Glu Glu Thr
545                 550                 555                 560
Ala Pro Asp Glu Thr Gln Phe Thr Ile Pro Pro Pro Ile Asn Gly Ile
                565                 570                 575
```

```
Asn Gly His Gly Ser Ser Asn Gly His Ala Gln Gly Ile Ser Val Leu
            580                 585                 590
Leu Thr Gly Ala Thr Gly Phe Leu Gly Gly His Val Leu Arg Gln Leu
        595                 600                 605
Val Gln Leu Pro Ser Ile Glu His Val His Cys Val Ala Ile Arg Pro
    610                 615                 620
Ser Lys Val Asp Val Arg Arg Gln Leu Ser Val Glu Ser Pro Lys Ile
625                 630                 635                 640
Ile Arg Tyr Ser Gly Asp Leu Ala Leu Pro Asn Met Gly Met Ser Glu
                645                 650                 655
Ser Glu Phe Ser Asp Leu Phe Lys Ser Ile Asp Val Ile Val His Asn
            660                 665                 670
Gly Ala Glu Val Ser His Met Lys Asn Tyr Arg Ser Leu Arg Ala Ala
        675                 680                 685
Asn Phe Leu Ser Thr Val Gly Leu Ala Arg Ala Ala Val Ser Arg Gly
    690                 695                 700
Ile Pro Ile His Tyr Ile Ser Thr Gly Gly Val Ala Arg Leu Ser Val
705                 710                 715                 720
Ala Asp Glu Gln Pro Glu Ala Ser Leu Ala Ala Phe His Pro Pro Ile
                725                 730                 735
Asp Gly Ser Asp Gly Tyr Val Ala Ser Lys Trp Ala Ser Glu Val Phe
            740                 745                 750
Leu Glu Lys Val Gln Arg Arg Phe Gln Gly Gln Val Trp Ile His Arg
        755                 760                 765
Pro Ser Ser Ile Thr Gly Asp Asp Val Pro Asp Asn Asp Ile Ala His
    770                 775                 780
Ser Leu Leu Lys Phe Ser Arg Glu Leu Gly Ala Val Pro Glu Leu Thr
785                 790                 795                 800
Gly Ser Gly Phe Phe Asp Phe Ile Asn Val Glu Thr Val Ser Asn Asn
                805                 810                 815
Ile Ala Ala Ser Val Val Arg Ser Ser Glu Lys Ser Gly Gly Gly Leu
            820                 825                 830
Ile Tyr Leu His Gln Ser Gly Glu Gln Val Ile Pro Val Gly Asp Leu
        835                 840                 845
Gln Lys Tyr Val Glu Glu Leu Glu Gly Arg Pro Leu Gln Val Leu Pro
    850                 855                 860
Leu Lys Glu Trp Val Asp Leu Ser Ile Arg Lys Gly Leu Asp Glu Val
865                 870                 875                 880
Leu Gly Ser Tyr Met Leu Ala Ser Lys Gly Val Val Arg Ala Pro Leu
                885                 890                 895
Leu Gln Arg Gly Pro His Val Glu
            900
```

<210> 35593
<211> 138
<212> PRT
<213> A.fumigatus

<400> 35593

```
Gly Glu Arg Arg Gln Lys Glu Lys Gln Leu Pro Ala Thr Phe Tyr Cys
1               5                   10                  15
Glu Glu Pro Pro Phe Phe Ser Ser Phe Ser Leu Ala Ala Lys Ser Ser
            20                  25                  30
Asp Cys Val Cys Ser Ala Leu Ser Pro Ser Phe Ser Ala Ser Thr Ala
        35                  40                  45
Ser Leu Asp Cys Phe Ser Trp Leu Phe Glu Ala Ser Asn Phe Ala Ser
```

```
    50                  55                  60
Ser Val Ser Ser Ile Ser Ser Met Ser Phe Gly Val Val Thr Pro Phe
65                  70                  75                  80
Ser Ser Cys Leu Leu Phe Cys Ser Phe Ser Ser Ser Met Ser Ser Cys
                85                  90                  95
Cys Ser Leu Ile Thr Ser Arg Arg Cys Leu Leu Val Ala Ala Pro Ser
            100                 105                 110
Ala Leu Trp Thr Ser Ser Ser Ile Ser Trp Asn Asn Ser Ser Gly Ile
        115                 120                 125
Leu Asp Ser Thr Asp Leu Ser Ala Ser Ile
    130                 135
```

<210> 35594
<211> 379
<212> PRT
<213> A.fumigatus

<400> 35594

```
Val Phe Cys Tyr Pro Cys Glu Val Thr Leu Val Ala Ser Thr His Thr
1               5                   10                  15
Leu Asn Asn Gln Leu Gln Arg Thr Val Lys Asp Leu Gly Arg Leu Ile
            20                  25                  30
Pro Phe Ser Met Phe Val Ile Ile Pro Phe Ala Glu Leu Leu Leu Pro
        35                  40                  45
Val Ala Leu Lys Leu Phe Pro Asn Leu Leu Pro Ser Thr Tyr Glu Gly
    50                  55                  60
Gln Lys Ala Arg Glu Lys Lys Ala Leu Asn Leu Ser Ser Thr Arg Gln
65                  70                  75                  80
Glu Val Ser Thr Phe Leu Lys Asn Thr Leu Arg Glu Ser Gly Leu Pro
                85                  90                  95
Val Thr Pro Ala Ala Val Lys Asn Glu Glu Phe Gly Glu Phe Phe Lys
            100                 105                 110
Lys Ile Arg Thr Thr Gly Glu Thr Pro Ser Thr Glu Asp Val Ile Lys
        115                 120                 125
Val Cys Lys Ile Phe Lys Asp Asp Leu Thr Leu Asp Asn Leu Ser Arg
    130                 135                 140
Pro Gln Leu Val Ala Ile Cys Lys Tyr Met Asn Leu Asn Ser Phe Gly
145                 150                 155                 160
Thr Asp Ala Met Leu Arg Tyr Asn Ile Arg His Arg Met Arg Gln Ile
                165                 170                 175
Lys Arg Asp Asp Arg Ala Ile Phe Tyr Glu Gly Val Asp Ser Leu Ser
            180                 185                 190
Val Pro Glu Leu Gln Met Ala Cys Ala Ser Arg Gly Ile Arg Thr His
        195                 200                 205
Gly Ile Ser Pro Ala Arg Leu Arg Glu Asp Leu Ala Met Trp Leu Asp
    210                 215                 220
Leu Arg Leu Lys Gln Gly Val Pro Ser Thr Leu Leu Val Leu Ser Asn
225                 230                 235                 240
Ala Tyr Ala Tyr Ala Gln Gly Gly Lys Glu Ala Glu Met Ala Ser Gln
                245                 250                 255
Ile Glu Ala Leu Lys Ser Val Leu Ser Ser Ile Pro Glu Glu Leu Phe
            260                 265                 270
His Glu Ile Glu Leu Glu Val His Asn Ala Glu Gly Ala Ala Thr Asn
        275                 280                 285
Lys Gln Arg Leu Glu Val Ile Lys Glu Gln Gln Glu Leu Ile Glu Glu
    290                 295                 300
```

```
Glu Asn Glu Gln Asn Ser Lys His Glu Glu Lys Gly Val Thr Thr Pro
305                 310                 315                 320
Lys Asp Ile Glu Asp Ile Asp Glu Thr Glu Asp Ala Lys Phe Glu Ala
                325                 330                 335
Ser Asn Ser Gln Glu Lys Gln Ser Asn Glu Ala Val Glu Ala Glu Lys
            340                 345                 350
Glu Gly Asp Lys Ala Glu Gln Thr Gln Ser Glu Asp Leu Ala Ala Lys
        355                 360                 365
Glu Lys Glu Glu Lys Lys Gly Gly Ser Ser Gln
    370                 375
```

<210> 35595
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35595

```
Leu Leu Val Met Tyr Cys Leu Asp Arg Tyr Gln Glu Val Arg Arg Arg
1               5                   10                  15
Phe Asp His Trp Gly Gly Ser Leu Arg Ser Gly Pro Leu Pro Tyr Leu
            20                  25                  30
Phe Tyr Ile Met Ile Ile Phe Met Ala Pro Ser Leu Pro Phe Leu Phe
        35                  40                  45
Leu Leu Ile Asn Phe Val Asp Leu Leu Lys Ser Met
    50                  55                  60
```

<210> 35596
<211> 161
<212> PRT
<213> A.fumigatus

<400> 35596

```
Ala Thr Arg Thr His Met His Arg Ala Ala Arg Arg Gln Arg Trp Arg
1               5                   10                  15
Leu Arg Leu Lys Arg Ser Ser Leu Cys Cys Leu Val Ser Leu Lys Ser
            20                  25                  30
Cys Ser Thr Lys Leu Ser Ser Arg Ser Ile Met Pro Arg Ala Leu Pro
        35                  40                  45
Pro Thr Ser Ser Val Leu Arg Leu Ser Arg Ser Ser Lys Asn Ser Ser
    50                  55                  60
Arg Arg Lys Met Ser Arg Thr Ala Ser Met Lys Arg Arg Ala Leu Arg
65                  70                  75                  80
Pro Gln Arg Thr Leu Arg Ile Ser Thr Lys Gln Arg Thr Gln Ser Leu
                85                  90                  95
Arg Pro Arg Thr Ala Lys Lys Ser Asn Pro Thr Arg Leu Leu Arg Leu
            100                 105                 110
Arg Arg Lys Ala Ile Arg Pro Ser Arg His Ser Gln Lys Thr Trp Arg
        115                 120                 125
Pro Arg Arg Arg Lys Arg Arg Arg Glu Val Pro Arg Asn Arg Met Leu
    130                 135                 140
Pro Ala Ile Val Ser Pro Ser Val Ser Ser Pro Leu Thr Phe Cys Pro
145                 150                 155                 160
Arg
```

<210> 35597

<211> 216
<212> PRT
<213> A.fumigatus

<400> 35597
Pro Tyr Phe Ala Ala Ala Gly Gly His Leu Val Ser Gln His Arg Gly
1 5 10 15
Tyr Ala Thr Glu Thr Ser Thr Ser Thr Ser Ser Pro Ser Asn Pro Leu
20 25 30
Pro Pro Pro Gly Phe Asn Ala Glu Gln Ala Lys Lys Pro Ile Pro Lys
35 40 45
Glu Asp Val Ser Arg Leu Ala Ala Asp Asn Gly Asn Thr Gln Val Ala
50 55 60
Pro Lys Ser Glu Thr Pro Leu Ala Ser Glu Asn Ser Val Asp Val Gln
65 70 75 80
Lys Arg Ala Glu Leu Glu Ala Ala Lys Lys Gly Leu Ala Asp Asp Asp
85 90 95
Lys Lys Val Thr Glu Ala Lys Lys Glu Gln Lys Lys Leu Thr Ile Gly
100 105 110
Gln Lys Ile Lys Lys Glu Val Gln His Tyr Trp Asp Gly Thr Lys Leu
115 120 125
Leu Ala Thr Glu Val Arg Ile Ser Ser Arg Leu Ala Leu Lys Met Ala
130 135 140
Ala Gly Tyr Glu Leu Ser Arg Arg Glu Tyr Arg Gln Val Gly Leu Leu
145 150 155 160
Leu Pro Leu Arg Ser Asn Ala Ser Gly Leu Asn Ser His Thr Glu Gln
165 170 175
Ser Ala Ser Thr Asn Gly Glu Arg Ser Trp Pro Val Asp Pro Ile Leu
180 185 190
Asp Val Arg His Tyr Pro Leu Arg Arg Thr Ala Thr Ser Cys Arg Leu
195 200 205
Glu Ala Val Pro Gln Pro Ala Ala
210 215

<210> 35598
<211> 267
<212> PRT
<213> A.fumigatus

<400> 35598
Gly Ser Ser Leu Cys Glu Gly Lys Leu Pro Leu Glu Asp Pro Glu Leu
1 5 10 15
Ala Tyr Ile Gly Gln Ser Gly Lys Lys Tyr Phe Leu Ile Ser Tyr Met
20 25 30
Asp Pro Leu Asp Ile Ser Pro Asp Thr Cys Ala Val Gln Ser Thr Gln
35 40 45
Ile Leu Ser Leu Leu Ala Lys Ser Thr Tyr Gln Asp Ile Thr Ser Phe
50 55 60
Val Ala Glu Pro Glu Ser Glu Asn Gly Gln Ala Tyr Ala Thr Met Arg
65 70 75 80
Ser Leu Phe Asp His Thr Lys Lys Val Tyr Ser Ser Lys Glu Ser Phe
85 90 95
Leu Ser Pro Thr Glu Leu Gly Leu Thr Glu Pro Ser Gln Val Asp Ile
100 105 110
Ile Arg Lys Ala Asn Leu Ala Ser Phe Val Ser Ser Ile Phe Gly Thr
115 120 125

```
Gln Glu Ile Gly Phe Ala Glu Leu Asn Glu His Phe Leu Asp Val Phe
    130                 135                 140
Val Pro Glu Gly Gly Arg Leu Leu Lys Val Gln Gly Ala Leu Phe Leu
145                 150                 155                 160
Glu Leu Lys Thr Gln Ala Phe Ile Ala Ser Met Asn Asn Thr Glu Arg
                165                 170                 175
Thr Arg Thr Glu Leu Leu Tyr Asp Leu Phe Pro Asp Asp Leu Glu Gln
            180                 185                 190
Arg Leu Leu Asp Arg Arg Pro Gly Thr Arg Gln Leu Ala Pro Ser Glu
        195                 200                 205
Ala Asp Phe Val Lys Arg Ala Gly Ser Arg Arg Asp Ile Leu Leu Asn
    210                 215                 220
Asp Ile Asn Asn Glu Glu Ala Met Lys Ala Leu Pro Asp Lys Tyr His
225                 230                 235                 240
Trp Glu Asp Phe Leu Arg Asp Leu Ser Ser Tyr Ile Thr Lys Asn Phe
                245                 250                 255
Asp Ala Ile Cys His Gln Gln Val Cys Phe Leu
            260                 265
```

<210> 35599
<211> 88
<212> PRT
<213> A.fumigatus

<400> 35599

```
Gly Ala Gly Val Gly Leu Gly Glu Asn Val Arg Arg Thr Gly Arg Arg
1               5                   10                  15
Asp Arg Phe Phe Ala Gly Ser Arg Lys Arg Ser Gly Gly Thr Asn Gln
            20                  25                  30
Met Gly Glu Thr Val Asn Ala Ser Thr Leu Trp Val Tyr Ser Val Cys
        35                  40                  45
Ser Ile Ile Asn Tyr Ser Phe Asp Lys Val Asn Tyr Tyr Gly Val Leu
    50                  55                  60
Phe Phe Asn Arg Gln Gly Lys Leu Ile Ser Val Thr Asn Leu Asp Ser
65                  70                  75                  80
Ser Cys Leu Thr Asn Arg Arg Gln
                85
```

<210> 35600
<211> 777
<212> PRT
<213> A.fumigatus

<400> 35600

```
Arg Pro Ser Thr Asn Ser Thr Tyr Leu Ala Ile Pro Gly Ser Val Ala
1               5                   10                  15
Phe Ser His Ser Arg Gly Arg Ala Ile Ala Ala Ser Ile Gly Ala Leu
            20                  25                  30
Asp Val Arg Ala Gln Trp Ile His Tyr Val His Ala Glu Arg Pro Leu
        35                  40                  45
Asp Ala Gln Gln Gln Gly Val Leu Glu Gln Leu Leu Arg Tyr Gly Asp
    50                  55                  60
Ile Thr Asp Val Pro Ala Ser Phe Gly Pro Glu Asp Gly Ser Phe Asp
65                  70                  75                  80
Val Phe Tyr Val Phe Pro Arg Thr Gly Thr Ile Ser Pro Trp Ser Ser
                85                  90                  95
```

```
Gln Ala Thr Gly Ile Ser His Val Cys Gly Leu Arg Gln Tyr Val Lys
            100                 105                 110
Arg Ile Glu Arg Gly Ile Lys Ile Ser Cys Leu Arg Glu Lys Ser Gln
        115                 120                 125
Glu Phe Lys Pro Gly Phe Glu Asp Val Leu His Asp Arg Met Thr Gln
    130                 135                 140
Leu Leu Ser Gln Thr Glu Pro Asp Leu His Leu Met Phe Ser Glu His
145                 150                 155                 160
Ala Pro Gln Pro Leu Glu Thr Ile Pro Leu His Gly Ser Asp Lys Ser
                165                 170                 175
Pro Lys Glu Val Leu Gln Glu Ala Asn Lys Arg Leu Gly Leu Ala Leu
            180                 185                 190
Glu Gln Ser Glu Ile Asp Tyr Leu Ala Asp Ala Tyr Gly Pro Asn Gly
        195                 200                 205
Pro Leu Ala Arg Asp Pro Thr Asp Val Glu Leu Phe Met Phe Ala Gln
    210                 215                 220
Val Asn Ser Glu His Cys Arg His Lys Gln Phe Asn Ala Ser Trp Val
225                 230                 235                 240
Ile Asp Gly Lys Gln Met Pro Asn Ser Leu Phe Ser Met Ile Arg Asn
                245                 250                 255
Thr His Lys Lys His Pro Asp His Thr Ile Ser Ala Tyr Ser Asp Asn
            260                 265                 270
Ala Ala Val Leu Glu Gly Pro Asn Ala Ala Phe Trp Ala Pro Asp Pro
        275                 280                 285
Phe Thr Gly Glu Trp Asn His Thr Lys Glu Val Val His Phe Leu Ala
    290                 295                 300
Lys Val Glu Thr His Asn His Pro Thr Ala Val Ser Pro Phe Pro Gly
305                 310                 315                 320
Ala Ala Thr Gly Ser Gly Gly Glu Ile Arg Asp Glu Gly Ala Val Gly
                325                 330                 335
Arg Gly Ser Lys Pro Lys Ala Gly Leu Ala Gly Tyr Cys Val Ser Asp
            340                 345                 350
Leu Leu Ile Pro Asp Leu Lys Gln Pro Trp Glu Leu Asp Val Gly Lys
        355                 360                 365
Pro Asn His Ile Ala Ser Ser Leu Asp Ile Met Leu Glu Ala Pro Ile
    370                 375                 380
Gly Ser Ala His Tyr Asn Asn Glu Phe Gly Arg Pro Cys Thr Leu Gly
385                 390                 395                 400
Tyr Phe Arg Thr Leu Leu Thr Gln Ile Asp Val Gly Asn Gly Gln Thr
                405                 410                 415
Glu Val Arg Gly Tyr His Lys Pro Ile Met Ile Ala Gly Gly Val Gly
            420                 425                 430
Thr Val Arg Pro Gln His Ala Ile Lys Lys Pro Glu Ala Val Lys Pro
        435                 440                 445
Gly Ser Tyr Leu Val Val Leu Gly Gly Pro Ala Met Leu Ile Gly Leu
    450                 455                 460
Gly Gly Gly Ala Ala Ser Ser Val Ala Ser Gly Glu Gly Ser Ala Asp
465                 470                 475                 480
Leu Asp Phe Ala Ser Val Gln Arg Gly Asn Ala Glu Val Gln Arg Arg
                485                 490                 495
Ala Gln Glu Val Ile Asn Ala Cys Val Ala Met Gly Glu Asn Asn Pro
            500                 505                 510
Ile Lys Phe Ile His Asp Val Gly Ala Gly Gly Leu Ser Asn Ala Leu
        515                 520                 525
Pro Glu Leu Ile His Asp Ser Gly Leu Gly Ala Thr Phe Glu Leu Arg
    530                 535                 540
```

```
Glu Val Asp Ser Ala Asp Lys Ser Met Ser Pro Met Gln Ile Trp Cys
545                 550                 555                 560
Cys Glu Ala Gln Glu Arg Tyr Val Leu Ala Val Gly Glu Glu Gly Met
                565                 570                 575
Asn Lys Phe Thr Ala Ile Ala His Arg Glu Arg Cys Gly Phe Ser Val
            580                 585                 590
Val Gly Arg Gly Glu Gly Gly Ser Glu Glu Asp Lys Arg Leu Ile Leu
        595                 600                 605
Leu Asp Arg Asp Ser Thr Glu Tyr Pro Lys Pro Ile Asp Leu Pro Leu
    610                 615                 620
Ser Val Leu Phe Gly Lys Pro Pro Arg Met Thr Arg Thr Val Asp Ser
625                 630                 635                 640
Arg Lys Leu Lys Leu Pro Ala Val Asp Ala Ser Leu Thr Ser Tyr Leu
                645                 650                 655
Pro Ser Leu Ala Pro Asn Arg Val Glu Leu Ile Ser Glu Ala Ala Asn
            660                 665                 670
Arg Val Leu Ser Leu Pro Ala Val Gly Ser Lys Ser Phe Leu Ile Thr
        675                 680                 685
Ile Gly Asp Arg Thr Val Gly Gly Leu Thr Ala Arg Asp Gln Met Val
    690                 695                 700
Gly Lys Trp Gln Thr Pro Val Ser Asp Val Ser Val Thr Ala Thr Ala
705                 710                 715                 720
Leu Val Gln Gly Met Lys Thr Gly Glu Ala Met Ala Met Gly Glu Arg
                725                 730                 735
Pro Thr Leu Ala Leu Ile Ser Pro Ala Ala Ser Ala Arg Met Ala Val
            740                 745                 750
Ala Glu Ser Leu Met Asn Ile Ala Ala Ala Asp Leu Val Asp Arg Leu
        755                 760                 765
Asn His Val Lys Leu Ser Ala Lys Ser
    770                 775
```

<210> 35601
<211> 166
<212> PRT
<213> A.fumigatus

<400> 35601

```
Ser Pro Pro Phe Arg Thr Arg Tyr Val Pro Ser Arg Arg Leu Arg Leu
1               5                   10                  15
Gly Arg Lys Leu Asp Met Val Gln Ala Val Asp Gln Val Arg Arg Ser
            20                  25                  30
Asn Val His Glu Arg Leu Arg Asn Cys His Pro Ser Arg Cys Gly Arg
        35                  40                  45
Arg Asn Lys Ser Lys Ser Arg Pro Leu Thr His Gly His Gly Phe Pro
    50                  55                  60
Ser Leu His Ser Leu Asn Gln Arg Ser Gly Cys Asp Gly Asp Val Gly
65                  70                  75                  80
Asp Arg Gly Leu Pro Phe Ser Asp His Leu Val Pro Ser Ser Lys Thr
                85                  90                  95
Thr His Gly Pro Ile Ala Asp Cys Asp Gln Glu Gly Leu Gly Ala Tyr
            100                 105                 110
Ser Arg Gln Gly Lys Asp Thr Val Gly Ser Leu Ala Asp Gln Leu Asp
        115                 120                 125
Ala Ile Arg Arg Lys Gly Arg Lys Ile Ala Gly Lys Ala Gly Ile Asp
    130                 135                 140
Gly Gly Glu Phe Gln Phe Ala Gly Val His Ser Pro Cys His Pro Arg
```

145 150 155 160
Arg Leu Ala Glu Glu Asp
165

<210> 35602
<211> 99
<212> PRT
<213> A.fumigatus

<400> 35602
Gln Arg Glu Val Asp Gly Phe Gly Ile Leu Gly Gly Val Ser Val Lys
1 5 10 15
Glu Asp Glu Ser Leu Val Leu Leu Arg Ala Thr Leu Thr Thr Ala Asn
20 25 30
Asp Arg Glu Thr Thr Thr Leu Thr Met Ser Asp Gly Gly Glu Phe Ile
35 40 45
His Ala Phe Leu Ala Asn Cys Glu Asp Ile Ser Phe Leu Gly Phe Thr
50 55 60
Ala Pro Asn Leu His Gly Ala His Ala Leu Val Gly Ala Ile Asp Leu
65 70 75 80
Thr Lys Leu Lys Ser Gly Thr Glu Ser Arg Ile Val Asn Gln Leu Gly
85 90 95
Lys Arg Val

<210> 35603
<211> 329
<212> PRT
<213> A.fumigatus

<400> 35603
Glu Pro Thr Gly Thr Asp Val Val Asn Glu Leu Asp Arg Val Val Leu
1 5 10 15
Pro His Ser His Ala Ser Ile Asp Asn Leu Leu Ser Ser Thr Leu His
20 25 30
Leu Ser Val Ala Ser Leu Asp Thr Ser Glu Val Gln Val Arg Arg Ser
35 40 45
Phe Thr Gly Cys Asp Ala Gly Arg Gly Ala Ser Ala Gln Ser Asn Lys
50 55 60
His Gly Arg Thr Ser Gln Asn Asn Glu Val Gly Ala Gly Leu Asp Gly
65 70 75 80
Leu Gly Phe Leu Asp Ser Met Leu Trp Ser Asp Cys Pro Asn Ala Ala
85 90 95
Ser Asn His Asn Arg Leu Val Val Thr Thr Asn Leu Ser Leu Thr Val
100 105 110
Ala Asp Val Asn Leu Cys Glu Lys Ser Thr Glu Val Pro Gln Arg Thr
115 120 125
Gly Thr Thr Lys Leu Ile Val Val Val Ser Ala Ala Asn Gly Ser Leu
130 135 140
Gln His Asp Val Gln Ala Ala Arg Asn Val Val Gly Leu Ala Asn Ile
145 150 155 160
Glu Leu Pro Arg Leu Leu Gln Ile Arg Asn Gln Glu Ile Arg Asn Ala
165 170 175
Val Ser Ser Lys Thr Gly Leu Gly Leu Gly Ala Ser Ala Asp Cys Thr
180 185 190
Leu Ile Pro Asn Leu Pro Thr Arg Ala Gly Gly Ser Ala Gly Glu Arg

```
        195                 200                 205
Arg Asp Ser Ser Gly Met Val Val Ser Phe Asn Leu Ser Gln Glu Val
    210                 215                 220
Asp Asp Leu Leu Cys Val Val Pro Phe Ala Ser Glu Trp Val Arg Ser
225                 230                 235                 240
Pro Glu Cys Gly Val Gly Ser Leu Lys His Gly Gly Val Val Thr Val
                245                 250                 255
Gly Ala Asn Gly Val Ile Gly Val Leu Leu Met Arg Val Ala Asp His
            260                 265                 270
Gly Glu Glu Thr Val Trp His Leu Leu Ala Ile Asp His Pro Gly Ser
        275                 280                 285
Val Glu Leu Leu Val Thr Thr Val Leu Arg Val Asp Leu Ser Glu His
    290                 295                 300
Glu Gln Phe Asp Ile Gly Arg Val Thr Arg Glu Gly Thr Ile Gly Pro
305                 310                 315                 320
Val Ser Ile Ser Glu Ile Val Asn Leu
                325
```

<210> 35604
<211> 78
<212> PRT
<213> A.fumigatus

<400> 35604

```
Ala Leu Pro Met Gly Ala Ser Ser Met Met Ser Lys Leu Leu Ala Met
1               5                   10                  15
Trp Leu Gly Leu Pro Thr Ser Ser Ser Gln Gly Cys Phe Arg Ser Gly
            20                  25                  30
Ile Arg Arg Ser Glu Thr Gln Tyr Pro Ala Arg Pro Ala Leu Gly Leu
        35                  40                  45
Glu Pro Leu Pro Thr Ala Pro Ser Ser Arg Ile Ser Pro Pro Glu Pro
    50                  55                  60
Val Ala Ala Pro Gly Lys Gly Glu Thr Ala Val Gly Trp Leu
65                  70                  75
```

<210> 35605
<211> 185
<212> PRT
<213> A.fumigatus

<400> 35605

```
Val Leu Ala Tyr Ala Val His Arg His Val Leu His Ser Lys Lys Tyr
1               5                   10                  15
Ser Val Ala Lys Tyr His Glu Thr Trp Tyr His Ser Leu Arg Ala Pro
            20                  25                  30
Phe Pro Leu Thr Ala His Tyr Asp His Pro Thr Val Tyr Leu Leu Ala
        35                  40                  45
Asn Phe Ile Pro Thr Tyr Ala Pro Ala Met Leu Phe Arg Leu His Met
    50                  55                  60
Leu Thr Tyr Leu Ile Tyr Leu Ser Ile Ile Ser Ile Glu Glu Thr Phe
65                  70                  75                  80
Ala Phe Ser Gly Tyr Ser Val Met Pro Thr Ser Phe Phe Leu Gly Gly
                85                  90                  95
Ile Ala Arg Arg Met Asp Val His Leu Leu Ser Gly Ala Glu Gly Asn
            100                 105                 110
Phe Gly Pro Trp Gly Ile Leu Asp Trp Ile Cys Gly Thr Thr Val Gly
```

```
        115                 120                 125
Asp Gly Glu Asp Glu Ala Ala Ser Thr Val Asp Asp Ala Gln Ser Gln
    130                 135                 140
Leu Ser Ala Ser Leu Ser Gln Asp Gly Asp Leu Asp Glu Lys Ile Arg
145                 150                 155                 160
Arg Ala Val Glu Glu Ser Thr Arg Arg Phe Arg Asp Gly Ser Arg Arg
                165                 170                 175
Arg Leu Arg Arg Lys Arg Arg Asp Glu
            180                 185

<210> 35606
<211> 127
<212> PRT
<213> A.fumigatus

<400> 35606
His Gly Cys Ala Phe Glu Gln Val Arg Lys Ala Ile Arg Pro Thr Lys
1               5                   10                  15
Leu Arg Glu Ser Leu Gln Pro Gly Thr Ile Leu Ile Leu Leu Ala Gly
            20                  25                  30
Arg Phe Arg Gly Lys Arg Val Ile Leu Leu Lys His Leu Asp Gln Gly
        35                  40                  45
Val Leu Leu Val Thr Gly Pro Phe Lys Ile Asn Gly Val Pro Leu Arg
    50                  55                  60
Arg Val Asn Ala Arg Tyr Val Ile Ala Thr Ser Lys Arg Val Asp Ile
65                  70                  75                  80
Ser Asn Val Asp Gln Ser Val Leu Glu Lys Val Ser Ala Ser Asp Tyr
                85                  90                  95
Phe Thr Lys Glu Lys Lys Ala Glu Lys Lys Thr Glu Glu Ala Phe Phe
            100                 105                 110
Lys Gln Gly Glu Lys Pro Glu Val Cys Gly Phe Cys Arg Ser Thr
        115                 120                 125

<210> 35607
<211> 79
<212> PRT
<213> A.fumigatus

<400> 35607
Ser Val Thr Leu Gln Ser Asn Asn His Pro Leu Leu Thr Thr Thr Thr
1               5                   10                  15
Pro Ser Tyr Ile Leu Phe Arg Pro Pro Ser Ser Pro Val Ala Asn Met
            20                  25                  30
Ser Asp Ser Thr Val Gly Gln Thr Lys Gln Phe Gly Lys Gly Gln Arg
        35                  40                  45
Thr Val Pro Ala Gln Lys Ala Gln Lys Trp Tyr Pro Val Asp Asp Glu
    50                  55                  60
Pro Gln Pro Lys Lys Val Ser Thr Pro Tyr Thr Lys Arg Asn Thr
65                  70                  75

<210> 35608
<211> 252
<212> PRT
<213> A.fumigatus

<400> 35608
```

```
Ser Ala Ser Phe Gly Pro Ile Leu Gly Pro Ile Ile Ser Gly Phe Ala
1               5                  10                  15
Ser Pro Ser Tyr Gly Trp Arg Trp Thr Phe Trp Ile Ala Ser Ile Leu
            20                  25                  30
Ala Gly Cys Ala Trp Ile Cys Leu Leu Phe Val Pro Glu Thr Phe Gly
        35                  40                  45
Pro Val Leu Ser Arg Arg Asn Ala Pro Gly Leu Gly Asp Thr Val Pro
    50                  55                  60
Lys Asn Thr Val Asn Val Val Gln Ile Val Lys Arg Pro Leu Ala Met
65                  70                  75                  80
Leu Leu Phe Glu Pro Ile Ile Thr Phe Thr Ser Ile Tyr Ile Ala Leu
                85                  90                  95
Ala Tyr Gly Leu Val Phe Phe Tyr Phe Gln Ala Tyr Pro Ile Ile Phe
            100                 105                 110
Asp Gly Leu Ser Pro Val Leu Leu Ala Thr Leu Cys Met Leu Thr Ser
        115                 120                 125
Gln Val Ser Thr Ala Ser Met Cys Arg Leu Pro Leu Leu Leu Phe Tyr
    130                 135                 140
Leu Val Gly Ile Ser Phe Pro Val Pro Cys Ala Thr Leu Ile Glu Ile
145                 150                 155                 160
Val Gly Val Gly Ala Ala Ser Thr Ser Leu Val Ala Leu Tyr Trp Asp
                165                 170                 175
Met Thr Tyr Asp Lys Ala Lys Lys His Asn Lys Pro Trp Arg Phe Gly
            180                 185                 190
Ala Glu Leu His Arg Leu Pro Ile Ser Cys Leu Gly Ala Val Leu Leu
        195                 200                 205
Thr Ala Ser Ser Phe Trp Leu Ala Trp Thr Ser Arg Ser Ala Val His
    210                 215                 220
Trp Ala Val Pro Ile Ala Ser Gly Val Val Phe Gly Phe Gly Tyr Gln
225                 230                 235                 240
Thr Ile Phe Val Ser Leu Leu Thr Tyr Val Thr Asp
                245                 250
```

<210> 35609
<211> 309
<212> PRT
<213> A.fumigatus

<400> 35609

```
Gln Ile Gln Gly Thr Pro Glu Ser Arg Gln Ala Cys Ser Arg Gln Ser
1               5                  10                  15
Lys Phe Thr Ser Pro Asn Asp Trp Pro Val His Lys Lys Leu Ala Ile
            20                  25                  30
Val Val Ala Ser Phe Leu Ser Val Ile Asn Ser Gly Ile Gly Thr Ser
        35                  40                  45
Leu Pro Ser Asn Ala Val Pro Tyr Ile Met Gln Glu Phe His Val Glu
    50                  55                  60
Asp Ala Thr Gln Ser Asn Leu Pro Thr Ser Val Phe Leu Ile Gly Tyr
65                  70                  75                  80
Ile Val Gly Pro Leu Ala Phe Ser Pro Leu Ser Glu Thr Val Gly Arg
                85                  90                  95
Arg Leu Val Leu Leu Pro Thr Ile Thr Val Phe Thr Leu Ser Thr Val
            100                 105                 110
Ala Cys Ala Leu Ser Pro Asn Trp Gly Ser Leu Leu Phe Phe Arg Phe
        115                 120                 125
Ile Cys Gly Thr Met Gly Ser Ala Pro Gln Thr Val Val Gly Gly Val
```

```
    130                 135                 140
Tyr Ala Asp Met Phe Phe Asp Leu Arg Glu Arg Gly Arg Val Met Ala
145                 150                 155                 160
Phe Tyr Met Ala Val Cys Leu Trp Trp Phe Val Gln Leu Asn Gly Cys
                165                 170                 175
Val Ser Ala Asp Cys Ala Ser Ser Gln Leu Val Ser Asp Pro Phe Leu
            180                 185                 190
Val Gln Leu Tyr Arg Gly Leu His Leu Pro Arg Met Ala Gly Asp Gly
        195                 200                 205
His Ser Gly Leu Leu Pro Ser Leu Arg Ala Val Leu Gly Ser Ala Phe
    210                 215                 220
Ser Leu Cys Leu Arg Pro Ser Gly Arg Phe Cys Gln Asp Ala Met His
225                 230                 235                 240
Leu Asp Trp Gly Ile Gln Phe Gln Arg Thr Leu Ser Thr Leu Phe Arg
                245                 250                 255
Leu Ser Ser Asp Leu Trp Pro Cys Cys Ser Ser Ser Pro Leu Ser Pro
            260                 265                 270
Ser Leu Arg Tyr Ile Ser Arg Trp Leu Thr Val Leu Ser Ser Phe Ile
        275                 280                 285
Phe Lys Leu Ile Arg Leu Phe Leu Thr Val Cys Leu Leu Phe Ser Trp
    290                 295                 300
Leu His Tyr Ala Cys
305

<210> 35610
<211> 207
<212> PRT
<213> A.fumigatus

<400> 35610
Phe Phe Arg Ser Val Ser Pro Val Thr Val Ser Lys Pro Thr Pro Tyr
1                   5                   10                  15
Thr Phe Asp Leu Gly Tyr Leu Met Ala Asn Asp Pro Asn Pro Leu Glu
            20                  25                  30
Leu Pro Arg Ser Glu Pro Leu Asn Ala Ser Leu Lys Ala Pro Arg Thr
        35                  40                  45
Ser Gly His Pro Val Pro Ser Ser Thr Ser Ser Ser Ile Leu Ala Arg
    50                  55                  60
Leu Gln Cys Ser Ala Gln Ser Gly Val Leu Leu Thr Leu Pro Pro Pro
65                  70                  75                  80
Ala Thr Val Leu Pro Arg His Lys Pro Leu Pro Thr Pro Lys Pro Pro
                85                  90                  95
Ser Lys Trp Glu Leu Val Ala Arg Lys Lys Gly Ile Gly Lys Tyr Ser
            100                 105                 110
Asn Lys Pro Gly Ala Ala Leu Ala Asp Lys Glu Arg Arg Lys Lys Leu
        115                 120                 125
Val Tyr Asp Glu Glu Lys Gly Glu Trp Val Pro Arg Trp Gly Tyr Lys
    130                 135                 140
Gly Lys Asn Lys Ser Asp Asp Glu Trp Leu Val Glu Val Lys Glu Lys
145                 150                 155                 160
Asp Trp Lys Lys Glu Glu Glu Ala Ala Ala Lys Gly Ser Ser Ile Arg
                165                 170                 175
Gly Leu Ser Arg Ala Glu Arg Lys Glu Arg Ile Arg Arg Asn Glu Arg
            180                 185                 190
Lys Met Arg Ser Asn Glu Arg Arg Ser Arg Lys Ser Gly Gly Gly
        195                 200                 205
```

<210> 35611
<211> 279
<212> PRT
<213> A.fumigatus

<400> 35611
Cys Arg Gly Pro Val Ser Ser Glu Val Lys Ile Met Tyr Leu Asn Tyr
1 5 10 15
Lys Gly Cys Glu Glu Glu Gly Leu Tyr Arg Val Pro Gly Ser Gly Lys
20 25 30
Glu Val Lys His Trp Gln Arg Arg Phe Asp Thr Gly Lys Leu Ser Trp
35 40 45
Thr Ser Val His Ile Ser Leu Ala Asn Cys Ala Glu Leu Asp Ile Asn
50 55 60
Leu Phe Asp Glu Pro Asp Leu Tyr Asp Ile Asn Thr Ile Gly Ser Met
65 70 75 80
Phe Lys Ala Trp Leu Arg Glu Leu Pro Asp Glu Leu Phe Pro Lys Glu
85 90 95
Thr Gln Ala Met Ile Ala Glu Lys Cys Glu Gly Ala Thr Thr Ala Pro
100 105 110
Gln Leu Leu Lys Asp Glu Leu Ser Lys Leu Pro Pro Tyr Asn Tyr Tyr
115 120 125
Leu Leu Phe Ala Ile Thr Cys His Leu Asn Leu Leu His Ser Tyr Val
130 135 140
Asp Gln Asn Lys Met Asp Tyr Arg Asn Leu Cys Ile Cys Phe Gln Pro
145 150 155 160
Cys Met Lys Ile Asp Ala Phe Cys Phe His Phe Leu Val Cys Asp Trp
165 170 175
Lys Asn Cys Trp Gln Gly Cys Trp Thr Glu Lys Glu Tyr Leu Gln Leu
180 185 190
Glu Arg Glu Met Asp Glu Lys Glu Lys Ala Ala Ser Ser Lys Thr Gly
195 200 205
Asp Val Asp His Ser Ser Leu Pro Tyr Ser Asp Ala Asn Glu Arg Ala
210 215 220
Ile Ser Ser Ser Gly Ser Ser Gln Ala Ala Ala Glu Asp Glu Pro Ala
225 230 235 240
Tyr Arg Pro Glu Thr Ala Lys Ser Arg Lys Gln Lys Pro Lys Gln Ile
245 250 255
Glu Thr Ser His Thr Arg Ser Ile Ser Gln Leu Pro Glu Leu Gly Pro
260 265 270
Pro Leu Ser Pro Ile Gln Ile
275

<210> 35612
<211> 469
<212> PRT
<213> A.fumigatus

<400> 35612
Ser Arg Thr Gly Ser Asp Val Cys Ser Asn Leu Ser Thr Ile Met Ser
1 5 10 15
Ser Glu Gln Leu Ala Gln Ser Gln Lys Pro Thr Gly Glu Tyr Arg Gln
20 25 30
Tyr Leu Pro Asp Leu Ser Leu Lys Arg Phe Gln Val Met Arg Gly Gln
35 40 45

```
Asp Ala His Glu Tyr Ala His Asp Phe Lys Thr Leu Arg Gln Pro Pro
    50                  55                  60
Trp Leu His Ala Leu Tyr Met His Trp Leu Asp Leu Leu Gln Glu Pro
65                  70                  75                  80
Phe Lys Gly Val Thr Thr Asp Gly Leu Leu Ala Leu Met Tyr Leu Val
                85                  90                  95
Gly Leu Val Leu Met Leu Thr Asp Cys Gln Glu Thr Cys Ala Pro Val
            100                 105                 110
Cys Ser His Tyr Lys Thr Lys Ala Ser Pro Ser Thr Arg Ser Ser Leu
        115                 120                 125
Arg His Ser Arg Cys Ser Pro Phe Leu Thr Asp Lys Gln Arg Gln Ser
    130                 135                 140
Leu Ser Tyr His Ile Asp Ser Pro Glu Trp Arg Thr Trp Ser Asn Pro
145                 150                 155                 160
Glu Phe Leu Leu Ser His Lys Gly Leu Arg Leu Asp Glu Val Thr Pro
                165                 170                 175
Pro Ile Arg Asp Ala Ile Met His Ile Leu Glu Thr Thr Leu Ser Pro
            180                 185                 190
Glu Gly Tyr Asp Lys Ala Val Lys Ala Met Arg Ile Asn His Phe Leu
        195                 200                 205
Gly Glu Leu Val Asp Ser Pro Arg Ile Met Asn Glu Phe Ser Tyr Asn
    210                 215                 220
Phe Val Leu Phe Gly Arg Pro Ser Pro Asp Arg Pro Trp Gly Trp Ser
225                 230                 235                 240
Phe Tyr Gly His His Leu Cys Leu Asn Ile Phe Leu Tyr Lys Ser Gln
                245                 250                 255
Ile Val Ala Ser Pro Trp Phe Thr Gly Ala Glu Pro Asn Glu Ile Asp
            260                 265                 270
Ser Gly Pro Tyr Ala Gly Thr Arg Ile Met Gln Val Glu Glu Arg Leu
        275                 280                 285
Gly Leu Gln Leu Met Gln Ser Leu Ala Leu Glu Leu Gln Ala Gln Ala
    290                 295                 300
Arg Ile Phe Ala Gln Met His Asp Pro Ala Met Pro Pro Gly Arg Trp
305                 310                 315                 320
Asn Lys Asp Asp Gln Arg His Leu Cys Gly Ala Tyr Arg Asp Asn Arg
                325                 330                 335
Val Val Pro Tyr Glu Gly Ile Pro Ala Ile Ser Leu Thr Glu Pro Gln
            340                 345                 350
Lys Gln Leu Leu Tyr Gly Ile Leu Glu Gln Tyr Leu Leu Tyr Leu Pro
        355                 360                 365
Ala Arg Ala Arg Gln Leu Lys Leu Ala Gln Val Arg Gln Tyr Glu Pro
    370                 375                 380
Glu Thr Tyr Phe Cys Trp Ile Gly Gly Phe Gly Asp Gln Asp Pro Phe
385                 390                 395                 400
Tyr Tyr Arg Ile Gln Ser Pro Val Ile Leu Val Glu Phe Asp His His
                405                 410                 415
Ser Gly Val Phe Leu Asn Asn Glu Glu Pro Lys Lys Phe His Ile His
            420                 425                 430
Thr Leu Leu Arg Thr Pro Asn Gly Gly Asp Tyr Gly Met Ala Leu Arg
        435                 440                 445
Pro Leu Ile Pro Ala Val Glu Gly Leu Asn Gly Lys Glu Ile Thr Trp
    450                 455                 460
Glu Lys Ser Ala Leu
465

<210> 35613
```

<211> 187
<212> PRT
<213> A.fumigatus

<400> 35613
Gly Gly Ser Gly Ser Pro Val Val Lys Thr Met Gly Val Glu Arg Arg
1 5 10 15
Pro Gly Glu Arg Pro Leu Gln Ala Lys Tyr Pro Asp Leu Pro Ala Asp
20 25 30
Tyr Tyr Ile Pro Lys Asp Ser Trp Phe Ile Arg Ala Arg Leu Leu Lys
35 40 45
Gln Gly Val Thr Ala Pro Gly Arg Ser Ala Ser Val Gln Ser Ser Lys
50 55 60
Ser Asp Leu Asp Glu Leu Arg Arg Arg Phe Asn Val Ser Ser Leu Ser
65 70 75 80
Gln Ser Ala Glu Glu Lys Asn Pro Leu Thr Met Glu Asn Val Thr Gly
85 90 95
Ser Gly Pro Ser Ser Ala Thr Pro Ser His Val Pro Gly Arg Ile Phe
100 105 110
His Gly Val Trp Val Phe Val Asp Ile Gln Leu Tyr Gln Leu Glu Glu
115 120 125
Asn Asn Tyr Met Val Asp Phe Lys Cys Asp Gly Tyr Gln Asn Val Ile
130 135 140
Arg Ala Glu Gly Glu Thr Asp Trp His Pro Ile Ser Lys Arg Tyr Phe
145 150 155 160
Asn Lys Glu Lys Glu Ile Thr Ser Pro Tyr Pro Phe Leu Asp Val Ala
165 170 175
Ser Asp Leu Val Ala Gln Leu Ala Val Ala Ser
180 185

<210> 35614
<211> 80
<212> PRT
<213> A.fumigatus

<400> 35614
Pro Thr Ser Ser Ala Ser Pro Ser Ala Thr Thr Ser Thr Arg Leu Asn
1 5 10 15
Gly Ala His Gly Pro Thr Pro Asn Ser Phe Ser Ala Thr Lys Ala Cys
20 25 30
Val Ser Thr Lys Ser Pro Leu Pro Ser Ala Thr Pro Ser Cys Thr Ser
35 40 45
Ser Arg Arg Arg Ser Leu Gln Lys Gly Thr Thr Arg Pro Ser Lys Pro
50 55 60
Cys Ala Ser Thr Thr Phe Ser Ala Ser Trp Ser Thr Pro Pro Ala Ser
65 70 75 80

<210> 35615
<211> 172
<212> PRT
<213> A.fumigatus

<400> 35615
Thr Ser Ser Ser Thr Ser Pro Arg Ser Ser Pro Pro Pro Gly Ser Pro
1 5 10 15
Ala Pro Ser Pro Thr Arg Ser Thr Ala Val Pro Thr Gln Ala Pro Ala

```
            20                  25                  30
Ser Cys Lys Ser Arg Ser Gly Leu Ala Cys Ser Ser Cys Ser Arg Ser
        35                  40                  45
Pro Leu Ser Ser Lys Pro Arg Arg Ala Ser Ser Pro Arg Cys Met Ile
    50                  55                  60
Pro Arg Cys Arg Arg Ala Ala Gly Thr Arg Thr Thr Ser Ala Thr Ser
65                  70                  75                  80
Ala Ala Arg Thr Ala Thr Thr Ala Ser Cys Pro Thr Arg Ala Ser Pro
                85                  90                  95
Pro Ser Pro Ser Arg Asn Pro Arg Asn Asn Ser Ser Thr Ala Phe Trp
            100                 105                 110
Ser Ser Thr Ser Ser Ile Cys Pro Arg Gly Arg Gly Ser Ser Asn Trp
        115                 120                 125
Pro Arg Ser Ala Ser Met Asn Pro Arg His Thr Ser Ala Gly Leu Ala
    130                 135                 140
Gly Ser Ala Thr Arg Thr Leu Phe Thr Ile Gly Ser Arg Ala Leu Leu
145                 150                 155                 160
Phe Ser Ser Ser Ser Ile Thr Thr Pro Val Cys Phe
                165                 170
```

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<210> 35616
<211> 472
<212> PRT
<213> A.fumigatus

<400> 35616

```
Ser Glu Thr Pro Val Ile Thr Thr Arg Arg Pro Lys Leu Val Ser Ile
1               5                   10                  15
Thr Ser Arg Leu Val Ala Gly Gly Cys Arg Arg Ser Leu Ala His Phe
            20                  25                  30
Phe Ser Thr Thr Thr Ala Ile Met Thr Pro Arg Glu Thr Arg Ile Leu
        35                  40                  45
Ser Val Arg Arg Leu Asn Lys Glu Asp Pro Gly Thr Arg Ser Leu Ala
    50                  55                  60
Glu Trp Trp Ala Ser Glu Arg Ser Gln Lys Thr Pro Glu Ser Ser Ala
65                  70                  75                  80
Ile Glu Glu Ala Ala His Leu Leu Arg Thr Ser Asp Ile Pro Val Ala
                85                  90                  95
Phe Pro Thr Glu Thr Val Tyr Gly Leu Gly Ala Asp Ala Thr Arg Ser
            100                 105                 110
Ala Ala Val Gln Gly Ile Tyr Lys Ala Lys Gln Arg Pro Ser Asp Asn
        115                 120                 125
Pro Leu Ile Val His Ile Asp Ser Ile Glu Met Leu Glu Arg Leu Leu
    130                 135                 140
Asn Pro Ala Ser Ser Ser Pro Thr Arg Thr Thr Arg Thr Ala Lys Asn
145                 150                 155                 160
Thr Ile Pro Ala Ile Tyr Gln Pro Leu Ile Glu Arg Phe Trp Pro Gly
                165                 170                 175
Pro Leu Thr Ile Leu Leu His Asn Pro Ser Gly Ser Leu Leu Ala Asp
            180                 185                 190
Glu Val Thr Ala Asn Leu Thr Thr Phe Gly Val Arg Met Pro Ala Ser
        195                 200                 205
Pro Leu Ala Arg Leu Leu Ile His Val Ala Asp Arg Pro Leu Ala Ala
    210                 215                 220
Pro Ser Ala Asn Ala Ser Thr Lys Pro Ser Pro Thr Ala Ala Glu His
225                 230                 235                 240
```

```
Val Tyr His Asp Leu Glu Gly Arg Ile Asn Leu Ile Leu Asp Gly Gly
                245                 250                 255
Pro Cys Gly Val Gly Val Glu Ser Thr Val Val Asp Gly Leu Ser Lys
            260                 265                 270
Leu Pro Ala Ile Leu Arg Pro Gly Gly Val Gly Ile Glu Glu Leu Arg
        275                 280                 285
Thr Val Pro Gly Trp Glu Asn Val Gln Ile Ala Tyr His Asp Gly Asn
    290                 295                 300
Leu Asp Val Lys Glu Val Pro Arg Ala Pro Gly Met Lys Tyr Arg His
305                 310                 315                 320
Tyr Ser Pro Lys Ala Arg Val Val Leu Phe Cys Ala Gly Ser Ser Glu
                325                 330                 335
Glu Glu Ile Ala Lys Tyr Val Tyr Lys Asp Leu Glu Asp Thr Ala Ile
            340                 345                 350
Arg Ala His Met Ile Gly Val Val Arg Thr Arg Gln Trp Lys Arg Gly
        355                 360                 365
Leu Gly Leu Val Ser Glu Glu Asp Ile Gln Lys Thr Leu Lys Pro Ile
    370                 375                 380
Pro Ser Leu Val Asp Asp Leu Val Cys Phe Ser Val Pro Val Lys Gly
385                 390                 395                 400
Arg Ile Asn Asn Arg Glu Ile Ala Arg Ala Ala Phe Asp Cys His Leu
                405                 410                 415
Gly Asp Asn Ile Glu Ser Ile Ala Arg Gly Leu Phe Ser Ala Leu Arg
            420                 425                 430
Ala Met Asp Glu Met Glu Val Asp Val Ile Tyr Val Glu Gly Val Ser
        435                 440                 445
Asp Ser Gln Gly Asp Leu Ala Ala Ala Val Met Asn Arg Leu Arg Lys
    450                 455                 460
Ala Ala Gly Thr Val Leu Lys Leu
465                 470
```

<210> 35617
<211> 270
<212> PRT
<213> A.fumigatus

<400> 35617

```
Lys Glu Ala Asn Arg Ile Phe Lys Gln Thr Ala Asn Gly Val Pro Ala
1               5                   10                  15
Pro Val Lys Ser Ala Ser Ala Lys Lys Ala Ala Pro Ala Pro Ala Lys
            20                  25                  30
Gly Lys Lys Gly Lys Gly Lys Arg Gly Ala Asp Lys Tyr Ala His Gln
        35                  40                  45
Asp Glu Glu Glu Arg Glu Leu Ala Phe Arg Leu Val Gly Ala Lys Ser
    50                  55                  60
Ala Lys Ala Glu Lys Ala Ala Ala Ala Ala Ala Ala Lys Ala Gln Arg
65                  70                  75                  80
Glu Arg Glu Ala Glu Ala Ala Lys Lys Arg Arg Lys Ala Gln His Glu
                85                  90                  95
Arg Ala Ala Glu Ala Glu Arg Arg Arg Gln Ala Leu Phe Asp Glu Gly
            100                 105                 110
Ala Ala Asp Asp Tyr Asn Glu Glu Thr Ala Ala Ala Glu Ala Ala Asp
        115                 120                 125
Leu Ser Trp Ile Pro Ala Leu Ile Gly Thr Pro Arg Pro Glu Asp Glu
    130                 135                 140
Ile Leu Ala Ala Ile Pro Ile Cys Ala Pro Trp Ala Ala Leu Val Arg
```

```
145                 150                 155                 160
Tyr Lys Tyr Arg Val Lys Leu Gln Pro Gly Thr Val Lys Lys Gly Lys
                165                 170                 175
Ala Val Lys Glu Ile Leu Gly Arg Trp Val Ala Glu Thr Thr Thr Gly
            180                 185                 190
Lys Val Lys Lys Glu Gln Ala Glu Glu Ala Gly Ile Ser Ile Ala Asp
        195                 200                 205
Ala Glu Lys Leu Arg Ala Arg Glu Gly Glu Leu Phe Lys Ala Trp Arg
    210                 215                 220
Asp Thr Glu Ile Ile Asn Thr Val Pro Val Pro Lys Val Arg Ile Met
225                 230                 235                 240
Thr Gly Gly Gly Ala Thr Gly Ser Asp Ala Lys Gly Lys Gly Lys Gly
                245                 250                 255
Gly Ser Ser Gly Asn Lys Gly Gly Lys Gly Gly Lys Lys Lys
            260                 265                 270
```

<210> 35618
<211> 110
<212> PRT
<213> A.fumigatus

<400> 35618

```
Thr Met Cys Gln Ser Pro Leu His Asp Phe Leu His Gly Leu Pro Lys
1               5                   10                  15
Cys Glu His His Val His Leu Glu Gly Cys Val Thr Pro Glu Leu Ile
            20                  25                  30
Phe Gln Leu Ala Glu Lys Asn Asn Ile Gln Leu Pro Asn Pro Ala Thr
        35                  40                  45
His Pro Ala Tyr Ala Ser Val Glu Ala Leu Arg Ala Arg Tyr Ala Glu
    50                  55                  60
Phe Thr Ser Leu Asn Asp Phe Leu Asp Phe Tyr Phe His Gly Met Ser
65                  70                  75                  80
Val Leu His His Gln Ser Asp Phe Glu Glu Leu Ala Trp Ala Tyr Phe
                85                  90                  95
Gln Lys Ala His Ala Asp Gly Val His His Ala Glu Val Phe
            100                 105                 110
```

<210> 35619
<211> 72
<212> PRT
<213> A.fumigatus

<400> 35619

```
Phe Leu Asn Pro Asp Ser Ala Trp Pro Gln Tyr Gly Arg Lys Phe Ala
1               5                   10                  15
Gln Pro Val Asp Asn Arg Thr Leu His Ser Tyr Pro Thr Gly Ala Thr
            20                  25                  30
Ile Glu Tyr Gln Ile Asp Pro Pro Leu Lys Val Met Ile Asn Val Phe
        35                  40                  45
Ser Arg Ser Arg Arg Gly Leu Arg Arg Arg Ile Ser Arg Arg Ser Arg
    50                  55                  60
Glu Arg Pro Val Arg Asn Met Asp
65                  70
```

<210> 35620
<211> 474

<212> PRT
<213> A.fumigatus

<400> 35620

```
Thr Val Ile Arg Pro Glu Pro Leu Gln Val Ser Lys Trp Glu Leu Thr
1               5                  10                  15
Tyr Ser Leu Ala Asp Gly Arg Pro Leu Gln Thr Leu Val Gly Glu Phe
            20                  25                  30
Glu Phe Ser Leu Arg Asn Gly Thr Asn Ile Gly Cys Thr Ala Ala Arg
        35                  40                  45
Ile Thr Pro Asp Ile Gly Ala Ala Ala Ser Ala Ala Phe Ala Tyr Leu
    50                  55                  60
Pro Ala Ala Ile Leu Leu Leu Val Gly Met Ala Ser Trp Cys Arg Gln
65                  70                  75                  80
Thr Gln Gln Arg Arg Arg Ser Val Ser Ala His Gly Thr Thr Pro Thr
                85                  90                  95
Ala Pro Asp Ser Val Arg Lys Ile Val Val Asp Val Ala Asp Tyr Val
            100                 105                 110
Arg Tyr Leu Gln Phe Ile Phe Leu Thr Gly Ser Leu Thr Met Gln Tyr
        115                 120                 125
Pro Gly Phe Tyr Gln Pro Ile Val Ser Gln Leu Ala Trp Ser Ser Leu
    130                 135                 140
Leu Phe Trp Ser Gly Pro Ile Asp His Gly Phe Arg Tyr Pro Gly Ile
145                 150                 155                 160
Glu Asp Gly Ile Tyr Ala Val Asn Gly Thr Tyr Gly Leu Glu Tyr Met
                165                 170                 175
Ala Gln Asn Leu Gly Phe Pro Ser Met Leu Asp Ile Lys Phe Asp Ala
            180                 185                 190
Leu Ile Asn Leu Cys Ile Val Val Ser Ala Ile Val Val Ile Trp Leu
        195                 200                 205
Val Gly Trp Leu Leu Lys Cys Gly Ser Trp His Gly Val Ser Leu Asp
    210                 215                 220
Ala Val Leu Val Gln Phe Pro Ala Ala Cys His Ser Ile Ala Gly Val
225                 230                 235                 240
Thr Leu Leu Phe Phe Ser Leu Pro Leu Leu Ala Tyr Leu Ala Tyr Pro
                245                 250                 255
Phe Ala Leu Val Pro His Leu Pro Ser Tyr Asn Ile Cys Leu Ile Val
            260                 265                 270
Leu Met Ile Gly Val Leu Val Gly Ser Asn Leu Phe Val Ala Arg Tyr
        275                 280                 285
Gln Thr Lys Gln Lys Pro Arg Arg Ser Asp His Asn Ser Ser Glu Ala
    290                 295                 300
Ser Pro Arg Phe Asp Thr Ser Met Glu Tyr Ile Ala His Tyr Leu Leu
305                 310                 315                 320
Tyr Cys Leu Pro Leu Ile Gln Gly Leu Ala Ile Gly Gly Leu Gln Leu
                325                 330                 335
Trp Gly Trp Val Gln Leu Leu Leu Leu Gly Gly Cys Glu Val Ile Thr
            340                 345                 350
Leu Ala His Leu Ile Ile Gln Arg Arg Thr Lys Phe Met Leu Ser Lys
        355                 360                 365
Ser Ala Trp Cys Thr Ala Val Arg Leu Leu Thr Leu Ile Leu Gly Val
    370                 375                 380
Ala Phe Val Cys Pro Ser Arg Glu Ile Thr Arg Gln Trp Ile Gly Tyr
385                 390                 395                 400
Phe Ile Leu Val Leu His Ser Val Val Ile Val Phe Gly Phe Leu Phe
                405                 410                 415
```

```
Ile Ser Val Trp His Ile Gly Arg Phe Ala Val Asn Arg Ser Asp Arg
            420                 425                 430
Arg Val Ala Asp Asp Arg Trp Val Gly Ser Ser Asn Val Pro Val Ser
        435                 440                 445
Val Glu Ser Ala Leu Arg His Tyr Ser Ala Thr Tyr Trp Cys Pro Ala
    450                 455                 460
Phe Gln Phe Arg Arg Ala Leu Lys Pro Gln
465                 470
```

<210> 35621
<211> 248
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (15)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35621

```
Gly Val Cys Gly Ile Gly Gly Phe Leu Pro Ser Ser Glu Val Xaa Asp
1               5                   10                  15
Leu Val Glu Lys Gly Ser Met Asn Phe Ile Phe Gly Gly Asn Gly Phe
            20                  25                  30
Phe Gly Tyr Phe Phe Ser Thr Ser Ser Ser Ile Ala Ala His Arg Asp
        35                  40                  45
Ser Pro His His Val Ser Glu Pro Gly Asp Leu Leu Ala Trp Trp Ser
    50                  55                  60
Thr Tyr Ser Val Asp Glu Cys Pro Asp Pro Asn Met Leu Asp Met Asp
65                  70                  75                  80
Asp Val Leu Gln Gln Leu Gln Lys Arg His Glu His Trp Gly Asp Pro
                85                  90                  95
Val Val Gln Lys Val Leu Lys Ser Ala Arg Val Lys Ser Ile Tyr Pro
            100                 105                 110
Thr Trp Thr Ser Pro Gln Leu Pro Thr Trp Glu Arg Asp Gly Val Val
        115                 120                 125
Leu Val Gly Asp Ala Ala His Ala Leu Pro Ser Ser Ser Gly Gln Gly
    130                 135                 140
Ser Ser Gln Ala Leu Glu Asp Val Glu Ser Phe Ala Lys Leu Leu Ser
145                 150                 155                 160
Tyr Phe Leu Gly Lys Ala Asp Asp Ser Asp Ser Ser Val Arg Glu Cys
                165                 170                 175
Lys Glu Ala Val Lys Leu Ala Ala Lys Gln Tyr Met Asp Leu Arg Arg
            180                 185                 190
Pro Arg Val Gln Ala Ile Leu Asp Asp Ala Arg Lys Arg Gln Ser Lys
        195                 200                 205
Lys Arg Asp Met Gly Val Ile Glu Glu Tyr Leu Met Tyr Ser Ile Met
    210                 215                 220
Trp Ile Met Gly Met Tyr Ala Val Gly Phe Gly Gly Leu Ala Asn Met
225                 230                 235                 240
Glu Leu Gln Ala Ser Phe Arg Ala
                245
```

<210> 35622
<211> 66
<212> PRT

<213> A.fumigatus

<400> 35622

```
Pro Phe Ala Thr Thr Thr Asp His Val His Trp Arg Leu Ile Ser His
1               5                  10                  15
Ala Trp Ser Arg Ile Val His Thr Tyr Lys Glu Thr Ala Val Leu Ala
            20                  25                  30
Phe Glu Ile Ser Val Arg Asn Tyr Ile Ala Thr Pro Asp Asn Val Ala
        35                  40                  45
Glu Glu Ile Leu Val Glu Thr Leu Glu Asn Met Gln Thr Ile Arg Pro
    50                  55                  60
Asn Thr
65
```

<210> 35623
<211> 287
<212> PRT
<213> A.fumigatus

<400> 35623

```
Gly Glu Val Ser Ile Cys Arg Ser Gly Ser Gln Ser Thr Ser Phe Cys
1               5                  10                  15
Ser Leu Leu Leu Cys Ile Arg Ser Val Ser Met Lys Ser Leu Leu Arg
            20                  25                  30
Ala Thr Phe Phe Ala Thr Ala Ala Ile Ala Ala Pro Asp Ser Arg Arg
        35                  40                  45
Cys Arg Cys Gln Pro His Glu Pro Cys Trp Pro Ser Pro Arg Glu Trp
    50                  55                  60
Asn Ala Leu Asn Arg Ser Ile Asp Gly Asn Leu Val Ala Val Gln Pro
65                  70                  75                  80
Val Ala Ala Pro Cys His Ile Asn Pro Asn Ser Thr Ala Cys Gln Asp
                85                  90                  95
Val Thr Ala Gln Trp Ser Asn Ser Val Trp Arg Ala Ala Gln Pro Gly
            100                 105                 110
Ala Val Gln Trp Glu Asn Trp Ala Ala Trp Pro Glu His Asn Glu Ser
        115                 120                 125
Cys Tyr Ile Glu Thr Ala Pro Asp Thr Cys Lys Gln Gly Arg Ile Ser
    130                 135                 140
Leu Tyr Ser Ala Val Val Gln Asn Ala Arg His Ile Gln Glu Ala Val
145                 150                 155                 160
Arg Phe Ala Arg Arg His Asn Ile Arg Leu Ala Val Lys Asn Ser Gly
                165                 170                 175
His Asp Phe Leu Gly Arg Ser Ala Ala Pro Asn Ser Leu Gln Ile Leu
            180                 185                 190
Thr Asn Arg Met Lys Gly Leu Gln Thr Val Asp Asp Phe Val Pro Lys
        195                 200                 205
Gly Ala Pro Lys His Lys Gly Glu Gly Pro Ala Val Thr Leu Asp Ala
    210                 215                 220
Gly Ile Ser Leu Gln Glu Met Tyr Ala Ala Leu Ala Lys Gln Asn Arg
225                 230                 235                 240
Thr Val Val Gly Gly Thr Ala His Thr Val Gly Pro Thr Gly Gly Tyr
                245                 250                 255
Ile Gln Gly Gly Gly His Ser Phe Leu Ser Pro Trp Lys Gly Met Ala
            260                 265                 270
Ser Asp Asn Ala Leu Glu Phe Ser Val Val Thr Ala Ser Val Ser
        275                 280                 285
```

<210> 35624
<211> 226
<212> PRT
<213> A.fumigatus

<400> 35624
Gly Pro Gly Thr Asp Pro Leu Gln Gly Asp Leu Val Thr Ala Asn Ala
1 5 10 15
Tyr Gln Asn Ser Glu Leu Phe Trp Ala Leu Arg Gly Gly Gly Gly Gly
20 25 30
Thr Phe Gly Ile Val Thr Arg Val Thr Val Arg Thr Phe Glu Glu Ile
35 40 45
Pro Val Val Val Thr Thr Met Asn Ile Thr Thr Ala Gly Gly Asp Pro
50 55 60
Ala Phe Trp Thr Ala Val Ala Asp Phe His Ala Val Leu Pro Ala Val
65 70 75 80
Thr Asp Ala Arg Gly Gly Gly Tyr Tyr Phe Ile Ile Pro Asn Leu Pro
85 90 95
Trp Glu Asn Asn Gln Thr Leu Ser Val Leu Arg Phe Tyr Leu Phe His
100 105 110
Thr Asn Thr Ser Asn Thr Thr Glu Val Gly Gln Met Tyr Glu Pro Leu
115 120 125
Met Lys Lys Leu Asn Ala Thr Ala Gly Val Tyr Thr Gln Tyr Met Ser
130 135 140
Leu Pro Met Ser Ser Val His Glu Ala Leu Ser Lys Leu Met Leu Val
145 150 155 160
Gly Asp Ser Asp Glu Thr Gly Ser Ile Ala Val Ile Phe Phe Arg Leu
165 170 175
Phe Ser Lys Asp Leu Leu Thr Phe Lys Asp Gly Pro Ala Arg Leu Ala
180 185 190
Ser Ala Met Ser Lys Phe Arg Tyr Thr Pro Trp Gln Thr Gly Val Gly
195 200 205
Met Val Asp Gly Gly Gly Ala Val Ala Glu Asn Ala Ala Lys Ser Thr
210 215 220
Gly His
225

<210> 35625
<211> 189
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (189)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35625
Ile Gln Leu Leu Val Leu Ile Asn Glu Thr Ala Met Ala Ser Arg Gln
1 5 10 15
Leu Ala Arg Ala Arg Leu Leu Arg Thr Pro Ala Leu Ser Pro Asn Arg
20 25 30
Val Val Arg Pro Ser Gln Thr Leu Arg Cys Leu Pro Gln Thr Gln Ser
35 40 45
Leu Leu Pro Arg Ala Ser Leu Thr Ala Ala Leu Gln Ser Ile Ser Thr

```
    50                  55                  60
Val Arg His Tyr Ala Asn Gly Arg Pro His Pro Pro Gly Gly Thr His
65                  70                  75                  80
Arg Met Asn Leu Gly Gly Glu Pro Glu Lys Ser Ala Leu Glu Gln Phe
                85                  90                  95
Gly Val Asp Leu Thr Glu Lys Ala Lys Lys Gly Lys Leu Asp Pro Val
            100                 105                 110
Ile Gly Arg Asp Ser Glu Ile His Arg Thr Ile Gln Val Leu Ser Arg
        115                 120                 125
Arg Thr Lys Asn Asn Pro Val Leu Ile Gly Ala Ala Gly Thr Gly Lys
    130                 135                 140
Thr Ala Ile Leu Glu Gly Leu Ala Gln Arg Ile Val Gln Gly Asp Val
145                 150                 155                 160
Pro Glu Ser Ile Lys Asp Lys Arg Val Ile Ala Leu Asp Leu Gly Ser
                165                 170                 175
Leu Ile Ala Val Phe Thr His Ser Ala Gly Arg Ile Xaa
            180                 185

<210> 35626
<211> 69
<212> PRT
<213> A.fumigatus

<400> 35626
His Leu Pro Ser Ile Phe Ile Leu Tyr Phe Ile Glu Thr Tyr Asp Arg
1               5                   10                  15
Glu Leu Asn Ser Ala Ala Arg Pro Asn Lys Arg Asn Arg His Gly Ile
            20                  25                  30
Glu Ala Ala Arg Ser Ser Pro Ala Ser Ser Asn Ala Arg Ser Ile Thr
        35                  40                  45
Glu Pro Cys Ser Pro Ser Ile Pro Asp Ile Thr Leu Ser Pro Thr Asn
    50                  55                  60
Thr Val Pro Ser Pro
65

<210> 35627
<211> 62
<212> PRT
<213> A.fumigatus

<400> 35627
Asp Ser Ser Gly Ala Val Cys Glu Asp Ser Asn Glu Arg Ala Lys Val
1               5                   10                  15
Lys Gly Asn Asp Thr Leu Val Leu Asp Ala Phe Trp Asn Ile Pro Leu
            20                  25                  30
His Asp Ser Leu Ser Gln Ser Phe Gln Asn Arg Ser Phe Ala Gly Thr
        35                  40                  45
Ser Arg Ser Asp Glu Asp Gly Ile Val Leu Arg Ser Pro Arg
    50                  55                  60

<210> 35628
<211> 136
<212> PRT
<213> A.fumigatus

<400> 35628
```

```
Leu Thr Cys Gln Asn Ser Asp Ala Pro Ser Gln Ala Asp Val Val Thr
1               5                  10                  15
Phe Lys Ala Phe Ser Gly Ala Pro Asp Ala Glu Lys Tyr Pro His Val
            20                  25                  30
Ala Arg Trp Tyr Lys His Ile Ala Ser Phe Glu Pro Glu Phe Ala Ser
        35                  40                  45
Leu Pro Gly Asp Ala Ser Lys Ala Tyr Thr Ala Tyr Gly Pro Glu Ser
    50                  55                  60
Thr Glu Leu Pro Thr Asn Pro Lys Asp Lys Pro Ala Glu Asp Asp Asp
65                  70                  75                  80
Asp Met Asp Leu Phe Gly Ser Asp Glu Glu Glu Glu Asp Pro Glu Val
                85                  90                  95
Val Ala Gln Arg Glu Ala Arg Leu Ala Glu Tyr Lys Lys Lys Lys Glu
            100                 105                 110
Gly Lys Ala Lys Pro Ala Ala Lys Ser Ile Val Thr Leu Glu Val Lys
        115                 120                 125
Pro Trp Gly Met Phe Asp Arg Ser
    130                 135

<210> 35629
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35629
Asp Ser His Leu Ser Gly Cys Leu Asp Lys Met Tyr Pro Lys His Lys
1               5                  10                  15
Leu His Leu Asp Cys Met Met Lys Thr Asn Trp Ser Val Phe Arg Arg
            20                  25                  30
Arg Leu Lys Thr Pro Pro Asp Asp Tyr Thr Thr Ile Ala Arg Asn Arg
        35                  40                  45
Val Ser Asp Tyr Glu Glu Glu Ser Ala Cys Tyr Ser
    50                  55                  60

<210> 35630
<211> 103
<212> PRT
<213> A.fumigatus

<400> 35630
Arg Glu Thr Asn Cys Ala Arg Leu Asp Asp Glu Thr Asn Leu Asp Glu
1               5                  10                  15
Leu Leu Glu Asn Val Lys Ala Ile Glu Ile Asp Gly Leu Val Trp Gly
            20                  25                  30
Ala Tyr Lys Trp Val Pro Val Gly Phe Gly Ile Lys Lys Leu Gln Ile
        35                  40                  45
Asn Leu Val Val Glu Asp Glu Lys Val Ser Leu Asp Glu Leu Gln Gln
    50                  55                  60
Arg Ile Glu Glu Asp Glu Asp His Val Gln Ser Thr Asp Ile Val Ser
65                  70                  75                  80
Phe Asn Pro Glu Phe Asp Gly Asp Thr Ile Asp Ala Asp Ile Pro Ser
                85                  90                  95
Gln Ala Ala Met Gln Lys Leu
            100

<210> 35631
```

<211> 320
<212> PRT
<213> A.fumigatus

<400> 35631
Leu Ala Ser Gly Trp Asn Asn Thr Gln Asn Arg Asp Thr Val His Phe
1 5 10 15
Thr Phe Pro Val Glu Thr Thr Ile Pro Glu Leu Ser Thr Ala Met Pro
20 25 30
Ile Ala Ser Glu Ser Ser Thr Thr Thr Thr Thr Met Thr Thr Phe Ser
35 40 45
Ala Pro Val Thr Val Pro Met Ser Met Pro Asn Asn Gln Ser Ala Leu
50 55 60
Ala Ala Ser Phe Thr Asn Phe Leu Thr Val Ser Ile His Gln Ile Leu
65 70 75 80
Phe Leu Arg Ser Val Tyr Pro Arg Ala Thr Phe Leu Pro Val Arg Ala
85 90 95
Tyr Asn Tyr Pro Val Arg Gln Ser Arg His Pro Lys Val Cys Asp Tyr
100 105 110
Ile Asn Asp Ala Ser Ile Ala Val Gly Thr Glu Ile Leu Lys Gly Thr
115 120 125
Ile Thr Ala Val Ser Ile Ile Ile Ser Ser Leu Arg Thr Asn Gln Pro
130 135 140
Leu Glu Arg Tyr Ala Phe Asp Leu Ser Gly Phe Pro Arg Val Ser Ala
145 150 155 160
Gly Asp Val Asn Thr Thr Phe Glu Asp Arg Ser Glu Asp Ser Ser Lys
165 170 175
Pro Gly Val Pro Val Pro Asp Arg Gly Ser Ala Pro Thr Thr Val Asp
180 185 190
Leu Glu Ala Gln Phe Arg Ala Cys Leu Ala Arg Leu Ala Ser Ala Cys
195 200 205
Ala Arg Leu Thr Pro Leu Pro Arg Asp Asp Glu Phe Ser Phe Thr Val
210 215 220
Cys Ile Glu Val Arg Glu Asp Ala Leu Pro Pro Ala Gly Thr Thr Lys
225 230 235 240
Glu Glu Gln Thr Trp Ile Val Ala Glu Pro Gly Lys Ile His Leu Arg
245 250 255
Ser Cys Thr Ala Pro Tyr Ser Val Ser Lys Ser Lys Asn Gly Asp Leu
260 265 270
His Gln Leu Pro Pro Lys Val Ser Asn Gly Arg Ala Lys Thr Val Pro
275 280 285
Val Arg Arg Val Glu Ala Gly Glu Leu Arg Leu Glu Leu Trp Val Glu
290 295 300
Glu Ala Arg Gln Lys Phe Asn Glu Pro Val Asp Ser Glu His Pro Pro
305 310 315 320

<210> 35632
<211> 114
<212> PRT
<213> A.fumigatus

<400> 35632
Ile Val Pro Asp Met Val Val Lys His Ile Gln Arg Lys Leu Gln Glu
1 5 10 15
Lys Ser Asp Lys His Ser Ala Glu Leu Gln Lys Leu Glu Met Ile Ala
20 25 30

```
Ser Glu Glu Gln Leu Ser Ala Asn Val Phe Leu Met Pro Gln Thr Pro
        35                  40                  45
Gln Phe Ile Ser Met Asn Thr Ile Leu Gln Asp Pro Ala Thr Glu Gln
    50                  55                  60
Val Asp Phe Val Phe Tyr Phe Asp Arg Leu Ala Cys Leu Leu Ile Glu
65                  70                  75                  80
Lys Cys Val Asp Pro Tyr Val Pro Ala Pro Glu Lys Phe Lys Phe Gly
                85                  90                  95
Thr Asp His Asn Ile Gly Leu Ile Gly Pro Trp Thr Val Leu Gly Ile
            100                 105                 110
Asn Arg
```

<210> 35633
<211> 79
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (11)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35633
```
Arg His Glu Ser Ser Leu Ser Ser Tyr Phe Xaa Ala Thr Lys Lys Arg
1               5                   10                  15
Tyr Tyr Ser Pro Pro Trp Ala Asp Leu Ser Ile Ile Gly Ile Ala Gly
            20                  25                  30
Ser Ser Gly Ser Gly Lys Thr Ser Val Ala Met Glu Ile Val Lys Ser
        35                  40                  45
Leu Asn Leu Pro Trp Val Val Ile Leu Asp Met Val Leu Arg Thr Arg
    50                  55                  60
Ser Asn Ile Ile Ser Ile Asp Ile Ser His Phe Arg Ala Ser Ser
65                  70                  75
```

<210> 35634
<211> 82
<212> PRT
<213> A.fumigatus

<400> 35634
```
Arg Lys Lys Ala Asn Ile Pro Val Tyr Ser Phe Ala Glu His Gln Arg
1               5                   10                  15
Gln Pro Gln Thr Thr Thr Leu Tyr Ser Pro His Val Leu Ile Leu Glu
            20                  25                  30
Gly Ile Leu Ala Leu His Asp Pro Arg Ile Met Glu Met Leu Asp Val
        35                  40                  45
Lys Val Ile Leu Leu Ser Pro Thr Tyr Tyr Leu Lys Ile Leu Ile Arg
    50                  55                  60
Pro Phe Ser Asp Phe Cys Arg Gly Arg Tyr Gly Cys Leu Pro Trp Thr
65                  70                  75                  80
Gln Lys
```

<210> 35635
<211> 165

<212> PRT
<213> A.fumigatus

<400> 35635
His Arg Ile Asn Arg Ala Leu Asp Cys Thr Arg Tyr Gln Pro Val Lys
1 5 10 15
Val Glu Thr Pro Gln Gly Met Asn Tyr Asn Gly Leu His Pro Glu Gly
20 25 30
Leu Val Ser Ala Val Ala Ile Leu Arg Gly Gly Ser Cys Leu Glu Thr
35 40 45
Ala Leu Lys Arg Thr Ile Pro Asp Cys Ile Thr Gly Arg Leu Leu Ile
50 55 60
Gln Thr Asn Glu Arg Asn Glu Glu Pro Glu Leu His Tyr Leu Lys Leu
65 70 75 80
Pro Pro Gly Ile Glu Glu His Ala Thr Val Met Leu Leu Asp Pro Gln
85 90 95
Met Ala Ser Gly Gly Ala Ala Leu Met Ala Val Arg Val Leu Val Asp
100 105 110
His Gly Val Ala Glu Asp Arg Ile Val Phe Val Thr Cys Ala Ala Gly
115 120 125
Lys Val Gly Leu Lys Arg Leu Ser Thr Val Tyr Pro Glu Val Arg Val
130 135 140
Ile Val Gly Arg Ile Glu Glu Glu Arg Glu Pro Arg Trp Leu Glu Lys
145 150 155 160
Arg Tyr Phe Gly Cys
165

<210> 35636
<211> 155
<212> PRT
<213> A.fumigatus

<400> 35636
Lys Met Leu Thr Leu Asp Cys Leu Leu Leu Ala Asp Pro Arg Phe Ala
1 5 10 15
Asn Ile Gln Thr Asp Pro Arg Tyr Arg Leu Pro Ser Lys Arg Gln Thr
20 25 30
His Val Lys Leu Asp Lys Arg Phe Ala His Met Leu Arg Asp Lys Asp
35 40 45
Phe Ser Arg Asn Ala Ala Val Asp Arg Tyr Gly Arg Lys Leu Ala Arg
50 55 60
Asp Asp Thr Lys Lys Gln Leu Glu Arg Phe Tyr Gln Leu Glu Gly Asp
65 70 75 80
Glu Glu Gly Asp Lys Asp Glu Asp Glu Asp Glu Glu Gly Asp Gly Met
85 90 95
Val Ala Asp Asp Asp Asp Glu Val Arg Lys Glu Leu Lys Arg Ile Asp
100 105 110
Lys Ala Tyr Asp Pro Ala Arg Asp Gly Gly Phe Ser Ser Ser Ser Ser
115 120 125
Glu Glu Glu Ser Ser Ser Asp Glu Glu Ser Glu Glu Glu Asp Asp Glu
130 135 140
Glu Glu Gln Ser Ile Glu Glu Leu Asp Phe Pro
145 150 155

<210> 35637
<211> 85

<212> PRT
<213> A.fumigatus

<400> 35637
His Tyr Arg Pro Ser Lys Cys Asn Pro Ser Pro Ala Ser Thr Leu Ser
1 5 10 15
Met Tyr Asn His Leu Ile Gln His Gly Pro Val Lys Asn Leu Thr Ser
20 25 30
Glu Ile Ser Leu Leu Gln Pro Ser Arg Leu Ser Leu Leu Phe Asp Pro
35 40 45
Pro Tyr Asn Asp Pro Asp Phe Arg Val Asn Gly Ala Lys Pro Leu Lys
50 55 60
Ser Asn Leu Ser Ser Gly Thr Gly His Lys Asp Asn Ser Val Phe Arg
65 70 75 80
Asp Ser Val Ile Asn
85

<210> 35638
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35638
Ile Asp Ser Gly Leu Pro Glu Val Ile Ser Lys Tyr Ile Thr Phe Leu
1 5 10 15
Gly Asp Leu Thr Ala Leu Thr Leu Trp Ser Leu Ser Asn Leu Thr Ala
20 25 30
Pro Ser Thr Tyr Gln Ile Ile Ala Met Arg Lys Lys Gly Phe Ile Pro
35 40 45
Leu Val Phe Leu Thr Gly Leu Asn Ile His Gln Thr Arg Ile His His
50 55 60
Asn Val Thr Trp Ser Asn Ile Leu Phe Ile Lys Ser Arg His Val Thr
65 70 75 80
Ser

<210> 35639
<211> 78
<212> PRT
<213> A.fumigatus

<400> 35639
Val Thr Cys Phe Arg Arg Gln Ser Gln Thr Thr Phe Trp Ile Trp Leu
1 5 10 15
Thr Val Cys Arg Asp Arg Arg Pro Leu Gly Ser Leu Ile Tyr Phe Thr
20 25 30
Tyr Arg Tyr Thr Cys Arg Leu Ser Pro Leu Gln Tyr Asn Thr Gly Asn
35 40 45
His Ser Pro Ser Val Ser Pro Val Phe Asp Arg Asn Lys Ser Leu Val
50 55 60
Ser Thr Phe Leu Val Leu Lys Leu Thr Thr Ser Pro Leu Arg
65 70 75

<210> 35640
<211> 77
<212> PRT

<213> A.fumigatus

<400> 35640
Cys Arg Leu Ala Ala Gly Asn Lys Ala Ile Leu Arg Pro Thr Gly Asp
1 5 10 15
His Ile Tyr Thr Asp Leu Glu Pro Arg Ala Thr Gly Asp Ile Ile Ala
20 25 30
Pro Val Val Ser Thr Thr Asp Tyr Thr Ser Pro Ala Ala Ala Val Trp
35 40 45
Ser Gly Thr Ala Cys Arg Ser Pro Gln Ser Ser His Arg Ser Ser Thr
50 55 60
Ser Ala Gly Arg Gly Arg Ala Ala Ala Ala Ser Gln Gln
65 70 75

<210> 35641
<211> 88
<212> PRT
<213> A.fumigatus

<400> 35641
Ala Asn Arg Leu Asp Gln Leu Ile Asn Arg His Leu His His Pro Val
1 5 10 15
Gly Ile Ile Glu Ser Trp Phe Val Ala Ser Ser Tyr Asp Pro Ser Phe
20 25 30
Gly Phe Ser Phe Gly Phe Leu Pro Leu Ala Ala Ser Val Glu Ser Asn
35 40 45
Glu Leu His Gln Asn Gly Ser Glu Trp Ile Ile Val Gln Ser Tyr Gln
50 55 60
His Cys Leu Ser Lys Cys Ser Pro Glu Gly Cys Leu Val Val Tyr Phe
65 70 75 80
Arg Tyr Ser Cys Thr Leu Asp Gly
85

<210> 35642
<211> 321
<212> PRT
<213> A.fumigatus

<400> 35642
Arg Pro Cys Arg Thr Leu Val Gly Tyr Pro Asp Glu Arg Tyr Asn Leu
1 5 10 15
Leu Gly Gly Phe Leu Leu Leu Thr Leu Ala Ala His Val Val Val Lys
20 25 30
Asn Thr Arg Thr Arg Gly Ser Leu Ala Asn Ser Ala Arg Ala Gln Arg
35 40 45
Gly Arg His Leu Asp Ala Leu Arg Arg Arg Arg Ala Gly Gly Lys Glu
50 55 60
Glu Asn Asp Ala Ala Leu Glu Gln Asp Ser Asp Ala Glu His Ser Asp
65 70 75 80
Glu Ala Gly Pro Asp Asp Glu Pro Asp Ser Glu Ala Glu Ser Gln Val
85 90 95
Arg Gln Gln Gln Phe Arg Leu Gln Glu Gly Ser Asp Val Glu Ser Ile
100 105 110
Val Ala Glu Asp Glu Asp Leu Asp Gln Tyr Glu Asp Asp Phe Val Leu
115 120 125
Glu Asp Asp Asn Ala Glu Leu Gly Val Pro Ser Ser Leu Glu Asp Leu

```
    130                 135                 140
Pro Phe Glu Phe Ser Arg His Ala Tyr Lys Gln Leu Lys Glu Tyr Phe
145                 150                 155                 160
Gln Asp Ala Val Glu Trp Met Val Asn Asn Lys Ile Asn Pro Ala Phe
                165                 170                 175
Pro Arg Ser Asp Pro Leu Tyr Glu Val Ala Phe Met Lys Leu Glu Asp
            180                 185                 190
Glu Val Lys Gly Arg Thr Gly Ser Gln Leu Val Ser Ser Val Trp Asn
        195                 200                 205
Val Lys Phe Arg Arg Ala Leu Leu Ala Arg Pro His Val Glu Thr Thr
    210                 215                 220
Leu Tyr Pro Ile Thr Asp Asn His Pro Cys Asp Ala Cys Tyr Arg Ser
225                 230                 235                 240
Lys His Pro Ala Ser Phe Asp Met Lys Leu Tyr Gly His Ala Tyr Ser
                245                 250                 255
Leu Val Asp Thr Pro Asn Asn Cys Pro Met Thr Ile Pro Thr Thr Thr
            260                 265                 270
Asn Lys Ser Ile Ala Pro Lys Glu Thr Glu Thr Val Thr Ala Phe Pro
        275                 280                 285
Asn Asp Asp Thr Arg Phe Leu Leu Gly Arg Phe Gly Phe Pro Ser Tyr
    290                 295                 300
Leu Ser Val Ser Pro Phe Leu Leu Val Asp Pro Leu Asn Ala His Trp
305                 310                 315                 320
Gln
```

<210> 35643
<211> 457
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (32)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 35643
His Asp Cys Ser Phe Gly Ile Leu Asn Pro Gln Leu Ser Leu Ser Tyr
1               5                   10                  15
Tyr Cys Ser Asn Pro Met Tyr Cys Gln Gln His Leu Ile Ala Leu Xaa
            20                  25                  30
Tyr Ala Phe Leu Ala Tyr Phe Val Asn Val Thr Glu Ser Leu Gly Gln
        35                  40                  45
Leu Pro Glu Lys Ser Leu Ser Ser Gln Thr Tyr Glu Pro Glu Tyr Cys
    50                  55                  60
Asn Gln Thr Leu Ile Asn Phe Ser Gly Leu Asn Tyr Ser Asp Ala Glu
65                  70                  75                  80
Val Asp Glu Leu Gly Tyr Ala Val Ser Leu Gly Arg Arg Leu Cys Trp
                85                  90                  95
Thr Asp Pro Gly Ala Ile Arg Gly Arg Asn Ile Ser Ile Tyr Ser Gln
            100                 105                 110
Ser Ser Glu Gly Gly Ile Gln Thr Val Val Asn Leu Thr Val Thr Leu
        115                 120                 125
Thr Ile Ser Val Gly Lys Glu Ala Ser Met Gln Leu Arg Lys Arg Leu
    130                 135                 140
Leu Thr Arg Pro His Asn Ser Pro Glu Ala Leu Ile Thr Leu Gly Glu
```

```
145                 150                 155                 160
Ile Ile Val Leu Asp Ser Arg Leu Glu His Ser Asn Pro Gln Trp Glu
                165                 170                 175
Arg Arg Ser Lys Ala Arg Asn Gly Gln Leu Glu Ala Ala Ser Gly Ser
            180                 185                 190
Asp Pro Glu Ser Ala Ser Gln Arg Gly Lys Val Arg Thr Glu Thr Gln
        195                 200                 205
Ile Ser Glu Asp Thr Leu Gly Phe Gly Ser Gly Ser Asp Gly Asp Ala
    210                 215                 220
His Pro His Asp Lys Asn Gly Pro Val Arg Lys Asn Ser His Ser Arg
225                 230                 235                 240
Arg Ser Val Cys Val Asp Asn Phe Cys Glu Gly Phe Asp Leu Lys Asn
                245                 250                 255
Thr Cys Ala Pro Gly Gly Lys Ile Pro Ala Lys Glu Glu Ile Cys Ala
            260                 265                 270
Leu Cys Tyr Pro Gly Arg Asn Leu Ala Val Ile Glu Arg His Cys Ser
        275                 280                 285
Lys Gln Glu Val Ser Gly Arg Gln Ala Phe Tyr Ser Val Cys Val Leu
    290                 295                 300
Leu Gly Cys Phe Val Val Val Ala Val Leu Leu Tyr Leu Leu Arg Ser
305                 310                 315                 320
Phe Tyr Arg Gly Val Gln Arg Arg Tyr Arg Ile Phe Arg Gly Leu Cys
                325                 330                 335
Ser Ala Gln Thr Ser Arg Ser Pro Ala Thr Arg Ser Gly Ser Ser Ser
            340                 345                 350
Val Phe Gln Val Asn Ser Leu Pro Ser Leu Phe Pro Gly Phe Ser Ser
        355                 360                 365
Pro Thr Lys Leu Glu Val Leu Gln Arg Glu Ser Val Thr Gly Thr Asp
    370                 375                 380
Asp Ala Ser Asp Arg Thr Leu Pro Phe Ser Thr Leu Lys Gln Lys Trp
385                 390                 395                 400
Arg Gln Leu Gly Ala Phe Arg Arg Asp Ser Arg Gly Arg Ile Gln Val
                405                 410                 415
Ile Phe Asp Ile Glu Ser Leu Asp Thr Glu His Ala Lys Gly Gly Gln
            420                 425                 430
Ser Ala His Lys Thr Pro Val Leu Pro Arg Ala Pro Asn Ala Ser Ile
        435                 440                 445
Arg Arg Tyr Cys Glu Glu Thr Arg Ser
    450                 455
```

<210> 35644
<211> 99
<212> PRT
<213> A.fumigatus

<400> 35644

```
Leu Ser Ser His Asn Met Val Thr His Leu Met Ile Thr Ser Ile Asp
1               5                   10                  15
Tyr Leu His Ala Ala Gly Ser Ile Glu Val Ile Leu Thr Asn Tyr Pro
            20                  25                  30
Ala Tyr Val Gln Phe Arg Pro Phe Thr Asn Thr Cys Ala Arg Ser Gln
        35                  40                  45
Ile Arg Pro Val Gln Pro Tyr Ala Thr Arg Gly Asp Gly Leu Leu Ser
    50                  55                  60
Gly Glu Lys Phe Asn Arg Gly Tyr Ile Gly Cys Met Leu Pro Arg Val
65                  70                  75                  80
```

```
Cys Leu Gln Ile Leu Ala Val Cys Pro Arg Ala Pro Phe Ser Leu Ala
                85                  90                  95
Val Gly Arg


<210> 35645
<211> 114
<212> PRT
<213> A.fumigatus

<400> 35645
Asn Thr Leu Lys Asp Pro Leu Ile Met Lys Lys Gln Ala Gly Ala Ser
1               5                  10                  15
His Ser Phe Ser Ala Pro Thr Val Pro Pro Ser Ser Pro Arg Thr Arg
            20                  25                  30
Val Ala Pro Ile His Ser Arg Ser Ser Leu Tyr Pro Trp Asp Arg Gln
        35                  40                  45
Ser Pro Gly Pro Gln Thr His Trp Pro Ser Ala Arg Asp Ser Ser Ala
    50                  55                  60
Ala Asp Ile Pro Pro Pro Ala Pro Tyr Thr Gly Pro Pro Cys Pro Leu
65                  70                  75                  80
Ser His Pro Val Ala Pro Pro Leu Ala Val Pro Gly Asp Gly Pro Pro
                85                  90                  95
Arg Phe Pro His Pro Val Ala Glu Thr Pro Ser Ser Arg Thr Ala Arg
            100                 105                 110
His Thr


<210> 35646
<211> 251
<212> PRT
<213> A.fumigatus

<400> 35646
Ser Lys Ser Phe Ala Asn Ser Pro Ser Asn Pro Glu Phe Gln Gln Ala
1               5                  10                  15
Arg Ala Glu Leu Glu Ala Thr Leu Thr Asp Leu Thr Ala Asp Leu Asp
            20                  25                  30
Asp Leu Val Glu Ser Val Arg Ala Ile Glu Gln Asp Pro Tyr Arg Tyr
        35                  40                  45
Gly Leu Glu Ile Asp Glu Val Ala Arg Arg Arg Lys Leu Val Asp Glu
    50                  55                  60
Val Gly Asp Glu Val Glu Lys Met Arg Glu Glu Leu Gln Arg Val Val
65                  70                  75                  80
Thr Thr Ala Asp Thr Ala Gly Gly Thr Lys Ala His Thr Gly Ser Thr
                85                  90                  95
Ser Gly Leu Pro Asn Pro Ser Asp Phe Asp Asn Val Leu Ser Pro Ser
            100                 105                 110
Asp Asp Arg Gly Asp Asp Tyr Tyr Thr Ala Leu Glu Gln Gln Arg Gln
        115                 120                 125
Met Glu Leu Met His Glu Gln Asp Glu Gln Leu Asp Gly Val Phe Arg
    130                 135                 140
Thr Val Gly Asn Leu Arg Gln Gln Ala Asp Asp Met Gly Arg Glu Leu
145                 150                 155                 160
Glu Glu Gln Ala Val Met Ile Asp Glu Val Asp Thr Leu Ala Asp Arg
                165                 170                 175
```

```
Val Gly Gly Lys Leu Ser Asn Gly Met Ser Arg Ile Lys His Ile Val
            180                 185                 190
Arg Lys Asn Glu Gly Lys Cys Thr Leu Ser Val Arg Arg Lys Gly Phe
        195                 200                 205
Arg Arg Thr Tyr Ser Lys Gln Ser Asn Ser Gln Leu Ile Ile Phe Gly
    210                 215                 220
Ser Leu Asp Thr Met Ser Ser Phe Cys Ile Ala Ala Leu Ile Phe Val
225                 230                 235                 240
Leu Val Leu Leu Leu Ile Leu Val Ile Ala Leu
                245                 250
```

<210> 35647
<211> 62
<212> PRT
<213> A.fumigatus

<400> 35647

```
Leu Ser Arg Leu Trp Asp Val Leu Tyr Cys Ser Leu Gly Tyr Tyr Gly
1               5                   10                  15
Trp Lys Met Ser Glu Ile Gly Val Asp Ile Gln Pro Arg Ala Met Leu
            20                  25                  30
Phe Glu Ile Glu Val Arg Asn Lys Ser Gly Leu Asn Glu Lys Lys Ser
        35                  40                  45
Thr Ile Asn Gly Arg Ala Thr Thr Ala Thr Lys Val Arg Leu
    50                  55                  60
```

<210> 35648
<211> 99
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35648

```
Xaa Pro Ala Gly Tyr Arg Glu Gln Leu Glu Ala Ile Glu Val Val Phe
1               5                   10                  15
Gly Gln Tyr Asn Ala Pro Tyr Phe Pro Gln Pro Glu Phe Ser Arg Pro
            20                  25                  30
Ala Ala Gly Ser Pro Lys Gly Leu Gly Pro Ala Asn Gly Lys Gly Ala
        35                  40                  45
Gly Ala Gly Met Met Gln Gly Pro Gly Gly Val Val Ser Leu Arg Val
    50                  55                  60
Thr Asp Glu Ala Arg Gln Leu Trp Glu Gly Trp Arg Asp Met Glu Glu
65                  70                  75                  80
Tyr Ala Arg Glu Val Phe Pro Val Glu Glu Glu Ala Asn Gly Leu Asp
                85                  90                  95
Trp Met Leu
```

<210> 35649
<211> 392
<212> PRT
<213> A.fumigatus

<400> 35649
Ile Leu Thr Ile Cys Ser Ile Asp Cys Phe Ile Pro Leu Tyr Pro Ser
1 5 10 15
Ser Leu Thr Val Leu Leu Tyr Ser Pro Leu Phe Ser Leu Leu Ile Ala
20 25 30
Pro His Pro Tyr Arg Ser Ser Trp Val Pro Lys Thr Val Arg Asn Arg
35 40 45
Ser Leu Ser Ala Leu Arg Cys Leu Gly Ser Pro Trp Arg Leu Arg Glu
50 55 60
Ser Leu Arg Ser Ser Ser Arg Asp Leu Ser Ala Leu Arg Pro Thr Ala
65 70 75 80
Val Ser Cys Pro Arg His Leu Ser Ala Phe Gly Val Thr Arg Pro Pro
85 90 95
His Glu His Ile Asn Leu Thr Arg Leu Val Arg Arg Ser Thr Val Glu
100 105 110
Asn Arg Pro Leu Trp Glu Lys Arg Ser Glu Ile Ile Ser Lys Val Gln
115 120 125
Asp Asp Phe Trp Ile Arg Val Leu Ser Asn Ala Pro Ala Glu Ile Asp
130 135 140
Glu Tyr Ile Gln His Ser Asp Ala Ala Val Leu Gly Ser Ala Leu Lys
145 150 155 160
Asp Leu Thr Val Glu Arg Phe Glu Val Asp Glu Lys Gly Asn Gly Glu
165 170 175
Pro Arg Ser Leu Arg Phe Thr Phe Val Phe Arg Thr Gly Glu Glu Asn
180 185 190
Pro Phe Phe Glu Asn Glu Lys Leu Val Lys Glu Phe Tyr Trp Arg Lys
195 200 205
Lys Ile Thr Lys Thr Pro Lys Gly Lys Arg Arg Thr Trp Glu Gly Leu
210 215 220
Val Ser Glu Pro Val Arg Ile Asn Trp Lys Lys Asp Met Asp Leu Thr
225 230 235 240
Lys Gly Leu Leu Asp Ala Ala Cys Asp Leu Ala Glu Ala Glu Lys Lys
245 250 255
Gly Gly Asp Arg Lys Lys Leu Pro Glu Phe Glu Lys Leu Ala Lys Lys
260 265 270
Met Glu Glu Leu Glu Ala Ala Ala Met Glu Asp Asn Asp Glu Asp Glu
275 280 285
Glu Asp Leu Pro Thr Pro Ala Gly Thr Ser Phe Phe Gly Phe Phe Gly
290 295 300
Tyr Arg Gly Asn Val Val Ser Ala Glu Glu Ser Lys Glu Ala Gln Lys
305 310 315 320
Glu Asp Asp Glu Arg Phe Glu Arg Ala Leu Lys Gly Glu Lys Phe Asp
325 330 335
Asp Glu Glu Asp Asp Asp Asp Glu Asp Asp Asp Asp Glu Asp Ser Phe
340 345 350
Asp Glu Ile Glu Ile Phe Pro Asp Gly Glu Asp Leu Ala Ile Ala Leu
355 360 365
Ala Glu Asp Leu Trp Pro Asn Ala His Lys Tyr Tyr Gly Lys Thr Pro
370 375 380
Cys Tyr Arg Ala Asp Ala Thr Val
385 390

<210> 35650
<211> 481
<212> PRT

<213> A.fumigatus

<400> 35650

```
Lys Val Thr Ile Arg Ser Ile Arg Leu His Tyr Ser Glu Met Leu Arg
1               5                  10                  15
Arg Phe Lys Ala Phe Val Leu Ser Thr Leu Arg Phe Leu Trp Cys Pro
            20                  25                  30
Glu Ser Pro Ser His Pro Gln Met Ala Ala Leu Arg Asp Val Ile Ala
        35                  40                  45
Arg Gly Glu Phe Pro Thr Leu Ser Asn Thr Glu Ala Ile His Leu Phe
    50                  55                  60
Ala Ser Ser Phe Pro Thr Glu Leu Ser His Leu Arg Asn Ala Ser Ala
65                  70                  75                  80
Thr Val Glu Ser Gly Ser Ser Thr Pro Pro Gly Cys Leu Glu Gly Lys
                85                  90                  95
Thr Pro Ser Ala Val Ile Tyr Gly Ala Asp Phe Ala Glu Val Asn Arg
            100                 105                 110
Thr Leu Val Ser Met Leu Ala Leu Lys Trp Thr Leu Ala Asp Asp Tyr
        115                 120                 125
Glu Ser Phe Thr Arg Gly Gln Ser Glu Gly Lys Leu Thr Leu Glu Thr
    130                 135                 140
Phe Lys Arg Met Arg Glu Val Ile Ile Arg Asn Leu His Asp Pro Gly
145                 150                 155                 160
Asp Ile Tyr Ala Leu Leu Val Ala Ile Leu Ile Asp Asp Ile Gly Lys
                165                 170                 175
Asp Ser Ala Leu Ala Thr Thr Ala Glu Ala Glu Ala Glu Ala Asn His
            180                 185                 190
Ser Glu Leu Val Tyr His Ala Ala Gln Gly Asp Arg Ile Pro Ala Leu
        195                 200                 205
Ala Gly Val Pro Asn Arg Gly Arg Glu Ala Ile Met Arg Ser Leu Gln
    210                 215                 220
Ile Gly Ser Lys Leu Asn Leu Ser Gln Leu Val Gln Gly Glu Cys Ala
225                 230                 235                 240
Pro Ala Ser Leu Ser Val Leu Arg Ser Ile Asp Lys Gly Gly Cys Gly
                245                 250                 255
Phe Glu Met Arg Ala Ile Val Thr Leu Leu Asp Val Ala Gly Ala Gly
            260                 265                 270
Ala His Arg Asp Ala Arg Gly Cys Ala Leu Met Thr Glu Ser Val Cys
        275                 280                 285
Arg Ala Tyr Leu Arg Thr Ile Glu Val Val Gly Glu Phe Ile Arg Gly
    290                 295                 300
Asn Ile Pro Thr Glu Arg Ala Cys Tyr Asp Arg Ile Leu Thr Asp Arg
305                 310                 315                 320
Ala Glu Leu Leu His Lys Lys Gly Phe Ala Leu Leu Ser Val Glu Asn
                325                 330                 335
Ala Glu Glu Arg Thr Leu Leu Arg Leu Leu Cys Met Gly Arg Gly Asp
            340                 345                 350
Ser Leu Glu Ser Ala Glu Met Phe Gln Ala Ala Phe Gln Ile Leu Pro
        355                 360                 365
Glu Pro Thr Arg Arg Arg Leu Val Asp Gly Leu Ser Val Ala Gly Ile
    370                 375                 380
Gly Asp Gly Val Ala Ile Val Pro Tyr Tyr Ala Pro Gly Leu Leu Ala
385                 390                 395                 400
Glu Val Leu Arg Ser Val Tyr His Lys Glu Arg Ser Ser Ile Val Ala
                405                 410                 415
Ala Leu Ser Ala Phe Leu Arg Phe Leu Ala Arg Val Phe Asp Gly Pro
```

```
            420                 425                 430
Arg Pro Asn Thr Asp Gly Ile Gln Glu Arg Asp Leu Ser Phe Val Gln
        435                 440                 445
Asp Val Ile Lys Ser Asp Arg Phe Gly Asp Asp Pro Ser Ile Leu Asp
    450                 455                 460
Thr Val Arg Leu Pro Trp Ile Asp Leu Ser Asp Thr Ile Asp Pro Arg
465                 470                 475                 480
Leu
```

<210> 35651
<211> 69
<212> PRT
<213> A.fumigatus

<400> 35651

```
Thr Glu Arg Phe Asp Arg Thr Glu Tyr Ala Phe Tyr Tyr Ala Ile Thr
1               5                   10                  15
Tyr Gln Arg Asn Met Ala Met Asp Met Val Met Arg Pro Ala Gly Lys
            20                  25                  30
Ser Val His Leu Ser Val Glu Val Arg Thr Thr Glu Tyr Asn Ser Ser
        35                  40                  45
Pro Pro Leu Ser Gly Pro Leu Ser Pro Leu Phe Ala Asn Tyr His Tyr
    50                  55                  60
Arg Ile Gly His Ser
65
```

<210> 35652
<211> 139
<212> PRT
<213> A.fumigatus

<400> 35652

```
Val Phe Leu Leu Val Leu Ser Ser Leu Val Ser Val Leu Ile Ala Phe
1               5                   10                  15
Asp Ala Ala Asp Gln Glu Leu Gln Arg Thr Leu Gln Ser Leu Ala Cys
            20                  25                  30
Ala Lys Tyr Arg Val Leu Thr Lys Lys Pro Lys Gly Arg Asp Val Asn
        35                  40                  45
Pro Thr Asp Glu Phe Ser Phe Asn Ala Ser Phe Thr Asp Pro Lys Phe
    50                  55                  60
Arg Ile Lys Ile Asn Gln Ile Gln Leu Lys Glu Thr Lys Glu Glu Asn
65                  70                  75                  80
Lys Lys Thr His Glu Arg Val Ala Ala Asp Arg His Leu Glu Thr Gln
                85                  90                  95
Ala Ala Ile Val Arg Ile Met Lys Ser Arg Lys Gln Ile Ser His Ala
            100                 105                 110
Glu Leu Val Ala Glu Val Ile Lys Ala Thr Arg Ser Arg Gly Val Leu
        115                 120                 125
Asp Val Ala Glu Ile Lys Asn Asn Ile Glu Lys
    130                 135
```

<210> 35653
<211> 290
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1),(5),(7),(9),(10)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35653
Xaa Pro Ser Val Xaa Ser Xaa Lys Xaa Xaa Val Leu Ala Gln Ser Lys
1 5 10 15
Arg Phe Phe Val Ser Trp Ala Gln Arg Glu Ser Ser Gly Tyr Leu Ala
20 25 30
Thr Phe Val Glu Asn Gly His Asn Leu Ile Ala Arg Glu Val Lys Arg
35 40 45
Cys Glu Leu Phe Ser Leu Asn Arg Ser Thr Lys Gln Lys Leu Ser Glu
50 55 60
Leu Leu Asp Arg Val Leu Val Ala Asp Gln Glu Ser Val Leu Leu Asn
65 70 75 80
Glu Lys Asp Val Leu Gly Leu Leu Arg Thr Gly Asn Lys Thr Ala Leu
85 90 95
Glu Lys Leu Tyr Thr Leu Leu Glu Arg Arg Gln Leu Gly Thr Lys Leu
100 105 110
Lys Pro Ala Phe Lys Asn Tyr Ile Val Glu Glu Gly Ser Gln Ile Val
115 120 125
Phe Asp Glu Glu Lys Glu Ala Glu Met Val Val Ser Leu Leu Glu Phe
130 135 140
Lys Ala Gln Leu Asp Asp Thr Trp Val Asn Ser Phe His Arg Asn Glu
145 150 155 160
Glu Leu Gly His Ala Leu Arg Glu Ala Phe Ala Thr Phe Met Asn Lys
165 170 175
Ser Arg Lys Ser Glu Ser Thr Gly Gly Thr Asp Asn Val Lys Thr Gly
180 185 190
Glu Met Ile Ala Lys Tyr Val Asp Arg Leu Leu Lys Gly Gly Trp Lys
195 200 205
Leu Ala Pro Gly Arg Asn Met Ala Asp Val Pro Leu Ala Asp Glu Asp
210 215 220
Ala Glu Ile Asn Arg Gln Leu Asp Gln Val Leu Asp Leu Phe Arg Phe
225 230 235 240
Val Asn Gly Lys Ala Val Phe Glu Ala Phe Tyr Lys Asn Asp Leu Ala
245 250 255
Arg Arg Leu Leu Met Gly Arg Ser Ala Ser Asp Asp Ala Glu Lys Ser
260 265 270
Met Leu Ala Arg Leu Lys Thr Gly Trp Phe Arg Tyr Ala Pro Ser Phe
275 280 285
Phe Ser
290

<210> 35654
<211> 156
<212> PRT
<213> A.fumigatus

<400> 35654
Ala Glu Cys Gly Ser Thr Phe Thr His Asn Leu Glu Ser Met Phe Lys
1 5 10 15
Asp Met Asp Val Ala Arg Asp Glu Met Ala Ala Tyr Ala Ser Ile Gln
20 25 30

```
Arg Glu Arg Arg Lys Pro Leu Pro Ile Asp Leu Asn Val Ser Val Leu
        35                  40                  45
Ser Ala Ser Ala Trp Pro Ser Tyr Pro Asp Val Gln Val Arg Ile Pro
    50                  55                  60
Pro Val Val Ala Glu Ala Ile Asp Asp Phe Glu Lys Phe Tyr Tyr Asn
65                  70                  75                  80
Lys Tyr Asn Gly Arg Lys Leu Ser Trp Lys His Gln Leu Ala His Cys
                85                  90                  95
Gln Leu Arg Ala Asn Phe Ser His Gly Gln Lys Glu Leu Val Val Ser
            100                 105                 110
Ser Phe Gln Ala Ile Val Leu Leu Leu Phe Asn Asp Val Pro Glu Gly
        115                 120                 125
Gly Ser Leu Ser Tyr Ala Gln Leu Gln Glu Gly Thr Lys Leu Cys Glu
    130                 135                 140
Cys Phe Tyr Ser Ser Tyr His Pro Trp Tyr Pro Tyr
145                 150                 155

<210> 35655
<211> 79
<212> PRT
<213> A.fumigatus

<400> 35655
Gly Thr Pro Leu Asp Asp Asn Tyr Thr Gly Ala Ile Leu Gln Thr Leu
1               5                   10                  15
His Cys Arg Met Val Val Asp Thr Trp Met Ser Gly Ile Thr Gly Thr
            20                  25                  30
Gly Gln Ile Ala Asn Cys Gly Ser Ala Leu Tyr Ile Ala Ala His Gly
        35                  40                  45
Ala Glu Tyr Gly Val Pro Lys Lys Gly Ala Asp Val Thr Gly Val Pro
    50                  55                  60
Tyr Glu Asp Asn Arg Trp Ala Val Ala Glu Ser Ala Ser Thr Asn
65                  70                  75

<210> 35656
<211> 191
<212> PRT
<213> A.fumigatus

<400> 35656
Gly Arg Ser Gly His Gln Ile Arg Thr Val Trp Asn Thr Cys Leu Lys
1               5                   10                  15
Cys Asp Lys Tyr Thr Tyr Ser Cys Gly Arg Phe Glu Arg Ala Val Asp
            20                  25                  30
Pro Gly Leu Val Lys Val Asn Pro Leu Ser Glu His Leu Thr Thr Val
        35                  40                  45
Asp Val Lys Ile Gln Ile Val Glu Val Pro Arg Gln Val Cys Met Thr
    50                  55                  60
Lys Asp Asn Val Thr Leu Asn Leu Thr Ser Val Ile Tyr Tyr Gln Ile
65                  70                  75                  80
Ile Ser Pro His Lys Ala Ala Phe Gly Ile Ser Asn Ile Arg Gln Ala
                85                  90                  95
Leu Ile Glu Arg Thr Gln Thr Thr Leu Arg His Val Ile Gly Ala Arg
            100                 105                 110
Val Leu Gln Asp Val Ile Glu Arg Arg Glu Glu Ile Ala Gln Ser Thr
        115                 120                 125
```

```
Ser Glu Ile Ile Glu Glu Val Ala Ala Gly Trp Gly Val Leu Val Glu
    130                 135                 140
Ser Met Leu Ile Lys Asp Ile Ile Phe Ser Asn Asp Leu Gln Asp Ser
145                 150                 155                 160
Leu Ser Met Ala Ala Gln Ser Lys Arg Ile Gly Glu Ser Lys Val Ile
                165                 170                 175
Ala Ala Arg Ala Glu Val Glu Ser Ala Lys Leu Met Arg Gln Val
            180                 185                 190

<210> 35657
<211> 232
<212> PRT
<213> A.fumigatus

<400> 35657
Gln Cys Gln Pro Pro Lys Phe Pro Gln Arg Leu Ala Ser Thr Thr Ile
1               5                   10                  15
His Leu Gln Met Ser Asn Asn Ile Leu Ile Val Gly Ala Ser Arg Gly
            20                  25                  30
Leu Gly Ala Ser Leu Arg His Leu Tyr Ala Ser Gln Ala Ser Thr Thr
        35                  40                  45
Cys Val Phe Ala Thr Cys Arg Ser Ser Ala Pro Pro Gln Asp Ser Ala
    50                  55                  60
Glu Ser Arg Val Ser Trp Ile Pro Asn Ile Asp Val Ser Gln Pro Asn
65                  70                  75                  80
Val Gly Glu Thr Leu Val Ser Gln Leu Pro Ser Ser Thr Lys Leu Ser
                85                  90                  95
Arg Val Ile Ile Thr Ala Gly Tyr Phe Gly Phe Glu Thr Phe Asp Asp
            100                 105                 110
Pro Asp Trp Glu Lys Glu Val Arg Met Tyr Thr Thr Ser Ala Ile Gly
        115                 120                 125
Pro Val Phe Val Val His Thr Leu Val Lys Ala Gly Leu Leu Asp Lys
    130                 135                 140
Gly Ser Lys Val Ile Leu Val Ser Ser Glu Ser Gly Ser Ile Thr Leu
145                 150                 155                 160
Arg His Glu Lys Glu Gly Gly Gly Asn Tyr Gly His His Ala Ser Lys
                165                 170                 175
Ala Ala Leu Asn Met Val Gly Lys Leu Leu Ser Ile Asp Leu Lys Glu
            180                 185                 190
Asn Gly Ile Ala Val Gly Leu Val His Pro Gly Phe Met Arg Thr Glu
        195                 200                 205
Met Thr Lys Ser Val Gly Tyr Asp Lys Tyr Trp Asp Ala Gly Gly Gly
    210                 215                 220
Lys Arg Pro Leu Thr Cys Leu Ser
225                 230

<210> 35658
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35658
Ala Ala Asp Ile Leu Ser Ser Ala Pro Ala Met Gln Ile Arg Tyr Leu
1               5                   10                  15
Glu Ala Met Gln Ala Met Ala Lys Thr Ala Asn Ser Lys Val Ile Phe
            20                  25                  30
```

```
Leu Pro Ala Val Asn Gln Thr Val Gln Gln Gln Leu Ala Ala Ala Asp
        35                  40                  45
Asn Ala Gly Glu Gly Pro Ser Lys Tyr Gly Ala Gly Gln Pro Val Gln
    50                  55                  60
Ala Asp Asp Gly Phe Gln Arg Ala Ile Asn Ala Arg Val Val Glu Asp
65                  70                  75                  80
Ile
```

<210> 35659
<211> 409
<212> PRT
<213> A.fumigatus

<400> 35659

```
Trp Gly Pro Arg Arg Thr Asn Lys Ser Lys Arg Met Ser Leu Tyr Ala
1               5                   10                  15
Arg Ala Trp Cys Gln Pro Cys Ala Cys Leu Ile Thr Phe His Thr Cys
            20                  25                  30
Arg Arg Lys Arg Pro Gly Phe Leu Arg Pro Ser Leu Ala Arg Thr Lys
        35                  40                  45
Ala Gln Ser Phe Gln Leu Gly Met Ala Lys Pro Ala Pro Glu Ser Gln
    50                  55                  60
Ala Pro Pro Phe Lys Phe Gln Thr Arg Gly Thr Lys Thr Ser Leu Ser
65                  70                  75                  80
Ala Ser Thr Ser Leu Glu Asp Met Phe Gly Glu Ser Pro Gln Arg Glu
                85                  90                  95
Arg Pro Ile Ala Arg Asn Asn Ser Ser Thr Leu Leu Asn Asn Pro Arg
            100                 105                 110
Leu Arg Pro Pro Leu Gly Ser Gly Ser Asn Gly Ser His Ala Arg Gly
        115                 120                 125
Asn Gly Ser Pro Ser Ala Ala Ser Ile Arg Lys Ser Ser His Pro Leu
    130                 135                 140
Met Arg Pro Arg Lys Gln Cys Arg Arg Ser Leu Ser Met Phe Glu His
145                 150                 155                 160
Pro Glu Glu Val Ile Ala Glu Lys Glu Ala Asn Tyr Thr Thr Asn Ala
                165                 170                 175
Pro Leu Gln Ser Ile Thr Asp Val Asp Thr Thr Pro Ser Leu Gln Leu
            180                 185                 190
Pro His Phe Ile Pro Glu Asp Ser Ala Asp Thr Leu Pro Arg Ile Asp
        195                 200                 205
Lys Thr Ile Leu Val Asp Leu Met Asp Gly Lys Tyr Asn Asp Arg Phe
    210                 215                 220
Asp His Ile Met Val Val Asp Cys Arg Phe Glu Tyr Glu Tyr Glu Gly
225                 230                 235                 240
Gly His Ile Asn Gly Ala Val Asn Tyr Asn Asp Lys Glu Tyr Leu Ala
                245                 250                 255
Ala Gln Leu Phe Ala Asp Pro Lys Pro Arg Thr Ala Leu Val Leu His
            260                 265                 270
Cys Glu Tyr Ser Ala His Arg Ala Pro Ile Met Ala Lys Tyr Ile Arg
        275                 280                 285
His Arg Asp Arg Ala Phe Asn Val Asp His Tyr Pro His Leu Thr Tyr
    290                 295                 300
Pro Asp Met Tyr Ile Leu Asp Gly Gly Tyr Ser Ala Phe Phe Ala Glu
305                 310                 315                 320
His Arg Ser Leu Cys Phe Pro Gln Asn Tyr Val Glu Met Asn Ala Lys
```

```
                325                 330                 335
Glu His Glu Phe Ala Cys Glu Arg Gly Leu Gly Lys Val Lys Gln Arg
            340                 345                 350
Ser Lys Leu Asn Arg Ala Gln Thr Phe Ala Phe Gly Gln His Ser Pro
        355                 360                 365
Gln Met Glu Asp Ser Pro Thr Gly Arg Cys Arg Asn Asn Pro Gly Glu
    370                 375                 380
Arg Thr Arg Phe Leu Asp Ser Pro Phe Glu Gly Thr Pro Ser Ser Arg
385                 390                 395                 400
Gly Pro Gly Arg Arg Met Leu Ser Tyr
                405
```

<210> 35660
<211> 71
<212> PRT
<213> A.fumigatus

<400> 35660

```
Arg Pro Pro Leu Pro Ser Ser Ser Pro Ala Pro Ile Met Asp Thr Met
1               5                   10                  15
Glu Met Ser Pro Leu Pro His Lys Pro Pro Phe Ile Ala Ala Lys Glu
            20                  25                  30
Ile Glu Leu Asn Pro Pro Thr Pro Gly Gly Ser Pro Ile Asp Ser Pro
        35                  40                  45
Met Met Ser Ala Ala Pro Ser Pro Leu Gln Glu Ser Pro Leu Met Gly
    50                  55                  60
Pro Lys Glu Asp Lys Gln Glu
65                  70
```

<210> 35661
<211> 462
<212> PRT
<213> A.fumigatus

<400> 35661

```
Tyr Leu Lys Leu Ala Asn Gln Leu Pro Asn Gly Thr Asn Thr His Thr
1               5                   10                  15
Lys Ile Val Ala Glu Lys Ile Leu Cys Arg His Pro Glu Tyr Glu Pro
            20                  25                  30
Phe His Asn Gln Ser Leu Asn Pro Leu Asp Val Ile Lys Ala Leu Ala
        35                  40                  45
Asp Ser Gly Asn Val Gly Ser Glu Ala Leu Thr Ala Ile Lys Glu Gly
    50                  55                  60
Leu Glu Cys Cys Arg Ser Ile Asn Arg Pro Asp Asn Asp Lys Gln Leu
65                  70                  75                  80
Ser Glu Ala Asn Ser Cys Tyr Val Ala Thr Lys Ala Gly Val Ser Gly
                85                  90                  95
Asn Leu Glu Lys Asp Phe Thr Thr Lys Gly Thr Gln Gly Ser Leu Arg
            100                 105                 110
Cys Pro Phe Ser Lys Pro Asn Asn Lys Pro Ser Glu Asn Glu Gly Phe
        115                 120                 125
Asn Gly Ile Glu Asp Ala Phe Val Thr Gln Asn Asp Asp Thr Cys Gly
    130                 135                 140
His Glu Asp Leu Asp Pro Ile Lys Ala Glu Lys Asn Asp Arg Arg Ser
145                 150                 155                 160
Ser Leu Thr Thr Ser Ala Lys Ser Ser Ser Thr Arg Cys Pro Val Ser
```

```
                165                 170                 175
Arg Cys Pro Ile Arg Phe Met Asp Lys His Ser Pro Glu Glu Ile Ala
            180                 185                 190
Asp Tyr Val Glu Arg His Lys His Glu Ile Pro Arg Ser His Ala Ile
        195                 200                 205
Cys Val Gln Arg Tyr Gln Lys Asp Ser Gln Thr Met Arg Gln Leu Asp
    210                 215                 220
Ala Lys Tyr Gly Asn Leu Ile Ser Met Ile Gln Gly Leu Ser Val Lys
225                 230                 235                 240
His Gln Ala Phe Leu Pro Gly His Ser Gln Asp Gly Ala Pro Ala Ser
                245                 250                 255
Ser Ser Ser Ala Glu Arg Val Glu Lys Trp Ala Glu Asp Val Gly Met
            260                 265                 270
Glu Ala Pro Glu Gln Glu Thr Pro Asn Ser Ala Asn Arg Gln Glu Ala
        275                 280                 285
Gln Gly Ala Asp Asp Asp Asp Glu Arg Lys Gly Arg Phe Asp Arg Pro
    290                 295                 300
Leu Arg Glu Val Arg Val Gly Glu Ser Pro Ser Arg Pro Trp Gly Ile
305                 310                 315                 320
Pro Val Pro Val Ser Gln Pro Ser Phe Thr Pro Thr Met Pro Ser Pro
                325                 330                 335
Pro Thr Pro Leu Ser Asp Ser Thr Lys Gln Pro Leu Lys Glu Pro Ser
            340                 345                 350
Asp Ile Pro Ala Thr Ala Glu Pro Ala Lys Val Pro Ser Gly Thr Arg
        355                 360                 365
Thr Gly Gln Cys Pro Phe Gly His Asp Ala Pro Lys Ala Asn Asp Pro
    370                 375                 380
Arg Arg Asp Leu Glu Ile Glu Pro Ile Arg Gln Glu Thr Ser Lys Ser
385                 390                 395                 400
Glu Thr Ala Asp Thr Pro Arg Pro Pro His Gly Asp Gly Ala Asp Gly
                405                 410                 415
Tyr Phe His Ala Gly Gln Ile Asn Pro Thr Ser Ser Ala Lys Val Val
            420                 425                 430
Phe Asn Gly Pro Val Phe Phe Gly Phe Ser Pro Glu Gln Thr Ala Ser
        435                 440                 445
Phe Leu His Glu Leu Gly Asn Thr Val Pro Ser Lys Pro Ser
    450                 455                 460
```

<210> 35662
<211> 85
<212> PRT
<213> A.fumigatus

<400> 35662

```
Ser Gln Ala Ile Arg Ala Asn Gly Gln Leu Phe Ile Ser Gly Gln Ile
1               5                   10                  15
Pro Ala Asp Ala Ser Gly Asn Leu Val Glu Gly Asn Ile Gly Glu Lys
            20                  25                  30
Thr Gln Ala Cys Cys Asn Asn Ile Lys Ala Ile Leu Asp Ala Ala Gly
        35                  40                  45
Ser Ser Val Asp Lys Ile Val Lys Val Asn Val Arg Tyr Ser Ser Val
    50                  55                  60
Pro Thr Val Leu Lys Arg Val Gly Leu Val Leu Thr Leu Ser Pro Phe
65                  70                  75                  80
Thr Gly Leu Pro His
                85
```

<210> 35663
<211> 230
<212> PRT
<213> A.fumigatus

<400> 35663
Ser Arg Ile Arg Pro Pro Arg Gly Glu Glu Ser Trp Arg Ala Trp Trp
1 5 10 15
Lys Glu Val Leu Ala Thr Ile Glu Gly Leu Leu Val Pro Pro Leu Ser
20 25 30
Asp Lys Pro Ser His Gln Lys Pro Leu Thr Met Gln Glu Val Asp Ile
35 40 45
Val Ser Arg Trp Leu Val Leu Leu Leu Asn Phe Phe His Ala Val Asp
50 55 60
Glu Glu Thr Gly Glu Ala His Gly Val Ser Leu Asp Ile Leu Lys Ser
65 70 75 80
Pro Lys Tyr His Glu Ile Gln Thr Leu Asn Phe Phe Tyr Phe Glu Pro
85 90 95
Thr Glu Ser Leu Ile Arg Thr Ser Glu Arg Met Ala Ser Ala Thr Ile
100 105 110
Ser Arg Gln Gln Val Ser Lys Asn Arg Val Ser Ala Pro Pro His Ile
115 120 125
Gly Ser Gly Gly Thr Gly Ser Ile Leu Gly Val Pro Asn Thr Arg Arg
130 135 140
Val Lys Ser Ile Met Leu Ser Arg Asn Leu Gly Thr Met Lys Lys Met
145 150 155 160
Lys Glu Glu Arg Arg Arg Glu Ala Gln Ala Glu Pro Asn Asp Asp Met
165 170 175
Ile Leu Arg Ile Leu Arg Met Arg Pro Glu Ala Ala Gly Tyr Leu Arg
180 185 190
Asp Arg Ser Arg Gln Lys Glu Arg Leu Ala Ala Ala Ala Ala Ala Asp
195 200 205
Ala Ile Val Lys Gln Ser Leu Met Ala Gly Met Gly Gly Arg Met Ala
210 215 220
Gly Thr Leu Gly Arg Arg
225 230

<210> 35664
<211> 75
<212> PRT
<213> A.fumigatus

<400> 35664
Ser Cys Leu Leu Leu Ser Asn Phe Phe Leu Arg Leu Ser Phe Cys Leu
1 5 10 15
Gln Phe Cys Ile Leu Ala Ser Phe Asp His Met Asn Phe Met Ile Leu
20 25 30
Asn Phe Val Cys Leu Ala Ser Phe Arg Cys Asn Tyr Val Tyr Phe Ala
35 40 45
Gly Leu Met Val Leu Asn Met Lys Pro Arg Gln Gln Thr Tyr Asn Glu
50 55 60
Asp Leu Ile Ala Asn Glu Asn Glu Ile His Arg
65 70 75

<210> 35665

<211> 66
<212> PRT
<213> A.fumigatus

<400> 35665
Asn Val Ile Val Phe Asp Phe Leu Trp Phe Pro Gly Lys Met Asn Pro
1 5 10 15
Ser Tyr Ser Lys Val Gly Val Glu Phe Met Arg Phe Ala Tyr Thr His
20 25 30
Gly Leu Ile Asp Pro Leu Pro Trp Tyr Leu Asp Ile Ser Leu Ala Ala
35 40 45
Ser Ser Ile Leu Pro Leu Gly Leu Pro Glu Gly His Met Trp Leu Gln
50 55 60
Pro Arg
65

<210> 35666
<211> 257
<212> PRT
<213> A.fumigatus

<400> 35666
Gln Ser Ala Arg Asn Ser Asp Gly Leu Leu Tyr Tyr Leu Asn Leu Asn
1 5 10 15
Thr Ser Phe Asp Thr Ala Ile Ser Asn Leu Thr Ala Leu Phe Gly Asn
20 25 30
Ile Ser Lys Ala Gly Gly Ile Ala Asn Asn Ile Ala Pro Thr Tyr Arg
35 40 45
Asp Gly Ala Met Phe Thr Asn Asp Asn Glu Leu Tyr Leu Tyr Gly Tyr
50 55 60
Phe Asp Ser Leu Phe Thr Asn Ser Arg Leu Thr Ile Cys Ser Gly Leu
65 70 75 80
Leu Arg Leu Thr Asp Ser Gln Asp Pro Pro Ala Gly Asn Thr Val Leu
85 90 95
Gly Tyr Glu Arg Tyr Gln Tyr Gly Pro Asp Arg Glu Ser Trp Gln Pro
100 105 110
Gly Phe Ile Ile Asp Asn Leu Asp Thr Gly Val Thr Arg Tyr Val Thr
115 120 125
Asn Gly Ala Gly Val Ser Ala Pro Asn Glu Asn Leu Gly Phe Tyr Phe
130 135 140
Ser Gly Met Arg Gly Lys Asp Trp Gly Pro Ile Tyr Ala Asp Asp Lys
145 150 155 160
Ser Ala Asn Val Thr Ser Asp Cys Met Ile Lys Val Asp Met Ser Ser
165 170 175
Met Arg Asp Asn Lys Trp Ser Asn Leu Ser Leu Pro Ala His Val Pro
180 185 190
Ala Arg Ala Asn Gly Glu Leu Val Trp Val Pro Val Ala Glu Ser Gly
195 200 205
Val Leu Val Ala Ile Gly Gly Val Ile Asn Pro Ala Thr Ile Phe Ser
210 215 220
Ser Asp Gly Leu Thr Ser Ala Gln Gln Asn Ala Ser Lys Arg Val Ser
225 230 235 240
Pro Gly Leu Met Glu Thr Val Ser Val Tyr Asp Val Ser Gly Asp Lys
245 250 255
Trp

<210> 35667
<211> 130
<212> PRT
<213> A.fumigatus

<400> 35667
Arg His Cys Arg Thr Thr Leu Asn Asp Ile Ile Ser His Ser Ser Asp
1 5 10 15
Gln Pro Tyr Thr Phe Glu Ala Phe Val Asp Phe Leu Ala Arg Asn His
20 25 30
Cys Leu Glu Thr Leu Glu Phe Ile Ser Glu Val Lys His Tyr Arg Glu
35 40 45
Ser Tyr Asn Leu Ser Leu Ala Arg Phe Ser Val Ser Gly Lys Asp Pro
50 55 60
Lys Glu Arg Glu Asp Ser Tyr Leu Phe Arg Glu Trp Gln His Ile Lys
65 70 75 80
Asp Ala Tyr Ile Ala Pro Asn Ala Pro Arg Glu Ile Asn Ile Pro Gly
85 90 95
Trp Met Arg Asp Ala Leu Met Glu Ile Ala Pro Glu Val Ser Tyr Pro
100 105 110
Pro Pro Ile Leu Val Phe Thr Thr Gly Leu Glu Gly Ala Gly Arg Ser
115 120 125
Lys Gly
130

<210> 35668
<211> 180
<212> PRT
<213> A.fumigatus

<400> 35668
Ala Gln Gly Leu Trp Arg Gln Cys Leu Phe Thr Met Ser Ala Val Ile
1 5 10 15
Asn Gly Glu Phe Leu Asp Gln Gln Asn Ser Arg Leu Leu Ile Glu Asn
20 25 30
Arg Tyr Leu Gln Asn Thr Thr Gly Asp Ile Pro Pro Gln Leu Thr Gln
35 40 45
Phe Cys Ser Ile His Ala Ser Ala Gln Asp Gly Ser Ser His Asn Ile
50 55 60
Tyr Ile Tyr Gly Gly Tyr Asp Gly Leu Ser Met Glu Asn Thr Pro Ser
65 70 75 80
Asp Asp Val Tyr Val Leu Ser Leu Pro Ser Phe Ser Trp Ile Lys Leu
85 90 95
Tyr Ser Gly Asn Thr Thr His Gly Arg Ser Gly His Arg Cys Val Lys
100 105 110
Pro Tyr Pro Asp Gln Met Leu Val Leu Gly Gly Val His Leu Asp Pro
115 120 125
Thr His Cys Leu Asp Gly Gly Val Ile Gln Val Phe Asn Leu Asn Thr
130 135 140
Gly Arg Phe Gln Asn Thr Tyr Asn Pro Asn Val Trp Asn Glu Tyr Lys
145 150 155 160
Val Pro Asp Leu Ile Thr Thr Val Ile Gly Gly Glu Tyr Val Ser Lys
165 170 175
Phe Ala Lys Gln
180

<210> 35669
<211> 84
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (70),(79),(80),(82)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35669
Gln Thr Thr Pro Asn Asn Ser Glu Gln Arg Lys Val Ile Arg Ser Thr
1 5 10 15
Gln Leu Ser Thr Lys Phe Ala His Asp Phe Gly Pro Lys Asn Ile Ala
20 25 30
Pro Lys Met Ser Glu Val Val Pro Ile Glu Gly Phe Val Ala Gln Ala
35 40 45
Leu Asn Arg Leu Ala Tyr Lys His Arg Leu Leu His Arg Val Phe Thr
50 55 60
Thr Gly Leu Glu Gly Xaa Thr Ala Gly Ala Ile Gly Asn Gln Xaa Xaa
65 70 75 80
Asn Xaa Gly Pro

<210> 35670
<211> 96
<212> PRT
<213> A.fumigatus

<400> 35670
Val Cys Gln Gln Phe Leu Cys Arg Asn Ser Ala Asn Glu Ala Ile Pro
1 5 10 15
Ala Thr Gly Ile Val Gln Leu Phe Gln His Leu Gln Pro Gly Phe Glu
20 25 30
Gln Ser Arg Ile Cys Ile Lys Ile Pro Ser Thr Trp Glu Gly Met Met
35 40 45
Ala Cys Arg Ala Leu Glu Met Ala Gly Val Arg Thr Leu Ala Thr Thr
50 55 60
Leu Phe Thr Met Ser Gln Ala Ile Leu Ala Ala Glu Val Gly Cys Thr
65 70 75 80
Tyr Ile Ala Pro Tyr Val Asn Gln Leu Lys Val His Phe Glu Pro Gly
85 90 95

<210> 35671
<211> 130
<212> PRT
<213> A.fumigatus

<400> 35671
Leu Gln Ile Asp Met Ala Val Ala Thr Leu Leu Pro Gly Ser Ser Leu
1 5 10 15
Asp Ala Val Lys Gln Ala Val His Ser Thr Ser Thr Cys Cys Asn Ala
20 25 30
Thr Val Leu Ser Leu Gln Ser Leu Leu Arg Gly Ser Ile Lys Pro Val
35 40 45

```
Ser Asp Val Glu Ser Glu Pro Thr Lys Lys Thr Asn Arg Thr Lys Lys
    50                  55                  60
Ala Val Ser Ala Ser Ser Arg Arg Ser Arg Ala Thr Ile Lys Thr Asn
65                  70                  75                  80
Val Ser Ala Lys Gly Ala Thr Thr Ile Ala Ala Val Glu Tyr Asp Ala
                85                  90                  95
Pro Arg Leu Ser Cys Gln Glu Lys Val Ser Leu Ala Thr Glu Ile Phe
            100                 105                 110
Asn Thr Thr Phe Glu Asp Thr Trp Gln Lys His Gln Lys Ser Ser Lys
        115                 120                 125
Thr Ser
    130
```

<210> 35672
<211> 120
<212> PRT
<213> A.fumigatus

<400> 35672

```
Gln Ile Ala Arg Phe Thr Asp Pro Asn Lys Leu Leu Pro Leu Cys Val
1               5                   10                  15
Ser Ile Gln Lys His Tyr Lys Ser Ile Asn Ala Lys Thr Lys Val Leu
            20                  25                  30
Pro Ala Ser Leu Thr Ser Thr Asp Glu Ile Tyr Ala Leu Ala Gly Val
        35                  40                  45
Asp His Ile Thr Ile Ala Pro Tyr Leu Leu Gln Gln Leu Ser Gln Pro
    50                  55                  60
Ser Ser Val Pro His Thr Glu Ser Leu Phe Asp Ser Asp Val Pro Pro
65                  70                  75                  80
Ala Ile Ser Val Ala Gln Glu Ser Phe Val Asn Asp Glu Ser Ala Tyr
                85                  90                  95
Arg Ile Ala Phe Thr Arg Asp Leu His Gly Ala Ser Glu Glu Lys Leu
            100                 105                 110
Thr Gln Ala Ser Leu Asp Glu Gly
        115                 120
```

<210> 35673
<211> 142
<212> PRT
<213> A.fumigatus

<400> 35673

```
Glu Phe Ala Cys His Ser Ser Asp Cys Phe Ser Tyr Cys Ser Ser Asp
1               5                   10                  15
Leu Lys Gly Lys Tyr Ser Glu Asp Leu Ala Lys Tyr Ser Glu Ser Leu
            20                  25                  30
Phe Phe Pro Leu Ala Leu Pro Pro Arg His Phe Leu Asn Ala Tyr Leu
        35                  40                  45
Ile Gly Val Gly Arg Ser Leu Val Pro Tyr Ser Thr Arg Gln Arg Asn
    50                  55                  60
Ala Ile Ala Pro Pro Ser Thr Ser Gly Thr Cys Leu Phe Val Thr Ser
65                  70                  75                  80
Gln Leu Phe Ala Ala Tyr Cys Cys Gln Thr Leu Ser Ser Phe Glu Glu
                85                  90                  95
Lys Asn Thr Pro Gln Lys Pro Thr Cys Gly Ser Leu Ile Asp Leu Gly
            100                 105                 110
```

```
Leu Ser Thr Tyr Ser Ser Leu Ser Gln Phe Pro His Thr Ile Gly Tyr
        115                 120                 125
Ser Cys Asn Val Val Val Phe Ile Tyr Leu Thr Asp Ser Cys
    130                 135                 140

<210> 35674
<211> 892
<212> PRT
<213> A.fumigatus

<400> 35674
His Ser Ser Ile Ile Pro Arg Asp Arg Pro Asn Leu Glu Thr Ile Lys
1               5                   10                  15
Met Ser Thr Ser Asp Pro Phe Ala Phe Leu Glu Lys Glu Pro Arg Pro
            20                  25                  30
Val Ala Val Lys Lys Pro His Trp Arg Glu Lys Leu Phe Ser Lys Gly
        35                  40                  45
Arg Glu Arg Asp Lys Glu Lys Asn Ile Lys Pro Ser Thr Thr Asp Gln
    50                  55                  60
Gln Ile Glu Ala Phe Leu Ser Pro Val Arg Ser Lys Ser Val Ser His
65                  70                  75                  80
Ala Leu Asn Ser Ala Asn Gly Thr Ala Arg Gly Tyr Gln Lys Pro Arg
                85                  90                  95
Leu Asp Thr Ser His Arg Trp Pro Ser Ala Gln Asp Val Leu Asn Ala
            100                 105                 110
Thr Ser Pro Ile Ser Lys Pro Ala Ser Ala Thr Glu Ile Tyr Pro Pro
        115                 120                 125
Thr Ser Phe Pro Ser Pro Pro Arg Lys Thr Arg Ala Arg Lys Gly Leu
    130                 135                 140
Lys Val Arg Phe Ser Asp Lys Asp Pro Glu Val Ile Gly Glu Gly Gly
145                 150                 155                 160
Asp Glu Thr Glu Ala Pro Thr Ile Glu Ile Ser Leu Asn Arg Gly Arg
                165                 170                 175
Arg Ala Glu Tyr Glu Ser Lys Ala Pro Gln Leu Gln Leu Asp Thr Ser
            180                 185                 190
Leu Gly Asp Thr Asp Gly Val Ser Gln Ala Arg Thr Pro Gln Arg Lys
        195                 200                 205
Asp Thr Ser Glu Gly Ile Asn Thr Ala Glu Arg Lys Pro Leu Leu Val
    210                 215                 220
Gln Ser Pro Gln Asp Ser Glu Phe Leu Leu Thr Leu Asn Leu Gly Gly
225                 230                 235                 240
Ala Gly Ser Arg Leu Ser Phe Arg Ala Ser Pro Glu Ser Asn Ser Phe
                245                 250                 255
Ala Gln Arg Val Arg Ala Lys Met Gln Ala Glu Glu Gly Arg Ala Leu
            260                 265                 270
Gln His Gly Cys Gln Asp Tyr Pro Ser Ser Pro Glu Glu Asp Gly Pro
        275                 280                 285
Leu Ala Glu Lys Lys Ser Thr Ala Ala Ser Pro Glu Ser Pro Asn Ser
    290                 295                 300
Leu Tyr Glu Thr Pro Pro Val Ser Glu Thr Glu Pro Ser His Pro Ala
305                 310                 315                 320
Leu Thr Leu Arg Ile Pro Ala Asn Ser Ser Thr His Lys Gln Gly Gly
                325                 330                 335
Thr Ser Pro Ile Glu Leu Asn Leu Pro Ala Ala Leu Thr Ser Gly Pro
            340                 345                 350
Glu Leu Arg Ser Leu Ser Pro Pro Lys Pro Gln Pro Ile Pro Arg Asn
```

```
        355                 360                 365
Pro Val Gln Asn His Pro Val Ser Arg Asp Ala Arg Asp Thr Thr His
    370                 375                 380
Gly Gly Gln Leu Pro Lys Ala Ser Leu Arg Ser Leu Ala Ser Gln Val
385                 390                 395                 400
Gly Asp Thr Ala Phe Thr Asp Leu Lys Ala Tyr Val Ala Gln Tyr Ser
                405                 410                 415
Pro Ser Ile Arg Val Ala Ala Glu Thr Gly Lys Pro Ser Met Glu Ile
            420                 425                 430
Ser Leu Ala Glu Trp Ile Arg Ala Ala Val Trp Trp Phe Leu Arg Gly
        435                 440                 445
Lys Lys Lys Leu Glu Val Tyr Ala Arg Ser Arg Ser Ser Ser Ser Gly
    450                 455                 460
Gly Arg Thr Pro Gln Gly Ser Ser Leu Gly Ala Ala Lys Gln Ala Val
465                 470                 475                 480
Val Asp Leu Gly Lys Ala Leu Trp Ile Cys Glu Asn Val Val Pro Gln
                485                 490                 495
His Ser Glu Leu Ser Arg Tyr Gly Thr Arg Gly Ile Asp Ala Ile Ile
            500                 505                 510
Ala Val Ala Ser Thr Thr Gly Asn Lys His Leu Ala Asp Cys Leu Ser
        515                 520                 525
Leu His Gln Ala Ile Ile Ser His Leu Arg Ser Leu Ala Met Ser Ile
    530                 535                 540
Arg Arg Asn Asn Ile Leu Ser Glu Leu Ala Ser Glu Gly Asp Ala Ala
545                 550                 555                 560
Val Gln Pro Asp Thr Asn Val Trp Val Gly Tyr Pro Val Phe Ala Pro
                565                 570                 575
Asp Val Ser Ala Val Leu Ser Gly Ala Ala Thr Arg Ser Val Leu Val
            580                 585                 590
Asp Asn Ser Gly Lys Gly Pro Ser Ile Ile Gln Met Met Pro Leu Gly
        595                 600                 605
Asp Thr Ser Arg Tyr Phe Ser Tyr Gly Ser Met Phe Val Glu Ala Cys
    610                 615                 620
Ile Ser Ser Gln Glu Asp Asp Ser Gln Glu Gln Phe Ser Ile Pro Cys
625                 630                 635                 640
Ala Leu Ser Ile Leu Arg Asp Arg Gly Asp Trp Tyr Val Phe Ala Ala
                645                 650                 655
Ile Thr Ser Gln Ser Glu Leu Val Asn Val Met Ile Gln Ser Asp Arg
            660                 665                 670
Lys Lys Gly Pro Thr Trp Asp Asp Val Glu Trp His Val Arg Ser His
        675                 680                 685
Ser Met Arg Val Arg Leu Pro Arg Gly Phe Glu Leu Asp Val Ser Phe
    690                 695                 700
Gln Asp Glu Asp Phe Lys Asn Leu Trp Asn Ile Val His Tyr Thr Leu
705                 710                 715                 720
Lys Thr Glu Ala Ser Leu Gln Pro Glu Ala Gly Glu Thr Val Ile Phe
                725                 730                 735
Glu Tyr Thr Leu Lys Asn Phe Gln Tyr Met Asp Ser Gly Thr Pro Lys
            740                 745                 750
Ala Phe Pro Thr Glu Pro Val Glu Arg Cys Arg Leu Arg Leu Phe Glu
        755                 760                 765
Arg Ser Glu Thr Val Thr Glu Gly Thr Gly Ser Arg Ser Ala His Arg
    770                 775                 780
Gly Phe Arg Leu Thr Val Leu Thr Ser Pro Lys Val Lys Thr Leu Ser
785                 790                 795                 800
Ser Val Arg His Ile Ile Gly His Gly Ala Pro Ile Ile Phe Gly Leu
```

```
                805                 810                 815
Leu Arg Gly Glu Asp Gly Ala Pro Ala Leu Met Leu Lys Val Lys Glu
            820                 825                 830
Asp Gly Arg Ser Arg Ser Met Val Met Thr Phe Gln Glu Val Gln Asp
        835                 840                 845
Arg Asn Thr Met His Ala Leu Leu Leu Gly Met Thr Thr Ser Asp Gln
    850                 855                 860
Glu Phe Lys Ile Pro Asp Ile Ser Leu Gln Ala Tyr Ser Ile Glu Gln
865                 870                 875                 880
Pro Ala Asp Lys Phe Asn Gly Gln Pro Val Lys Val
                885                 890
```

<210> 35675
<211> 337
<212> PRT
<213> A.fumigatus

<400> 35675

```
Phe Ser Phe Leu Thr Ser Val Val Arg Leu Trp Cys Ile Ala Asp Leu
1               5                   10                  15
Leu Leu Tyr Arg Gly Asn Thr Pro Leu Glu Lys Lys Ile Ala Ile Arg
            20                  25                  30
Pro Thr Ser Glu Thr Val Met Tyr Pro Tyr Tyr Ala Lys Trp Ile Arg
        35                  40                  45
Ser His Arg Asp Leu Pro Leu Lys Leu Asn Gln Trp Asn Ser Val Val
    50                  55                  60
Arg Trp Glu Phe Lys His Pro Gln Pro Phe Leu Arg Thr Arg Glu Phe
65                  70                  75                  80
Leu Trp Gln Glu Gly His Thr Ala His Leu Thr Glu Asp Ala Ala Arg
                85                  90                  95
Lys Lys Val Leu His Met Leu Asn Leu Tyr Ala Arg Ile Tyr Glu Lys
            100                 105                 110
Leu Leu Ala Val Pro Leu Val Lys Gly Gln Lys Pro Lys Ser Arg Lys
        115                 120                 125
Phe Ala Gly Gly Leu Tyr Thr Thr Thr Val Glu Gly Tyr Ile Pro Ala
    130                 135                 140
Thr Gly Arg Gly Ile Gln Gly Gly Thr Ser His Gly Leu Gly Gln Asn
145                 150                 155                 160
Phe Ser Lys Met Phe Gly Ile Thr Val Glu Asp Pro Ser Ala Lys Pro
                165                 170                 175
Asp Glu Lys Lys Pro Pro Leu His Val Trp Gln Asn Ser Trp Gly Leu
            180                 185                 190
Ser Thr Arg Thr Leu Gly Val Met Val Met Ile His Ser Asp Asn Arg
        195                 200                 205
Gly Leu Val Leu Pro Pro Arg Val Ala Glu Thr Gln Thr Ile Ile Val
    210                 215                 220
Pro Val Gly Ile Thr Ala Lys Thr Ser Asp Glu Glu Arg Glu Lys Leu
225                 230                 235                 240
Tyr Ala Glu Ile Asp Ser Leu Val Ser Val Leu Lys Ala Ala Gly Ile
                245                 250                 255
Arg Ala Asp Ser Asp Lys Arg Glu Gly Tyr Ser Pro Gly Trp Lys Phe
            260                 265                 270
Asn Asp Trp Glu Leu Arg Gly Val Pro Leu Arg Ile Glu Phe Gly Pro
        275                 280                 285
Gly Glu Ser Val Gly Arg Tyr Val Thr Ala Ala Arg Arg Asp Ile Pro
    290                 295                 300
```

```
Gly Lys Asp Gly Lys Ser Thr Ile Pro Ile Asp Glu Leu Ser Thr Ala
305                 310                 315                 320
Val Pro Gly Ser Ala Gly Asn His Pro Gln Gly Ser Leu Gln Ala Arg
                325                 330                 335
Arg
```

<210> 35676
<211> 69
<212> PRT
<213> A.fumigatus

<400> 35676

```
Lys Leu Leu Met Arg Arg Gln Pro Ala Ser Tyr Phe Ile Trp Glu Glu
1               5                   10                  15
Ile Gln Asn Trp Phe Asn Ala Glu Ile Lys Lys Val Gly Val Lys Asn
            20                  25                  30
Cys Ser Phe Pro Leu Phe Val Ser Glu Asp Val Leu Gln Arg Glu Lys
        35                  40                  45
Asp His Ile Glu Gly Phe Ala Ala Glu Val Ala Trp Val Thr His Ala
    50                  55                  60
Tyr Asp Phe Pro Phe
65
```

<210> 35677
<211> 261
<212> PRT
<213> A.fumigatus

<400> 35677

```
Ser Thr Val Thr Thr Ala Val Trp Ser Phe Leu Leu Ala Leu Leu Arg
1               5                   10                  15
Leu Arg Arg Ser Ser Phe Leu Ser Val Ser Leu Pro Arg Leu Pro Thr
            20                  25                  30
Arg Ser Val Arg Ser Cys Thr Arg Arg Ser Thr Ala Leu Ser Pro Cys
        35                  40                  45
Ser Arg Leu Gln Ala Ser Val Pro Ile Ala Thr Arg Glu Lys Ala Ile
    50                  55                  60
Pro Pro Ala Gly Asn Ser Thr Thr Gly Asn Phe Val Val Ser Leu Cys
65                  70                  75                  80
Val Leu Asn Ser Val Pro Val Ser Pro Ser Val Val Thr Ser Arg Pro
                85                  90                  95
Leu Val Val Thr Phe Pro Val Arg Met Ala Ser Arg Leu Phe Pro Leu
            100                 105                 110
Met Ser Cys Pro Pro Pro Phe Leu Ala Leu Leu Glu Thr Ile His Lys
        115                 120                 125
Asp Leu Tyr Lys Arg Ala Asp Asp Glu Phe Arg Ala His Arg Lys Leu
    130                 135                 140
Ile Thr Asn Trp Asp Asp Phe Thr Pro Ala Leu Asn Glu Lys Asn Ile
145                 150                 155                 160
Cys Val Ile Pro His Cys Leu Thr Glu Glu Cys Glu Asp Gln Ile Lys
                165                 170                 175
Glu Leu Ser Ala Arg Lys Ala Glu Glu Asp Ser Gly Val Pro Gln Asp
            180                 185                 190
Ala Arg Ala Pro Ser Met Gly Ala Lys Ser Leu Cys Ile Pro Phe Asp
        195                 200                 205
```

```
Gln Pro Glu Gly Ile Val His Gly Gln Thr Lys Cys Val Asn Pro Lys
    210                 215                 220
Cys Thr Arg Met Ala Glu Lys Trp Cys Met Phe Gly Arg Lys Leu Pro
225                 230                 235                 240
Pro Tyr Ala Phe Ala Leu Glu Gly Ile Glu Gln Phe Thr Asp Asn Leu
                245                 250                 255
Arg Ala Gly Ser Tyr
            260
```

<210> 35678
<211> 76
<212> PRT
<213> A.fumigatus

<400> 35678

```
Asp Tyr Arg Asn Gly Arg Ser His His Gly Pro Arg Thr Ser Ser Arg
1               5                   10                  15
Lys His Gly Leu Lys His Phe Leu Ala Ala Ser Leu Leu Trp Met Tyr
            20                  25                  30
Ser Thr Ser Pro Ala Asp Val Ser Trp Ser Asn Ser Asp Pro Asn Ser
        35                  40                  45
Gly Asp Arg Ala Asn Gly Leu Cys Leu Trp Leu Gly Lys Gly Thr Val
    50                  55                  60
Ser Leu Gly Met Ser Leu Thr Ser Val Asp Val Leu
65                  70                  75
```

<210> 35679
<211> 150
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (146)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35679

```
His Arg Phe Pro Thr Tyr Ala Ile Phe Leu Gln Ser Ser Ile Val Ile
1               5                   10                  15
Leu Leu Pro Thr Val Ile Ile Ile Leu Thr Ile Thr Met Thr Ala Thr
            20                  25                  30
Leu Glu Arg Ser Leu Ser Arg Thr Ser Ser Met Ser Ile Pro Ile Ser
        35                  40                  45
Ser Pro Leu Leu Ser Val Arg His Asp Val Thr Pro Pro Ile Leu Ser
    50                  55                  60
Glu Pro Ser Leu Ser Gln Ile His Asp Arg Leu Asn Leu Leu Asp Ser
65                  70                  75                  80
Arg Val Leu Glu Leu Arg Ser Thr Val Leu Thr Lys Asp Gly Tyr Val
                85                  90                  95
Asp Arg Arg Asn Arg Glu Asp Glu His Ile Arg Arg Glu Phe Glu Ala
            100                 105                 110
Asn Arg Ser Ile Ser Asn Arg Ile Asp Leu Asn Val Val Ala Leu Arg
        115                 120                 125
Thr Asp Val Asp Gln Leu Lys Ser Gly Val Phe Gln Leu Lys Ser Ser
    130                 135                 140
Ile Xaa Gln Ala Gly Asn
```

145 150

<210> 35680
<211> 138
<212> PRT
<213> A.fumigatus

<400> 35680
Glu Gly Glu Ser Thr Gln Val Lys Pro Phe Ala Asp Cys Phe His Pro
1 5 10 15
Val Val Ile Val Leu Ala Ile Val Ser Val Val Phe Thr Val Lys Val
20 25 30
Leu Phe Ile Val Ala Val Phe Phe Asn Ala Asp Phe Pro Phe Leu Val
35 40 45
Ile Ala Leu Ile Leu Val Ser Ser Ile Gly Ser Gly Pro Cys Ile Ala
50 55 60
Ser Pro Leu Asp Ala Asp Phe Ala Ala Ile Ala Ile Ile Thr Arg Gln
65 70 75 80
Arg Asp Leu Ser Glu Ile Pro Glu Gly Val Val Phe Glu Val Tyr Gly
85 90 95
Phe Arg Ser Gly His Asn Ile Ala Val Thr Leu Ala Leu Val Glu Val
100 105 110
Asn Gly Glu Ser Arg Arg Cys Gly Thr Thr Val Thr Trp Ser Arg Ile
115 120 125
Arg Glu Asp Cys Cys Gly Glu Glu Arg Gly
130 135

<210> 35681
<211> 471
<212> PRT
<213> A.fumigatus

<400> 35681
Leu Leu Leu Pro Ile Ile Leu Thr Ser Thr Tyr Thr Phe Leu Arg Met
1 5 10 15
Lys Leu Tyr Leu Leu Ser Leu Leu Pro Ser Leu Phe Thr Thr Thr Val
20 25 30
Leu Ser Tyr Pro Ala Pro Ser Asn Ser Gly Thr Thr Ser Pro Arg Leu
35 40 45
Ala Ile Asp Phe Tyr Lys Arg Gln Cys Asp Cys Tyr Val Val Ser Gly
50 55 60
Ser Glu Thr Val Tyr Phe Glu Asn Tyr Ala Phe Trp Asp Phe Arg Lys
65 70 75 80
Ile Pro Leu Pro Arg Tyr Asp Ser Asn Gly Ser Lys Val Arg Ile Lys
85 90 95
Arg Arg Ser Tyr Thr Arg Ser Arg Ala Asp Arg Thr Asp Lys Asp Glu
100 105 110
Gly Asp Asn Glu Glu Gly Lys Val Gly Ile Glu Glu Asn Gly Asp Asn
115 120 125
Glu Glu Asn Leu Asn Gly Glu Asp Asn Ala Asp Asp Gly Glu Asn Asp
130 135 140
Tyr Asn Gly Met Lys Ala Val Gly Glu Gly Leu Asp Leu Gly Thr Leu
145 150 155 160
Pro Phe Ser His Thr Ala Phe Ala Arg Asp Trp Lys Pro Gln Glu Trp
165 170 175
His Arg Lys Ser Asn Lys Tyr Gly Pro Leu Pro Ile Ile Asn Ser Pro

```
            180                 185                 190
Glu Asn Ile Phe Phe Ala Ser Asn Thr Leu Tyr Thr Asn Asp Ala Glu
        195                 200                 205
Ser Thr His Leu Val Leu Arg Thr Thr Arg Phe Pro Asn His Thr Ala
    210                 215                 220
Thr Ala Glu Leu Glu Tyr His Leu Arg Asn Ile Phe His Cys Ser Leu
225                 230                 235                 240
Arg Val Arg Met Arg Val Met Thr Val Gly Ser Val Asn Arg Glu Pro
                245                 250                 255
Met Leu Tyr Gly Arg Pro Val Leu Lys Gly Asn Pro Thr Ser Gln Ser
            260                 265                 270
Val Val Pro Ile Gly Ala Cys Ala Gly Ile Phe Thr Tyr Arg Ser Ser
        275                 280                 285
Thr Cys Glu Ser Asp Ile Glu Ile Leu Thr Ser Asp Pro Thr Asn Ile
    290                 295                 300
Val Arg Tyr Ala Asn Gln Pro Asp Tyr Asp Pro Ile Thr Asp Ala Met
305                 310                 315                 320
Ile Pro Gly Ala Ala Ser Ile Gly Lys Leu Ser Gln Pro Trp Thr Asn
                325                 330                 335
Pro Thr Thr His Arg Val Asp Trp Leu His Asn Ile Thr Asn Trp Tyr
            340                 345                 350
Ala Asp Gly Glu Ile Lys Ala Ser Asn Thr Tyr His Val Pro Asp Gln
        355                 360                 365
Pro Ser Met Met Ala Ile Asn Leu Trp Ser Asn Gly Gly Glu Trp Thr
    370                 375                 380
Gly Glu Met Pro Val Gly Gln Ser Ala Tyr Ile Gly Ile Glu Trp Ile
385                 390                 395                 400
Glu Val Ala Tyr Asn Thr Ser Thr Glu Val Asn Asp Ile Pro Ser Asp
                405                 410                 415
Thr Val Pro Phe Pro Ser His Lys His Arg Pro Phe Ala Arg Ser Pro
            420                 425                 430
Glu Leu Gly Ser Glu Leu Asp His Glu Thr Ser Ala Gly Glu Val Glu
        435                 440                 445
Tyr Ile Gln Arg Arg Asp Ala Ala Arg Lys Cys Leu Arg Pro Cys Phe
    450                 455                 460
Leu Asp Asp Val Arg Gly Pro
465                 470
```

<210> 35682
<211> 165
<212> PRT
<213> A.fumigatus

<400> 35682

```
Phe Tyr Thr Val Ile Leu Glu Tyr Asp Arg Ala Met Ser Ser Phe Phe
1               5                   10                  15
Thr Leu Pro Ala Ser Gln Arg Lys Arg Lys Arg Asp Asp Arg Ala Ala
            20                  25                  30
Ala Pro Ala Ser Lys Lys Arg Gly Val Asp Ala Asp Gly Asp Ser Gly
        35                  40                  45
Ala Lys Gly Lys Gly Arg Thr Arg Glu Arg Asp Gln Ser Ile Ser Gly
    50                  55                  60
Ser Asp Leu Asp Asp Asp Asp Glu Ser Val Ala Ser Ala Val Ser Glu
65                  70                  75                  80
Glu Glu Ser Gly Ser Glu Ser Glu Asp Gly Glu Thr Ala Ala Glu Arg
                85                  90                  95
```

```
Arg Leu Lys Leu Ala Glu Arg Tyr Leu Glu Asn Val Arg Glu Glu Val
            100                 105                 110
Asp Asp Tyr Gly Phe Asp Ala Ala Glu Ile Asp Arg Asp Leu Ile Ala
        115                 120                 125
Glu Arg Leu Lys Glu Asp Val Val Cys Thr Val Ser Leu Phe Phe Phe
    130                 135                 140
Ile Asn Pro Pro Ile Leu Arg Asn Met Cys Gln Met Asp Gln Met Ala
145                 150                 155                 160
Asp Ala Arg Lys Gly
                165
```

<210> 35683
<211> 113
<212> PRT
<213> A.fumigatus

<400> 35683

```
Glu Leu Ala Arg Leu Gln Val Ser Leu Leu Ile Thr Ile Thr Ile Ser
1               5                   10                  15
Leu His Pro Leu Phe Ser Ser Ser Ile Ile Phe Ile Ser Pro Phe Gln
            20                  25                  30
Asn Arg Leu Leu Leu Ile Cys Glu Ile Gly Ile His Leu Phe Pro Arg
        35                  40                  45
Gly His Ala Leu Thr Val Ala Phe Arg Glu Val Leu Leu Gly Ile Thr
    50                  55                  60
Gly Lys Asp Phe Val Ile Leu Ala Ala Ser Lys Ala Ala Met Arg Gly
65                  70                  75                  80
Pro Thr Ile Leu Lys Ala Glu Asp Asp Lys Thr Arg Gln Leu Ser Gln
                85                  90                  95
His Thr Leu Met Ala Phe Ser Gly Glu Ala Gly Asp Thr Gly Thr Leu
            100                 105                 110
Arg
```

<210> 35684
<211> 87
<212> PRT
<213> A.fumigatus

<400> 35684

```
Leu Arg Ile Val Gln Phe Ala Glu Tyr Ile Gln Ala Asn Val Ala Leu
1               5                   10                  15
Tyr Thr Met Arg Asn Asp Thr Glu Leu Arg Pro Asn Ala Val Ala Asn
            20                  25                  30
Phe Val Arg Gly Glu Leu Ala Arg Ser Leu Arg Ser Arg Asn Pro Tyr
        35                  40                  45
Thr Val Asn Leu Leu Leu Gly Gly Val Asp Ser Ile Thr Gln Glu Pro
    50                  55                  60
His Leu Tyr Trp Ile Asp Tyr Leu Ser Ala Leu Ala Arg Val Pro Tyr
65                  70                  75                  80
Ala Ala His Gly Tyr Ala Gln
                85
```

<210> 35685
<211> 196
<212> PRT

<213> A.fumigatus

<400> 35685

```
His Val Cys Thr Phe Asp Leu Ser Arg Leu Leu Gln Leu Ser Leu Gly
1               5                  10                  15
Glu Gly Phe Gly Ile Pro Ala Pro Ser Pro Arg His Leu Asn Pro Ile
            20                  25                  30
Asp Asn Phe Thr Ala Thr Met Ser Lys Arg Pro Ala Glu Leu Ser Leu
        35                  40                  45
Glu Asp Glu Pro Ala Val Gly Ser Pro Val Ser Lys Lys Ala Arg Val
    50                  55                  60
Glu Asp Glu Leu Glu Glu Gly Asp Pro Arg Asn Gly Ala Leu Pro Leu
65                  70                  75                  80
Arg Arg Ala Ser Gly Gln Glu Met Glu Glu His Glu Arg Lys Gly Gln
                85                  90                  95
Asn Ile Leu Ala Ala Ala Asp His Glu Glu Glu Glu Met Glu Glu Ala
            100                 105                 110
Ile Pro Glu Asn Glu Glu Ala Ile Pro Glu Asn Ala Glu Val Pro Glu
        115                 120                 125
Ser Ser Asp Val Asp Glu Asp Arg Pro Val Ile Lys Ala Pro Lys Arg
    130                 135                 140
Gln Ser Glu Pro Met Glu Gly Tyr Ser Asp Leu Tyr Leu Asp Thr Ile
145                 150                 155                 160
Asn Arg Glu Ile Leu Asp Phe Asp Phe Glu Lys Leu Cys Ser Val Ser
                165                 170                 175
Leu Ser Asn Ile Asn Val Tyr Ala Cys Leu Val Cys Gly Lys Tyr Phe
            180                 185                 190
His Gly Pro Gly
        195
```

<210> 35686
<211> 266
<212> PRT
<213> A.fumigatus

<400> 35686

```
Pro Pro Gln Leu Ala Gly Ser Ser Leu Phe Val Val Lys Thr Ser Cys
1               5                  10                  15
Leu Pro Phe Pro Ser Ile Asp Ala Pro Thr Phe Gly Leu Val Gln Glu
            20                  25                  30
Gln Leu Ala His Asp Pro Phe Arg Leu Leu Ile Ala Thr Ile Phe Leu
        35                  40                  45
Asn Arg Thr Arg Gly Gly Val Ala Leu Pro Val Leu Phe Gln Val Phe
    50                  55                  60
Glu His Phe Pro Thr Ala Gln Asp Met Ser Thr Ala Glu Phe Ser Lys
65                  70                  75                  80
Leu Val Ser Met Ile His Ser Leu Gly Phe Gln Asn Glu Arg Ala Arg
                85                  90                  95
Lys Cys Ile Asp Leu Ala Lys Thr Trp Leu Glu Arg Pro Pro Thr Lys
            100                 105                 110
Gly Arg Arg Tyr Arg Arg Leu His Tyr Pro Arg Lys Met Asp Gly Lys
        115                 120                 125
Asp Val Gly Arg Asp Glu Cys Ile Gly Asp Asp Glu Asn Asp Thr Arg
    130                 135                 140
Val Ala Trp Glu Ile Ala His Leu Pro Gly Val Gly Pro Tyr Ser Leu
145                 150                 155                 160
```

```
Asp Ser Trp Arg Ile Phe Cys Arg Asp Glu Leu Arg Gly Leu Ala Lys
                165                 170                 175
Asp Trp Lys Gly Asn Gly Ala Ala Ser Ala Asp Phe Glu Pro Glu Trp
            180                 185                 190
Lys Ser Val Leu Pro Gln Asp Lys Glu Leu Arg Ala Tyr Leu Thr Trp
        195                 200                 205
Met Trp Leu Lys Glu Gly Trp Ile Trp Asp Arg His Thr Gly Glu Arg
    210                 215                 220
Lys Arg Ala Ser Glu Lys Met Met Arg Ala Ala Arg Arg Gly Gly Val
225                 230                 235                 240
Ala Gln Glu Gln Asp Gly Asn Phe Val Leu Glu Met Ser Pro Val Lys
                245                 250                 255
Lys Val Ala Asn Gly Leu Thr Ala Trp Ser
            260                 265
```

<210> 35687
<211> 447
<212> PRT
<213> A.fumigatus

<400> 35687

```
Thr Lys His Thr Thr Pro Val Glu Gln Arg Pro Arg Arg Thr Asp Gly
1               5                   10                  15
Thr Ala Leu Ser Ser Ser Ile Ser Ser Ser Ile His Pro Thr Pro Val
            20                  25                  30
Leu Pro Met Ser Asp Leu Ser His Pro Val Ile Leu Phe Pro Leu Arg
        35                  40                  45
Leu Asn Asp Arg Asp Ser Asp Arg Asp Arg Asp Arg Lys Pro Ser Ser
    50                  55                  60
Ser Ser Ser Thr Ser Ser Arg Pro Lys Gln Arg His His Arg Ser Ser
65                  70                  75                  80
His Gly Arg Pro Ser Arg Ala Ser Thr Lys Asp Arg Asp Arg Asp Ile
                85                  90                  95
Pro Thr Gly His Ser Ser Thr Thr Ser Leu Ser Thr Ser Ile Ser Ala
            100                 105                 110
Ser Arg Gln Gln Arg Arg Phe Ser Met Pro Gly Val Asp Ala Ala Ser
        115                 120                 125
Arg Ser Ala Thr Ala Ser Leu Leu Glu Ser Arg Thr Ser Leu Pro Tyr
    130                 135                 140
Pro Thr Phe Ser Lys Ala His Ser Arg Glu Ala Val Gly Lys Pro Ser
145                 150                 155                 160
Ile Pro Thr Pro Asp Pro Thr Asp Leu Thr Glu Asn Lys Glu Ser Gly
                165                 170                 175
Asp Ala Asp Asn Lys His Arg Thr Asp Ser Arg His Ala Pro Pro Ser
            180                 185                 190
Pro Pro Leu Thr Ser Leu Asp Gln Gly Thr Ser Gly Lys Gly Ser Thr
        195                 200                 205
Val Gly Asp Lys Glu Glu Lys Ala Ala Glu Glu Lys Asn Ala Lys Pro
    210                 215                 220
Lys Asp Met Lys Thr Lys Ile Arg Ile Arg Ala Glu Ser Thr Lys Ser
225                 230                 235                 240
Ser Ser Ser Leu Arg Ser Lys Arg Asp Glu Thr Ser Lys Ser Ser Lys
                245                 250                 255
Thr Ala Arg Pro Glu Thr Pro Lys Pro Asn Lys Asp Lys Asp Thr Pro
            260                 265                 270
Thr Arg Val Ala Ser Lys Lys Ser Ser Lys Ala Lys Ile Ala Asp Glu
```

```
        275                 280                 285
Asp Lys Leu Pro Lys Arg Ser Ser Ser Arg Gly Thr Leu Ser Pro Pro
    290                 295                 300
Arg Ser Pro Ala Thr Val Arg Glu Val Gly Ser Gly Ser Ala Asn Gly
305                 310                 315                 320
Ser Asp Ala Thr Ile Ala Pro His Gln Pro Ser Ile Thr Ser Arg Lys
                325                 330                 335
Pro Gln Thr Pro Pro Val Lys Pro Pro Ser Arg Asn Gln Thr Arg Ser
            340                 345                 350
Ser Met Leu His Ser Phe Arg Pro Gly Ser Gly Ser Pro Val Asp Ile
        355                 360                 365
Ala Phe Asp Tyr Gly Arg Pro Pro Thr Thr Ala Ser Ser Thr Phe Gly
    370                 375                 380
Ala Pro Pro Pro Pro Pro Pro Pro Pro Pro Glu Val Pro Val Ser Ile Pro
385                 390                 395                 400
Arg Val Asp Tyr Leu Leu Gln Asn Gly Gly Leu Asp His Arg Val Pro
                405                 410                 415
Lys Thr Leu Leu Pro Gly Pro Glu His Pro Asp Leu Pro Gln Gln Gln
            420                 425                 430
Trp His Pro Val Phe Thr Ser Gly Met Thr Gly Arg Lys Val Phe
        435                 440                 445
```

<210> 35688
<211> 119
<212> PRT
<213> A.fumigatus

<400> 35688

```
Met Thr Glu Ile Ala Thr Gly Thr Gly Ile Glu Ser His Pro Pro His
1               5                   10                  15
Leu Leu His Arg Gln Gly Pro Asn Asn Val Ile Thr Ala Arg Pro Thr
            20                  25                  30
Asp Gly Pro Pro Ala Pro Gln Pro Arg Ile Glu Thr Val Thr Ser Pro
        35                  40                  45
Arg Val Thr Arg Pro Pro His Arg Tyr Leu Leu Pro Ser Pro Pro Arg
    50                  55                  60
Ala Asn Ser Val Gly Ser Pro Cys Arg Ala Ser Thr Pro Pro Ala Val
65                  70                  75                  80
Pro Leu Arg Pro Leu Tyr Ser Ser Arg Glu Pro Ala Cys Pro Thr Leu
                85                  90                  95
His Ser Arg Lys Pro Ile Ala Glu Arg Pro Ser Gly Asn Arg Val Phe
            100                 105                 110
Pro Arg Arg Thr Arg Pro Thr
        115
```

<210> 35689
<211> 137
<212> PRT
<213> A.fumigatus

<400> 35689

```
Arg Val Arg Arg Arg Val Arg Pro Ser Ala Ala Ala Val Arg Ala Ser
1               5                   10                  15
Phe Ala Glu Asp Arg Pro Cys Gln Gly Val Asp Gln Leu Arg Ala Val
            20                  25                  30
Arg Asp Gln Arg Ala Arg Gly Gly Gly Arg Gly Gly Arg Arg Arg Gly
```

```
        35                  40                  45
Gly Gly Ala Ala Gly Gln Arg Arg Gly Gln Ala Ala Gly Thr Arg Ser
    50                  55                  60
Val Arg Thr Gly Pro Gln Gly Val Gln Gly Glu Gly Asn Glu Gly Gly
65                  70                  75                  80
Gly Glu Leu Leu Ala Leu Met Ser Gly Asp Asp Val Thr Asn Ala Val
                85                  90                  95
Thr Ala Ser Gly Thr Ala Gln Arg Leu Ala Gly Leu Arg Thr His Thr
            100                 105                 110
Arg Ile Ser Arg Gly His Gln Glu Asp Arg Gly Ala Asp Ala Pro Ala
        115                 120                 125
Gly Gln Glu Ala Thr Gln Ala Gly Arg
    130                 135

<210> 35690
<211> 252
<212> PRT
<213> A.fumigatus

<400> 35690
Tyr Pro Thr Asp Met Ile Val Pro Lys Pro Pro Val Lys Leu Glu Gly
1               5                   10                  15
His Cys Ser Val Ile His Asn Asn Thr Leu Tyr Thr Tyr Ser Ala Asn
            20                  25                  30
Gly Phe Ala Ala Ile Pro Leu Gly Arg Gly Thr Trp Tyr Lys Leu Pro
        35                  40                  45
Met Pro Pro Gly Glu Pro Val Ser Asp Ala Val Cys Val Thr Gly Gly
    50                  55                  60
Ile Asp Gly Lys Glu Asp Gln Gln Ala Leu Tyr Val Ile Gly Gly Thr
65                  70                  75                  80
Ser Ser Ser Ser Asn Ser Pro Gly Leu Gln Arg Phe Ala Phe Gly Ser
                85                  90                  95
Gln Lys Trp Thr Thr Ile Gln Thr Ala Gln Arg Thr Met Gln Asn Arg
            100                 105                 110
Thr Ser His Gly Ala Val Tyr Leu Lys Ser Ser Ser Thr Leu Leu Val
        115                 120                 125
Tyr Ala Gly Ser Gln Thr Asp Ser Ser Asn Pro Ser Ser Asp Thr Phe
    130                 135                 140
Thr Ile Ser Thr Val Pro Pro Tyr Ile Leu Asp Ala His Ser Ala Gln
145                 150                 155                 160
Tyr Pro Ser Ser Ser Pro Val Leu Leu Pro Trp Ser Asp Gly Glu Ala
                165                 170                 175
Ala Leu Val Gly Gly Ala Thr Thr Pro Lys Glu Val His Leu Phe Ser
            180                 185                 190
Val Ser Asp Gly Trp His Ser Ser Gly Val Phe Leu Pro Gln Pro Leu
        195                 200                 205
Ser Ser Asp Val Lys Cys Ala Ile Val His Gly Ser Asp Gly Ser Lys
    210                 215                 220
Ala Leu Glu Ala Phe Asn Leu Ser Val Ser Pro Asn Thr Met Ser Ser
225                 230                 235                 240
Ile Ala Leu Ala Gln Ile Pro Val Gly His Pro Thr
                245                 250

<210> 35691
<211> 268
<212> PRT
```

<213> A.fumigatus

<400> 35691

```
Asp Ala Lys Pro Leu Gly Met Cys Pro Lys Asp Lys Leu Phe Arg Gly
1               5                  10                  15
Tyr Ile Asp Leu Glu Arg Gln Leu Phe Glu Phe Val Arg Cys Arg Thr
            20                  25                  30
Leu Tyr Glu Lys Gln Ile Glu Trp Asn Pro Ala Asn Ser Gln Ser Trp
        35                  40                  45
Ile Lys Tyr Ala Glu Leu Glu Arg Gly Leu Asp Asp Ser Glu Arg Ala
    50                  55                  60
Arg Ala Ile Phe Glu Leu Gly Ile Asp Gln Pro Met Leu Asp Met Pro
65                  70                  75                  80
Glu Leu Val Trp Lys Ala Tyr Ile Asp Phe Glu Glu Tyr Glu Gly Glu
                85                  90                  95
Tyr Asp Arg Val Arg Gln Leu Tyr Glu Arg Leu Leu Gln Lys Thr Asp
            100                 105                 110
His Val Lys Val Trp Ile Asn Tyr Ala Arg Phe Glu Ile Asn Val Pro
        115                 120                 125
Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Arg Pro Val
    130                 135                 140
Ser Asp Glu Ala Lys Arg Arg Ala Arg Ala Val Phe Glu Arg Ala His
145                 150                 155                 160
Lys Val Phe Lys Glu Lys Glu Met Lys Glu Glu Val Ser Tyr Trp Arg
                165                 170                 175
Leu Cys Pro Ala Thr Met Leu Leu Thr Gln Leu Gln Arg Val Glu Leu
            180                 185                 190
Leu Asn Ala Trp Arg Ala Phe Glu His Thr His Gly Ser Pro Glu Asp
        195                 200                 205
Ile Lys Lys Ile Glu Glu Gln Met Pro Arg Arg Val Lys Lys Arg Arg
    210                 215                 220
Lys Leu Asp Asp Asp Arg Tyr Glu Glu Tyr Met Asp Tyr Val Phe Pro
225                 230                 235                 240
Ala Asp Asp Gln Ala Ala Ala Ser Leu Thr Lys Ile Leu Gln Ala Ala
                245                 250                 255
His Arg Trp Lys Gln Thr Gly Gly Gln Val Val Pro
            260                 265
```

<210> 35692
<211> 67
<212> PRT
<213> A.fumigatus

<400> 35692

```
Ser Trp Arg Lys Phe Asn Pro Ala Asn Asn Asn Met Met Gln Thr Asp
1               5                  10                  15
Leu Ile Arg Asn Arg Val Gly Asp Ser Arg Arg Arg Leu Leu Asn Arg
            20                  25                  30
Lys Lys Gly Gly Gly Phe Arg Met Leu Val Ala Tyr Lys Asn Glu Ile
        35                  40                  45
Ile Leu Leu Met Ile Gly Gln Ser Thr Asp Thr Pro Tyr Ser Arg Asn
    50                  55                  60
Phe Leu Gly
65
```

<210> 35693

<211> 349
<212> PRT
<213> A.fumigatus

<400> 35693

```
Leu Cys Thr Arg Leu Ser Gln Leu Ala Leu Phe Ser Ser Ile Trp Arg
1               5                  10                  15
Ile Gly Asn Arg Arg Glu Phe Leu Phe Met Ser Tyr Gly Asn Met Ser
            20                  25                  30
Pro Ser Asn Gln Lys Thr His Phe Arg Leu Leu Gln Arg Phe Lys Pro
        35                  40                  45
Asp Tyr Ser Pro Ser Glu Phe Val Gln Tyr Glu Ser Glu Arg Thr Gly
    50                  55                  60
Met Arg Val Val Val Ile Asp Gln Lys Gly Pro Lys Val Thr Gly Tyr
65                  70                  75                  80
Phe Val Leu Ala Thr Glu Ile Leu Asp Asp Ser Gly Ala Pro His Thr
                85                  90                  95
Leu Glu His Leu Cys Phe Met Gly Ser Arg Asn Tyr Arg Tyr Lys Gly
            100                 105                 110
Phe Leu Asp Lys Leu Ala Thr Arg Val Tyr Ser Asn Thr Asn Ala Trp
        115                 120                 125
Thr Ala Thr Asp His Thr Ala Tyr Thr Leu Asp Thr Ala Gly Trp Glu
    130                 135                 140
Gly Phe Ser Gln Ile Leu Pro Val Tyr Leu Glu His Val Ile Ala Pro
145                 150                 155                 160
Thr Leu Thr Asn Glu Gly Cys Tyr Thr Glu Val His His Ile Asp Gly
                165                 170                 175
Ser Gly Asn Asp Ala Gly Val Val Tyr Ser Glu Met Gln Gly Val Gln
            180                 185                 190
Asn Asn Ala Ala Glu Leu Ile Asp Leu Ala Ala Arg Arg Leu Met Tyr
        195                 200                 205
Pro Pro Gly Val Gly Phe Arg Tyr Glu Thr Gly Gly Met Met Glu Gln
    210                 215                 220
Leu Arg Val Leu Thr Ala Asp Arg Ile Arg Ala Phe His Arg Glu Met
225                 230                 235                 240
Tyr Gln Pro Arg Asn Leu Cys Leu Ile Ile Thr Gly Glu Val Asp His
                245                 250                 255
Asp Asn Met Leu Glu Thr Leu Asp Lys Phe Glu Asp Thr Ile Leu Asp
            260                 265                 270
Val Ile Pro Ser Pro Asp Ser Pro Phe Lys Arg Pro Trp Val Asp Ser
        275                 280                 285
Lys Gln Ala Pro Pro Leu Glu Lys Ser Ile Val Lys Thr Val Glu Phe
    290                 295                 300
Pro Glu Glu Asp Glu Ser Phe Gly Glu Ile Glu Ile Arg Phe Leu Gly
305                 310                 315                 320
Pro Asp Cys Thr Asp Pro Val Gln Ser Glu Ser Pro Ser Leu His His
                325                 330                 335
Ser Ser Asp Ser Ser Leu Met Cys Thr Ser Arg Cys Ser
            340                 345
```

<210> 35694
<211> 116
<212> PRT
<213> A.fumigatus

<400> 35694

```
Lys Ser Gly Phe Trp Val Pro Ile Ala Leu Ile Leu Tyr Lys Val Ser
1               5                  10                  15
Pro Gln Val Phe Ile Ile Leu Val Ile Arg Arg Leu Cys Val Gln Ala
            20                  25                  30
Gly Ala Leu Asn Val Ala Leu Leu Tyr Leu Ala Gly Ser Ser Ala Ser
        35                  40                  45
Leu Leu Glu Asn Ile Leu Val Glu Lys Glu Gln Leu Ala Ser Ala Val
    50                  55                  60
Tyr Tyr Ala Thr Glu Asp His Pro Ser Val Glu Ile Arg Phe Thr Leu
65                  70                  75                  80
Thr Ser Val Glu Thr Ala Lys Leu Ala Gln Val Glu Lys Arg Phe Phe
                85                  90                  95
Glu Val Leu Asp Asp Ala Leu Lys Lys Asn Leu Asp Met Lys Tyr Leu
            100                 105                 110
Lys Glu Cys Ile
        115
```

<210> 35695
<211> 87
<212> PRT
<213> A.fumigatus

<400> 35695

```
Gly Arg Arg Asp Thr Met Gly Gln Gly Tyr Ser Leu Thr Thr Leu Ser
1               5                  10                  15
Thr Gly Ser Ala Gly Ile Asp Val Pro Glu Leu Ser Asp Leu Met Tyr
            20                  25                  30
Glu Lys Ser Met Gly Gly Gly Arg Phe Met Lys Ser Ile Arg Ala Arg
        35                  40                  45
Gln Arg Asn Gly Leu Val Leu Val Lys Val Ile Met Lys Pro Tyr Pro
    50                  55                  60
Ser Met Lys Leu Glu Ser Tyr Val Lys Ala Ile Ile Arg Glu Phe Ile
65                  70                  75                  80
Leu Pro Cys Asn Ser Phe Glu
                85
```

<210> 35696
<211> 65
<212> PRT
<213> A.fumigatus

<400> 35696

```
Asn Ile Pro Val Ser Leu Thr Pro Ile Gly Ala Ser Gln Asp Ile Glu
1               5                  10                  15
Ser Gly Thr Ile Ser Phe Lys Thr Gly Ile Tyr Ala Gln Gln Phe Val
            20                  25                  30
Ser Val Tyr Ser Arg Arg Trp Phe Pro Ser Met Lys Lys Leu Val Arg
        35                  40                  45
Arg Thr Lys Leu Pro Lys Tyr Gly Phe Lys Leu Thr Ser Glu Gln Ile
    50                  55                  60
Leu
65
```

<210> 35697
<211> 145
<212> PRT

<213> A.fumigatus

<400> 35697
Val Tyr Phe Ala Leu Gln Gln Leu Arg Ile Asp Ser Asp Asn Val Leu
1 5 10 15
Gly Glu Arg Lys Leu Leu Ser Asp Val Pro Asn Ala Leu Ser His Gln
20 25 30
Arg Ile Leu Glu Thr Gly Thr Gly Gly Tyr Leu Val Arg Gln Tyr Ile
35 40 45
His Ser Ser Leu Tyr Asp Arg Met Arg Tyr Ala Ser Tyr Ile Leu Ser
50 55 60
Thr Ser Lys Phe Ser Asp Leu Gly Ser Thr Arg Pro Phe Pro Glu Glu
65 70 75 80
Ile Glu Lys Lys Trp Ile Ala Phe Gln Leu Leu Cys Ala Leu Arg Asp
85 90 95
Cys His Ser Leu Asp Val Phe His Gly Asp Ile Lys Thr Glu Asn Ile
100 105 110
Leu Val Thr Ser Trp Asn Trp Leu Tyr Leu Thr Asp Phe Ser Ser Ser
115 120 125
Phe Lys Pro Val Phe Thr Ala Gly Leu Glu Gly Ser Val Gln Ser Glu
130 135 140
Thr
145

<210> 35698
<211> 66
<212> PRT
<213> A.fumigatus

<400> 35698
Cys Asp Phe Ile Arg His Val Pro Ser Ala Val Trp Gly Pro Ile Val
1 5 10 15
Thr Gly Tyr Ala Asp Gln His Ile Gly Lys Leu Cys Pro Arg Ala Met
20 25 30
Ile Thr Ser Lys Ile Leu Met Glu Asp Val Val Ala Lys Gly Phe Lys
35 40 45
Ala Leu Val Asp Glu Arg Gly Lys His Val Lys Ile Leu Val Glu Val
50 55 60
Ser Thr
65

<210> 35699
<211> 128
<212> PRT
<213> A.fumigatus

<400> 35699
Leu Thr Arg Val Arg Gly Ser Ala Val Pro Ser Ser Pro Val Val Lys
1 5 10 15
Thr Val Leu Ala Ala Ser Pro Arg Val Ala Glu Gly Glu Asp Ser His
20 25 30
Ala Gly Pro Val Glu Leu Val Thr Pro Pro Ala Asp Ala Pro Ala Gly
35 40 45
Thr Arg Ile Gly Phe Glu Gly Trp Phe Asp Gly Glu Pro Glu Lys Val
50 55 60
Leu Asn Pro Lys Lys Lys Val Trp Glu Thr Phe Gln Pro Gly Phe Thr

```
65                  70                  75                  80
Thr Thr Asp Ser Leu Glu Val Ala Phe Asp Met Ser Ala Val Pro Ala
                85                  90                  95
Val Gln Gly Gln Glu Gly Lys Pro Ala Leu Gly Lys Leu Val Ala Lys
            100                 105                 110
Thr Gly Gly Val Cys Thr Val Lys Ser Leu Lys Gly Ala Thr Val Arg
        115                 120                 125
```

<210> 35700
<211> 188
<212> PRT
<213> A.fumigatus

<400> 35700

```
Pro Ile Asn Leu Ala Val His Met Gln Pro Leu Phe Lys Pro Leu Thr
1               5                   10                  15
Val Pro Trp His Ala Val Ser Arg Ala Ser Phe Arg Pro Glu Asp Thr
            20                  25                  30
Val Phe Val Val Gly Gly Glu Pro Ile Gly Leu Ala Val Ile Gln Val
        35                  40                  45
Leu Lys Ala Arg Gly Val Lys Ser Ile Ile Val Ser Glu Val Ser Ser
    50                  55                  60
Gln Arg Lys Lys Phe Ala Arg Gln Leu Gly Ala Thr Glu Val Phe Asp
65                  70                  75                  80
Pro Arg Thr Asp Asp Ile Val Ala Ser Val Arg Ala Met Thr Ala Gly
                85                  90                  95
Gly Gly Ala Ala Ile Ala Phe Glu Cys Ser Gly Val Gln Val Gly Leu
            100                 105                 110
Asp Thr Ala Val Gln Ala Ile Gly Ala Arg Gly Thr Val Thr Ile Val
        115                 120                 125
Ser Leu Trp Glu Glu Lys Pro Lys Ile Asp Ala Leu Asp Met Val Leu
    130                 135                 140
His Glu Lys His Ile Ile Gly Ala Val Ile Cys Asp Asp Gly Asp Phe
145                 150                 155                 160
Glu Ala Val Ile Asp Ala Ile Ser Ser Gly Thr Phe Leu Leu Pro Tyr
                165                 170                 175
Gly Ala Arg Leu Leu Leu Val Met Leu Thr Ser Ile
            180                 185
```

<210> 35701
<211> 74
<212> PRT
<213> A.fumigatus

<400> 35701

```
Tyr Asn His Leu Ala Gln Phe Tyr Arg Tyr Ser Ile Phe Ser Leu Ser
1               5                   10                  15
Cys Thr Leu Met Glu Ala Lys Thr Arg Thr Ser Glu Val Lys Ser Thr
            20                  25                  30
Thr Thr Ser Arg Gly Gln Lys Thr Gln Thr Leu Ile Val Tyr Gly Val
        35                  40                  45
Asp Ile Gly Val Leu Arg Gln Val Ala Leu Thr Pro Leu Ser Pro Leu
    50                  55                  60
Ala His Leu Thr Ser Leu Tyr Pro Val Glu
65                  70
```

<210> 35702
<211> 93
<212> PRT
<213> A.fumigatus

<400> 35702
Arg Arg Leu Leu Thr Trp His Ile Asp Leu His Glu Tyr Leu Ala Gly
1 5 10 15
Pro Ile Thr Val Pro Ser Thr Pro His Pro Ile Thr Gly Gly Ser Val
20 25 30
Pro Val Thr Leu Gly His Glu Phe Ser Gly Val Val Glu Glu Val Gly
35 40 45
Ala Gly Val Ser Arg Leu Lys Val Gly Asp Arg Val Ala Val Lys Pro
50 55 60
Asn Leu Tyr Asp Gly Thr Cys Ala Asn Cys Ile Val Gly Arg Arg Asn
65 70 75 80
Cys Cys Gln Asn Leu Gly Phe Ile Gly Tyr Ser Ser Glu
85 90

<210> 35703
<211> 70
<212> PRT
<213> A.fumigatus

<400> 35703
Leu Val Tyr Thr Gln Trp Ser Lys Phe Trp Phe Ser Ser Gln His Leu
1 5 10 15
Gly Phe Val Gln Ile Val Ile Ile Pro Ile Tyr Ser Tyr Cys Ile Asn
20 25 30
Leu Thr Phe Gly Phe Ser Phe Pro Phe Leu Pro Phe Phe Cys Pro Leu
35 40 45
Leu Ser Ile Val Ile Ile Gln Leu Tyr Ile Arg Trp Ser Gly Pro Thr
50 55 60
Thr Ala Leu Ile Ser Tyr
65 70

<210> 35704
<211> 167
<212> PRT
<213> A.fumigatus

<400> 35704
Ser Leu Glu Ser Leu Gly His His Val Leu His Gln Asp Leu Ala Cys
1 5 10 15
Asp His Arg Ser Arg Ala Glu Leu Ser Tyr Met Leu Val Ser Ile Thr
20 25 30
Ser Asn Asn Arg Ala Pro Tyr Gly Arg Arg Asn Val Pro Asp Glu Ile
35 40 45
Ala Ser Met Thr Ala Ser Lys Ser Pro Ser Ser Gln Ile Thr Ala Pro
50 55 60
Met Ile Cys Phe Ser Cys Lys Thr Ile Ser Ser Ala Ser Ile Phe Gly
65 70 75 80
Phe Ser Ser His Ser Asp Thr Met Val Thr Val Pro Leu Ala Pro Ile
85 90 95
Ala Cys Thr Ala Val Ser Lys Pro Thr Cys Thr Pro Glu His Ser Asn
100 105 110

```
Ala Met Ala Ala Pro Pro Pro Ala Val Ile Ala Arg Thr Glu Ala Thr
        115                 120                 125
Ile Ser Ser Val Arg Gly Ser Lys Thr Ser Val Ala Pro Ser Cys Leu
    130                 135                 140
Ala Asn Phe Leu Arg Cys Glu Asp Thr Ser Glu Thr Met Met Asp Leu
145                 150                 155                 160
Thr Pro Arg Ala Phe Arg Thr
                165
```

<210> 35705
<211> 97
<212> PRT
<213> A.fumigatus

<400> 35705

```
Tyr Pro Pro Thr Leu Phe Arg Arg Pro Pro Arg Gly Gly Pro Ala Ile
1               5                  10                  15
Arg Pro Thr Met Leu Pro Val Pro Ile Tyr Pro Lys Ala Ser Pro Arg
            20                  25                  30
Pro Cys Phe Pro Ala Thr Ser Phe Arg Arg Ala Arg Pro Ala Thr Ser
        35                  40                  45
Thr Met Ala Ala Asp Ala Pro Cys Lys Ser Arg Ala Met Met Tyr Ile
    50                  55                  60
Ala Thr Asp Arg Ala Thr Val Lys Arg His Ile Asp Ala Ala Ser Arg
65                  70                  75                  80
Thr Arg Pro Pro Arg Asn Gly Ala Leu Arg Arg Pro Val Arg Ser Thr
                85                  90                  95
Gln
```

<210> 35706
<211> 348
<212> PRT
<213> A.fumigatus

<400> 35706

```
Glu Ala Leu Phe Phe Ile Ser Val Asn Arg Pro Thr Ala Gly Cys Thr
1               5                  10                  15
Leu Lys Tyr Ile Lys Ser Ile Leu Gln Lys Arg Tyr Ser Arg Val Met
            20                  25                  30
Leu Pro Pro Leu Glu Thr Gly Arg Phe Phe Phe Pro Pro Glu Trp His
        35                  40                  45
Pro His Ile Ala Thr Ile Leu Gly Phe Pro Ser Gln Ala Ala Thr Cys
    50                  55                  60
Gly Glu Leu Tyr Leu Gln Asn Cys Arg Glu Ile Val Asp Leu Ala Ala
65                  70                  75                  80
Ala Ile Ala Glu Phe Glu Pro Val Arg Leu Tyr Ala Arg Pro Glu Asp
                85                  90                  95
Val Pro Gly Val Gln Gln Leu Val His Arg Thr Val Asp Asp Pro Ser
            100                 105                 110
Arg Val Thr Val Ile Pro Thr Ser Ile Asn His Cys Trp Val Arg Asp
        115                 120                 125
Thr Gly Pro Val Tyr Val His Asp Ala Ser Gly Glu Leu Asp Pro Lys
    130                 135                 140
Gln Arg Leu Ala Ile Ser Phe Glu Phe Asn Glu Trp Gly Asn Lys Asn
145                 150                 155                 160
```

```
Gly Trp Glu Gly Ile Asp Gly Asp Tyr Arg Tyr Ala Asn Pro Ser Met
                165                 170                 175
Ser Pro Glu Ala Leu Gln Glu Asn Thr Asp Phe Ala Arg Asn Val Ile
            180                 185                 190
Glu Ser Asp Thr Ala Pro Ser Pro Val Gln Val Val Lys Ser Arg Ile
        195                 200                 205
Arg Thr Glu Gly Gly Gly Leu Val Val Asp Gly Glu Gly Thr Leu Ile
    210                 215                 220
Val Ala Glu Ser Tyr Met Val Cys Asp Gln Arg Asn Pro Gly Met Ser
225                 230                 235                 240
Arg Asp Glu Ile Glu Ala Glu Leu Arg Arg Leu Leu Gly Val Glu Lys
                245                 250                 255
Val Ile Trp Val Pro Gly Arg Lys Gly Leu Asp Ile Thr Asp Cys His
            260                 265                 270
Val Asp Ala Glu Val Arg Phe Ile Arg Pro Gly Val Leu Val Trp Ser
        275                 280                 285
Arg His His Pro Ser Val Pro Gln Val Trp Leu Asp Met Ser Gln Glu
    290                 295                 300
Ile Arg Asn Ile Leu Glu Asp Glu Thr Asp Ala Lys Gly Arg Lys Phe
305                 310                 315                 320
Glu Leu His Ala Ile Asp Glu Pro Gly Pro Glu Asp Leu Gly Ile Gln
                325                 330                 335
Glu His Asp Glu Phe Val Ser Gly Leu Arg His Phe
            340                 345

<210> 35707
<211> 242
<212> PRT
<213> A.fumigatus

<400> 35707
His Phe Gln Arg Gln Glu Val Tyr Trp Thr Ser Ile Met Leu Val Ala
1               5                   10                  15
Glu Thr Ala Ala Ala Phe Phe Thr Cys Pro Val Phe Gly Tyr Cys Val
            20                  25                  30
Asp Arg Thr Gly Arg Arg Lys Ala Pro Phe Leu Gly Gly Leu Val Leu
        35                  40                  45
Leu Ala Ala Ser Met Cys Leu Phe Thr Val Ala Arg Ser Val Ala Met
    50                  55                  60
Tyr Ile Ile Ala Arg Leu Leu Gln Gly Ala Ser Ala Ala Met Val Glu
65                  70                  75                  80
Val Ala Gly Leu Ala Leu Leu Lys Asp Val Ala Gly Lys Gln Gly Leu
                85                  90                  95
Gly Glu Ala Leu Gly Tyr Met Gly Thr Gly Ser Met Val Gly Leu Ile
            100                 105                 110
Ala Gly Pro Pro Leu Gly Gly Leu Leu Asn Lys Val Gly Gly Tyr Tyr
        115                 120                 125
Ala Val Cys Ala Leu Gly Phe Ala Ile Val Ala Leu Asp Ala Ala Leu
    130                 135                 140
Arg Leu Ala Val Leu Glu Pro Gly Glu Val Glu Cys Gly Asp Asn Pro
145                 150                 155                 160
Ala Arg Tyr Arg Ala Ile Pro Ser Thr Asp Pro Glu Asp His Asp Val
                165                 170                 175
Ala Ser Glu Gly Asp Thr Thr Asn Ala Pro Ser Gly Ser Asn Val Gln
            180                 185                 190
Arg Asp Asp Ala Phe Ala Ser Leu Lys Leu Leu Lys Gln Pro Arg Val
```

```
        195                 200                 205
Ala Ile Thr Leu Trp Ala Leu Ala Val Asp Gly Ile Ile Ile Gly Ala
    210                 215                 220
Phe Asp Ala Val Gly Ala His Ser Ala Ser Ser Lys Arg Gly Arg Phe
225                 230                 235                 240
Leu Thr
```

<210> 35708
<211> 222
<212> PRT
<213> A.fumigatus

<400> 35708

```
Asn Ile Arg Pro Cys Pro Ala Leu Trp Lys Ser Cys Ser Asp Gly Thr
1               5                  10                  15
Arg Leu Gln Pro Val Trp Ser Phe Ser Ser Trp Arg His Arg Arg Phe
            20                  25                  30
Trp Asn His Cys Leu Val Ser Arg Gln Leu Arg Pro Val Leu Leu Pro
        35                  40                  45
Thr Lys Gly Gln Asn Ala Asn Ser Ser Val Gly Arg Leu Cys Asp Arg
    50                  55                  60
Phe Gly Val Arg Leu Met Ala Val Ile Gly Tyr Ser Leu Leu Thr Pro
65                  70                  75                  80
Ser Leu Val Cys Leu Gln Phe Val Ser His Asp Ser Val Ser Gln Lys
                85                  90                  95
Ile Leu Phe Gly Val Leu Val Ala Phe Cys Gly Ile Ser Pro Asp Leu
            100                 105                 110
Gly Gln Pro Gly Leu Tyr Val Glu Ser Gln Met Val Ile Glu Glu Met
        115                 120                 125
Glu Gln Gln Ser Pro Gly Ile Phe Gly Ala Lys Gly Ala Val Ala Gln
    130                 135                 140
Ala Phe Gly Leu Gln Thr Met Ala Asn Tyr Ala Gly Leu Ala Ile Gly
145                 150                 155                 160
Pro Ile Leu Gly Asp Ala Leu Phe Asp Asn Tyr Gly Trp Lys Ala Val
                165                 170                 175
Ala Trp Ala Leu Gly Ala Leu Ser Ala Ala Thr Val Ile Pro Ser Phe
            180                 185                 190
Trp Leu Ser Ser Arg Thr Tyr Ser His Glu Thr Glu Glu Thr Glu Glu
        195                 200                 205
Glu Asp Leu Thr Val Ala Ala Gly Val Pro Tyr Gly Thr Ile
    210                 215                 220
```

<210> 35709
<211> 142
<212> PRT
<213> A.fumigatus

<400> 35709

```
Ser Cys Gly Val Phe Ala Asp Glu Ile Gln Asn Tyr Tyr Cys Ala Tyr
1               5                  10                  15
Val Gly Ala Phe Gly Glu Phe Ser Cys Asn Pro Arg Thr Leu Gly Ser
            20                  25                  30
Thr His Leu Asn Arg Met Ile Ser Leu Glu Gly Ile Val Thr Lys Cys
        35                  40                  45
Ser Leu Val Arg Pro Lys Ile Ile Gln Ser Val His Tyr Asn Glu Arg
```

```
    50                  55                  60
Lys Asp Arg Phe Val Ala Arg Arg Tyr Arg Asp Gln Thr Met Thr Thr
65                  70                  75                  80
Thr Gly Ile Thr Asn Met Asn Val Tyr Pro Gln Glu Asp Asp Glu Lys
                85                  90                  95
Asn Pro Val Cys Asp Arg Arg Lys Ser Leu Tyr Trp Thr Gly Ile Ala
            100                 105                 110
Asp Ser Phe Val Phe Val Phe Leu Val Asp His Arg Val Arg Ile Leu
        115                 120                 125
Asp Ile Pro Gly Ser Pro Asn His Phe Tyr Pro Arg Asn Ala
    130                 135                 140
```

<210> 35710
<211> 212
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (56),(62),(82),(89)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35710

```
Gly Lys Phe Leu Met Met Asn Ala Ala Arg Gly Glu Arg Ser Arg Arg
1               5                   10                  15
Ser Thr Lys Thr Leu Asn Pro Ala Asn Arg Thr Pro Arg Met Asp Asn
            20                  25                  30
Thr Ser Ala Asn Thr Thr Ala Thr Pro Arg Ser Ser Arg Arg Ser Gly
        35                  40                  45
Thr Met Arg Thr Arg Ser Ala Xaa Thr Arg Ser Thr Asn Xaa Asp Glu
    50                  55                  60
Met Asp Ala Asp Gly Asp Val Val Ser Glu Asp Gly Asp Gly Leu Tyr
65                  70                  75                  80
Phe Xaa Ser Leu Arg Gly Gln Arg Xaa Arg Ser Ser Gln Thr Ser Arg
                85                  90                  95
Thr Gln Thr Gln Thr Asp Ser Gln Ser Arg Met Ser Val Ala Ser Ser
            100                 105                 110
Gln Pro Ala Ser Gln Leu Ile Gln Ser Gln Thr Asp Asp Ser Gln Ser
        115                 120                 125
Gln Asn Ala Met Ser Ser Thr Ser Ser Ser Gln Pro Ile Gln Pro Ala
    130                 135                 140
Arg Leu Thr Val Phe Arg Gln Ala Leu Gly Pro Leu Met Gly Thr Arg
145                 150                 155                 160
Leu Phe Thr His Gly Asp Thr Ala Asp Val Glu Glu Leu Ile Gly Ala
                165                 170                 175
Val Asn Thr Ala Val Arg Glu Ser Pro Ser Leu Gly Ala Gly His Val
            180                 185                 190
Phe Gln Arg Ala Glu Ala Ile Glu Ala Leu Lys Ala Met Asn Glu Arg
        195                 200                 205
Asn Glu Leu Met
    210
```

<210> 35711
<211> 482
<212> PRT
<213> A.fumigatus

<400> 35711

```
Leu Ile Thr Glu Tyr Gly Tyr Ser Thr Tyr Leu Asp His Gln Thr Ile
1               5                  10                  15
Ser Ile Gln Glu Met Pro Glu Arg Ala Pro Ala Gly Gln Leu Pro Arg
            20                  25                  30
Ser Val Asp Val Ile Leu Asp Asp Asp Leu Val Asp Ser Ala Lys Pro
        35                  40                  45
Gly Asp Arg Ile Gln Leu Val Gly Ile Tyr Arg Ser Leu Gly Asn Arg
    50                  55                  60
Asn Ala Ser Ser Gly Ser Ser Thr Phe Arg Thr Val Val Met Ala Asn
65                  70                  75                  80
Asn Ile Ile Gln Leu Ser Ser Lys Ser Gly Gly Gly Ile Ala Gln Ala
                85                  90                  95
Thr Ile Thr Asp Thr Asp Ile Arg Asn Ile Asn Lys Val Ala Lys Lys
            100                 105                 110
Lys Asn Val Phe Glu Leu Leu Ala Asn Ser Leu Ala Pro Ser Ile Tyr
        115                 120                 125
Gly His Asp Tyr Ile Lys Lys Ala Ile Leu Leu Met Leu Leu Gly Gly
    130                 135                 140
Met Glu Lys Asn Leu Asp Asn Gly Thr His Leu Arg Gly Asp Ile Asn
145                 150                 155                 160
Ile Leu Met Val Gly Asp Pro Ser Thr Ala Lys Ser Gln Leu Leu Arg
                165                 170                 175
Phe Val Leu Asn Thr Ala Pro Leu Ala Ile Ala Thr Thr Gly Arg Gly
            180                 185                 190
Ser Ser Gly Val Gly Leu Thr Ala Ala Val Thr Ser Asp Lys Glu Thr
        195                 200                 205
Gly Glu Arg Arg Leu Glu Ala Gly Ala Met Val Leu Gly Asp Arg Gly
    210                 215                 220
Val Val Cys Ile Asp Glu Phe Asp Lys Met Ser Asp Val Asp Arg Val
225                 230                 235                 240
Ala Ile His Glu Val Met Glu Gln Gln Thr Val Thr Ile Ala Lys Ala
                245                 250                 255
Gly Ile His Thr Ser Leu Asn Ala Arg Cys Ser Val Leu Ala Ala Ala
            260                 265                 270
Asn Pro Ile Tyr Gly Gln Tyr Asp Pro His Lys Asp Pro His Lys Asn
        275                 280                 285
Ile Ala Leu Pro Asp Ser Leu Leu Ser Arg Phe Asp Leu Leu Phe Val
    290                 295                 300
Val Thr Asp Asp Ile Glu Asp Ala Arg Asp Arg Met Val Ser Glu His
305                 310                 315                 320
Val Leu Arg Met His Arg Tyr Arg Gln Pro Gly Thr Glu Glu Gly Ala
                325                 330                 335
Pro Val Arg Glu Asp Leu Asn Gln Thr Leu Gly Val Gly Leu Glu Asp
            340                 345                 350
Asn Gln Asp Ser Asn Gln Pro Thr Glu Val Tyr Glu Lys Phe Asn Val
        355                 360                 365
Met Leu His Ala Gly Met Ala Asn Ser Ser Arg Lys Gly Lys Gly Ile
    370                 375                 380
Glu Ile Leu Ser Ile Pro Phe Ile Lys Lys Tyr Ile Gln Tyr Ser Lys
385                 390                 395                 400
Ser Arg Ile Lys Pro Val Leu Thr Lys Gly Ala Ala Asp His Ile Val
                405                 410                 415
Ala Thr Tyr Ser Ala Leu Arg Asn Asp Glu Leu Ser Gly Asn Gln Arg
            420                 425                 430
```

```
Arg Thr Ser Pro Ile Thr Ala Arg Thr Leu Glu Thr Leu Ile Arg Leu
        435                 440                 445
Ser Thr Ala His Ala Lys Ala Arg Leu Ser Asn Arg Val Glu Glu Arg
    450                 455                 460
Asp Ala Asn Val Ala Glu Ser Ile Leu Arg Phe Ala Met Phe Lys Glu
465                 470                 475                 480
Ser Ser
```

<210> 35712
<211> 573
<212> PRT
<213> A.fumigatus

<400> 35712

```
Gly Ser Phe Ser Leu Glu Phe Val Ile Ser Pro Asp Cys Thr Glu Asn
1               5                  10                  15
Glu Ala Trp Lys Thr Arg Gln Pro Lys Asn Ile Asn Lys Pro Cys Phe
            20                  25                  30
Ala Ala Asn Ser Arg Ser Phe Ser Thr His Ser Arg His Ile Phe Thr
        35                  40                  45
Lys Pro Pro Phe Tyr Thr Asp Ser Arg Cys Ile Tyr Leu Val Arg Met
    50                  55                  60
Ala Ala Cys Phe Val Tyr Ala Leu Ala Phe Gly Leu Phe Leu Pro Ile
65                  70                  75                  80
Ser Ser Thr Thr Ala Thr Ser Thr Arg Ala Ser Thr Thr Val Gln Pro
                85                  90                  95
Leu Asp Thr Val Pro Val Asp Phe Arg Pro Val Tyr His Phe Val Pro
            100                 105                 110
Glu Gln Asn Trp Met Asn Glu Pro Asn Gly Leu Ile Lys Ile Gly Ser
        115                 120                 125
Thr Trp His Leu Phe Phe Gln His Asn Pro Thr Gly Asn Phe Trp Gly
    130                 135                 140
Asn Leu Ser Trp Gly His Ala Thr Ser Thr Asp Leu Val Ser Trp Thr
145                 150                 155                 160
His Gln Pro Ile Ala Ile Ser Ser Gly Asp Gly Ile Gln Ala Phe Thr
                165                 170                 175
Gly Thr Ala Tyr Phe Asp Ser Glu Asn Leu Ser Gly Leu Gly Ser Pro
            180                 185                 190
Ser Asn Ala Pro Tyr Leu Ala Phe Tyr Thr Gly Tyr Phe Pro Ser Thr
        195                 200                 205
Gly Val Gln Asp Gln Arg Leu Ala Tyr Ser Leu Asp His Gly Thr Thr
    210                 215                 220
Trp Ile Lys Tyr Ala Gly Asn Pro Ile Ile Ser Lys Thr Gln Glu Glu
225                 230                 235                 240
Pro His Asp Ile Thr Lys Gly Leu Glu Thr Arg Asp Pro Lys Val Phe
                245                 250                 255
Tyr His Thr Pro Ser Gly Arg Trp Val Met Ile Leu Ala His Gly Gly
            260                 265                 270
Gln Asn Lys Val Thr Phe Trp Thr Ser Ser Asp Ala Glu Ser Trp Thr
        275                 280                 285
Trp Arg Ser Asp Phe Asn Ala Asn Ser Ile Pro Asn Leu Pro Gly Gly
    290                 295                 300
Ile Asn Gly Trp Glu Val Pro Asp Phe Phe Glu Leu Ala Ile Lys Gly
305                 310                 315                 320
Thr Thr Gln Lys Lys Trp Val Met Ile Ile Thr Pro Ala Thr Gly Ser
```

```
                325                 330                 335
Pro Ala Gly Gly Asn Gly Val Phe Ala Val Val Gly Ser Phe Asp Gly
            340                 345                 350
Ala Val Phe Thr Ala Asp Pro Val Asp Pro Ile Ala Phe Trp Leu Asp
        355                 360                 365
Tyr Gly Arg Asp Phe Asp Gly Ala Leu Ser Trp Glu Asn Val Pro Ala
    370                 375                 380
Ser Asp Gly Arg Arg Ile Leu Ala Ser Val Met Asn Ser Tyr Gly Gly
385                 390                 395                 400
Asn Pro Pro Thr Asn Thr Trp Lys Gly Met Leu Ser Phe Pro Arg Thr
                405                 410                 415
Leu Glu Leu Gln Gln Phe Asn Ser Lys Leu Arg Phe Leu Gln Leu Pro
            420                 425                 430
Val Ala Glu Leu Ser Ala Tyr Thr Trp Leu Ile Ala Asn Ile Thr Asn
        435                 440                 445
Gln Thr Ile Ala Pro Gly Gln Thr Leu Leu Ser Asp Ile His Ser Arg
    450                 455                 460
Thr Leu Asp Ile Glu Met Ser Phe Thr Pro Ser Pro Gly Ala Thr Leu
465                 470                 475                 480
Ser Leu Ser Val Arg Lys Gly Gly Ser Gln Gln Thr Phe Ile Arg Tyr
                485                 490                 495
Ala Glu Ser Ala Gln Gln Leu Ser Val Asp Arg Asn Ala Ser Gly Asn
            500                 505                 510
Ile Ser Tyr Asp Pro Ala Ala Ala Gly Val His Thr Ala Thr Val Gln
        515                 520                 525
Pro Asp Ala Ser Gly Glu Met His Leu Arg Val Leu Val Asp Thr Cys
    530                 535                 540
Ser Leu Glu Val Phe Gly Gly Gln Gly Glu Ala Val Ile Ser Asn Leu
545                 550                 555                 560
Ile Phe Arg Leu His Ala Ala Ala Gly Asn Ile Thr Ser
                565                 570
```

<210> 35713
<211> 455
<212> PRT
<213> A.fumigatus

<400> 35713

```
Ile Gly Ser Arg Arg Leu Ser Tyr Ile Leu Tyr Leu Thr Asp Pro Asp
1               5                   10                  15
Thr Pro Trp Gln Ser Glu Trp Gly Gly Ala Leu Arg Leu Tyr Pro Thr
            20                  25                  30
Thr Thr Lys Lys Asp Ile Asn Gly Glu Asp Val Leu Val Pro Ser Pro
        35                  40                  45
Asp Phe Ser Leu Ser Ile Pro Pro Ala Phe Asn Gln Leu Ser Phe Phe
    50                  55                  60
Thr Val Gln Pro Gly Glu Ser Phe His Asp Val Glu Glu Val Tyr His
65                  70                  75                  80
Pro Lys Glu Gly Glu Asp Lys Ser Ala Lys Arg Val Arg Met Ala Ile
                85                  90                  95
Ser Gly Trp Phe His Ile Pro Gln Lys Gly Glu Asp Gly Tyr Glu Glu
            100                 105                 110
Gly Leu Glu Glu Lys Leu Ala Glu Arg Ser Ser Leu Ala Gln Leu Gln
        115                 120                 125
Gly Arg Gly Asp Ile Tyr Asp Leu Pro Gln Ala Lys Pro Val Val Cys
    130                 135                 140
```

```
Glu Lys Glu Pro Glu Ile Lys Gly Lys Gly Lys Ala Lys Met Glu Glu
145                 150                 155                 160
Glu Pro Ser Ser Glu Phe Ser Glu Ser Asp Leu Asn Phe Leu Leu Gln
                165                 170                 175
Tyr Ile Ala Pro Ser Tyr Leu Thr Pro Asp Ile Ala Glu Glu Met Ser
            180                 185                 190
Asp Thr Phe Ser Asn Glu Ser Ser Leu Asn Leu Asp Arg Phe Leu Ser
        195                 200                 205
Asp Lys Phe Ala Ala Arg Val Arg Ala Tyr Ile Glu Glu Gln Glu Lys
    210                 215                 220
Gln Glu Leu Pro Lys Ser Ser Asp Glu Ile Gln Ala Lys Thr Glu Trp
225                 230                 235                 240
Thr Val Ala Arg Pro Pro His Lys Gln Arg Tyr Leu Phe Gln Gln His
                245                 250                 255
Gly Thr Ala Thr Ser Asp Gln Lys Thr Pro Ile Gln Glu Leu Leu Asn
            260                 265                 270
Asp Leu Phe Pro Ser Leu Ala Phe Arg Lys Trp Leu Ala Leu Ile Thr
        275                 280                 285
Gly Ala Glu His Ile Thr Ser Tyr Asp Leu Leu Ala Arg Arg Phe Arg
    290                 295                 300
Arg Gly Gln Asp Tyr Thr Leu Ala Ser Gly Tyr Asp Gly Glu Glu Pro
305                 310                 315                 320
Arg Leu Glu Phe Thr Leu Gly Leu Thr Pro Thr Pro Gly Trp Glu Lys
                325                 330                 335
Glu Thr Asp Glu Asp Glu Glu Met Glu Asp Glu Asp Gly Glu Ala Gln
            340                 345                 350
Glu Lys Phe Lys Lys Glu Thr Ala Ser Ala Asp Glu Pro Ala Val Gly
        355                 360                 365
Gly Tyr Glu Ile Tyr Met Ala Gly Asp Asp Gly Asp Asp Gly Asp Ala
    370                 375                 380
Ala Ile Tyr Lys Ser Ala Ala Ala Asp Glu Asp Asp Gly Ile Leu Phe
385                 390                 395                 400
Ser Thr Ala Ala Gly Trp Asn Arg Leu Ser Ile Val Leu Arg Asp Ser
                405                 410                 415
Gly Thr Leu Lys Phe Val Lys Tyr Val Ser Ala Ala Ala Asn Gly Asp
            420                 425                 430
Arg Trp Asp Ile Thr Gly Glu Met Gly Val Asp Phe Gly Asp Asp Glu
        435                 440                 445
Asp Asp Glu Asp Asp Asp Glu
    450                 455
```

<210> 35714
<211> 180
<212> PRT
<213> A.fumigatus

<400> 35714

```
Ser Ser His Pro Arg Gly Glu Asp Leu Tyr Arg Glu Ala His Gly Val
1               5                   10                  15
Gly Ala Ser Val Pro Phe Pro Gly Thr Arg Gln Gly Tyr Tyr Ser Thr
            20                  25                  30
His Ser Asp Thr Leu Gln Asp Ile Val Ser Gln Leu Glu Ile Tyr Val
        35                  40                  45
Ala Leu His Arg Glu Lys Cys Val Asn Gly Ser Ser Phe Asn Ala Ala
    50                  55                  60
Asp Gly Gln Thr Val Ser Trp Ala Gln Val Trp Pro Gly Leu Cys Ala
```

65 70 75 80
Tyr Phe Gly Leu Val Gly Cys Glu Pro Gln Thr Ser Pro Gln Thr Ser
85 90 95
Met Glu Asp Phe Val Asn Gly His Met Asp Leu Trp Lys Arg Leu Ala
100 105 110
Glu Val His Glu Leu Lys Ser Asp Thr Val Glu Asn Gln Asn Trp Gly
115 120 125
His Thr His Phe Met Leu Val Asp Phe Asp Phe Asn Arg Glu Tyr Ser
130 135 140
Leu Glu Lys Val Arg Ser Ile Gly Phe Met Glu Arg Ile Asp Thr Val
145 150 155 160
Glu Gly Tyr Lys Thr Val Phe Asp Arg Met Val Thr Ala Lys Leu Ile
165 170 175
Pro Ser Phe Arg
180

<210> 35715
<211> 73
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (27)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35715
Leu Asn Arg Ser Ser Leu Leu Phe Ser Arg Thr Tyr Trp Pro Arg Phe
1 5 10 15
Ala Gly Arg Gly Leu Leu Ala Val Arg Ser Xaa Leu Leu Trp Val Gly
20 25 30
Tyr Phe Asn Ser Arg Ser Asn Gln Ser Lys His Tyr Leu Lys Ala Gly
35 40 45
Tyr Trp Lys Thr Pro Ala Tyr Tyr Val Ser Leu Leu Lys Lys Arg Thr
50 55 60
Asn Gly Val Asp Gly Leu Pro Lys Leu
65 70

<210> 35716
<211> 86
<212> PRT
<213> A.fumigatus

<400> 35716
Pro Trp Trp Ala Thr Ala Glu Lys Trp Gly Tyr Tyr Ile Pro Asp Thr
1 5 10 15
Lys Glu Ser Gly Arg Asn Glu Asn Gly Gly Gly Ser Lys Gly Glu Ala
20 25 30
Leu Ala Asp Leu Asn Trp Leu Ser Ala Gly Ile Val Val Lys Thr Met
35 40 45
Ala Ala His Ala Tyr Ile Ile Pro Leu Ala Ala Cys Thr Leu Pro Phe
50 55 60
Phe Ser Leu Gln Gly Gly Tyr Leu Ile Ala Glu Asp Phe Thr Thr Ser
65 70 75 80
Glu Val His Gln Arg His
85

<210> 35717
<211> 990
<212> PRT
<213> A.fumigatus

<400> 35717
Ser Gln Asp Ser Pro Ala Asp Ala Asp Asn Gln Ala Lys Glu Leu Pro
1 5 10 15
His Pro Glu Glu Glu Phe Gln Ala Glu Ala Thr His Ala Gln Glu Leu
20 25 30
Pro Glu Asp Thr Glu Ile Ile Asn Lys Thr Asp Asp Leu Ser Ser Gly
35 40 45
Ile Asp Pro Ser Gly Gln Ala Gly Gly Asp Met Val Asn Glu Ala Ala
50 55 60
Ser Pro Glu Val Trp His Asp Ala Leu Ala Ser Ser Pro Glu Asp Lys
65 70 75 80
Asn Gly Glu Ala Glu Gln Ala Asp Leu Lys Ser Asn Glu Pro Gln Asn
85 90 95
Glu Gly Lys Ala Pro Val Ser Glu Leu Pro Ala Leu Asp Lys Glu Leu
100 105 110
Ser Glu Ile Ser Glu Arg Pro Ala Glu Val Asp Ala Pro Ala Asp Thr
115 120 125
Pro Leu Val Asp Ser Pro Ser Thr Asp Gln Val Glu Ala Ala Asp Ser
130 135 140
Gly Val Gln Asn Glu Glu Pro Thr Pro Thr Ala Ala Glu Leu Glu Thr
145 150 155 160
Pro Leu Ser Arg Lys Asn Ser Lys Lys Asn Lys Lys Lys Asn Lys Arg
165 170 175
Lys Asn Thr Ala Glu Thr Pro Val Gln Asn Glu Ala Val His Thr Ala
180 185 190
Asp Pro Ile Ser Ser Ile Glu Gly Val Pro Glu Pro Gly Pro Glu Ala
195 200 205
Thr Thr Thr Ala Val Glu Glu Pro Gln Val Thr Leu Pro Asp Glu Ala
210 215 220
Val Asp Glu Asn Lys Gly Glu Ser Arg Asp Val Gln Ala Val Lys Glu
225 230 235 240
Glu Thr Ser Pro Glu Asn Ala Ala Glu Val Ala Asn Asp Ser Gln Pro
245 250 255
Ser Thr Phe Glu Glu Ile His Leu Ala Gly Ala Glu Gln Ser Ala Pro
260 265 270
Asp Ala Ile Ala Glu Ile Met Gly Glu Ser Gln Pro Ala Glu Pro Gln
275 280 285
Asp Val Leu Ala Thr Ala Pro Glu Glu Pro Ile Asp Gly Gln Pro Lys
290 295 300
Lys Lys Ala Lys Lys Lys Lys Asn Arg Lys Thr Ala Asn Val Ser Glu
305 310 315 320
Ser Gln Pro Glu Ser Glu Ala Glu Ala Lys Thr Glu Lys Leu Gln Ser
325 330 335
Ala Glu Leu Ala Glu Asn Pro Gln Pro His Ile Arg Asp Glu Val Ala
340 345 350
Gly Asp Ser Gln Val Pro Pro Glu Ser Gly Ala Ser Glu Ala Pro Ala
355 360 365
Gly Ile Glu Asp Val Thr Pro Ile Ser Ala Ala Glu Ala Val Glu Phe
370 375 380
Asp Leu Pro Val Glu Lys Asp Glu Thr Asn Gly Gly Glu Pro His Val

385 390 395 400
Ser Glu Leu Asn Lys Gln Leu Asn Asn Glu Thr Val Pro Gly Pro Glu
405 410 415
Thr Gly Ser Glu Pro Val Pro Glu Ala Gly Glu Ile Thr Gln Ser Gly
420 425 430
Lys Lys Ser Lys Lys Asn Lys Lys Lys Lys Gln Ser Leu Ser Leu Ala
435 440 445
Pro Asp Glu Thr Pro Ala Ser Asp Pro Ser Thr Pro Ala Gly Thr Ala
450 455 460
Asp Gly Asn Ala Asp Leu Pro Ala Ala Pro Glu Asp Ser Leu Lys Thr
465 470 475 480
Asp Gln Glu Pro Met Pro Glu Glu Pro Thr Val Ser Gln Pro Ile Val
485 490 495
Asp Leu Val Ala Glu Thr Leu Asn Leu Ser Met Ala Glu Glu Ala Val
500 505 510
Pro Met Thr Ala Ala Gln Lys Lys Thr Lys Lys Glu Lys Lys Lys Lys
515 520 525
Arg Gln Ser Ala Leu Leu Asp Glu Pro Thr Ala Thr Glu Ser Ile Glu
530 535 540
Glu Ala Asn Ala Lys Asp Val Thr Ser Glu Gly Thr Gln Met Pro Leu
545 550 555 560
Glu Val Pro Ser Glu Pro Gln Ser Ser Gly Pro Thr Leu Asp Ala Ile
565 570 575
Glu His Ala Glu Ala Ala Ala Glu His Ser Gln Glu Gln Pro Asn Lys
580 585 590
Asp Val Thr Leu His Ala Asp His Ser Pro Asn Ser Asp Gly Glu Phe
595 600 605
Val Leu Val Pro Glu His Val Pro Tyr Gly Ser Asn Asp Glu His Lys
610 615 620
Thr Gln Pro Gly Ser Met Glu Leu Asp Val Thr Gln Val Asn Thr Glu
625 630 635 640
Leu Glu Lys Glu Pro Ser Thr Gln Glu Gly Val Leu Glu Ala Asn Glu
645 650 655
Ala Thr Pro Ala Glu Thr Pro Ser Ala Ala Asp Gln His Val Gln Glu
660 665 670
Glu Ser Ser Pro Thr Pro Ala Met Glu Gly Gly Ala Ala Ala Glu Glu
675 680 685
Leu Val Ala Val Glu Pro Asp Val Leu Glu Gly Ser Gln Asp Lys Ile
690 695 700
Thr Glu Asp Asn Asp Thr Pro Asp Asp Ser Leu Thr Ala Lys Glu Pro
705 710 715 720
Gln Thr Glu Leu Val Asn Ala Glu Thr Thr Gln Lys Thr Glu Gln Gly
725 730 735
Asp Val Val Leu Asp Val Glu Ala Gly Ser Glu Gly Leu Val Arg Asp
740 745 750
Asp Gln Pro Val Ala Pro Ser Lys Lys Lys Asp Lys Lys Lys Lys Lys
755 760 765
Lys Arg Gln Ser Leu Thr Ile Asp Asp Glu Gln Arg Ser Ser Thr Lys
770 775 780
Glu Glu Pro Thr Ala Glu Phe Ser Ser Asp His Val Pro Glu Pro Ser
785 790 795 800
Ala Val Asp Glu Ser Ala Thr Thr Pro Ser Ala Ser Glu Glu Gln Gln
805 810 815
Lys Pro Glu Thr Asp Ile Thr Glu Thr Val Thr Gln Thr Ala Ala Glu
820 825 830
Pro Thr Pro Ser Ser Ala Ser Glu Glu Pro Glu Asn Ile Ala Glu Ala

```
        835                 840                 845
Pro Ser Asn Glu Ser Thr Gln Glu Pro Ala Ala Glu Glu Ala Gln Thr
    850                 855                 860
Ala Lys Ser Lys Lys Lys Ala Lys Lys Asp Lys Lys Lys Arg Lys Ser
865                 870                 875                 880
Val Ser Phe Glu Ile Gly Glu Pro Leu Thr Gln Gln Ser Glu Pro Gly
                885                 890                 895
His Pro Thr Ala Thr Pro Gly Glu Thr Val Thr Pro His Glu Asp Pro
            900                 905                 910
Lys Pro Gly Asp Lys Pro Thr Ser Pro Lys Asp Ser Ser Glu Glu Phe
        915                 920                 925
Gln Ser Gly Glu Ala Val Pro Glu Ser Pro Gln Asp Ser Ala Gly Ile
    930                 935                 940
Val Thr Gln Pro Glu Gln Pro Glu Pro Thr Ala Glu Ala Thr Val Val
945                 950                 955                 960
Thr Glu Gln His Lys Gln Val Thr Glu Pro Ser Leu Val Ser Ile Asn
                965                 970                 975
Glu Glu Ser His Gln Ala Gly Arg Arg Ser Glu Gln Cys Ala
            980                 985                 990
```

<210> 35718
<211> 562
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (25),(36),(39)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35718

```
Glu Glu Arg Asn Ser Gly Gly Glu Ala Val Ser Val Arg Leu Pro Ala
1               5                   10                  15
Ser Asn Ser Ser Ser Ser Ala Pro Xaa Thr Gly Ala Ile Thr Thr Gly
            20                  25                  30
Asn Asn Ser Xaa Ala Thr Xaa Val Gly Pro Leu Val Ser Lys Ala Pro
        35                  40                  45
Gly Met Thr Ser Ile Leu Gln Asp Trp His Ile Glu Phe Ser Val Asp
    50                  55                  60
Asp Lys Pro Val Ser Ser Asp Thr Thr Ile Tyr Arg Ala Val His His
65                  70                  75                  80
Asn Arg Glu His Ala Asp Ala Gly Ser Arg Asn Val Trp Ser Ala Ile
                85                  90                  95
His Thr Val Lys Phe Arg Arg Val Pro Gly Pro Pro Pro Pro Glu Pro
            100                 105                 110
Ser Thr Val Ala Pro His Leu Glu Glu Glu Leu Ser Gly Asn Gly Ala
        115                 120                 125
Glu Met Pro Ser Ser Leu Ser Lys Asp Ser Ile Thr Ala Pro Ile Leu
    130                 135                 140
Arg Leu Leu Arg Ser Leu His Glu Met Asn Val Thr Leu Asp Asp Ile
145                 150                 155                 160
Leu Ala Asp Thr Lys Glu Leu Val Ala Leu Lys Pro Glu Pro Leu Ala
                165                 170                 175
Gln Phe Ile Asn Thr Lys Leu Thr Ala Lys Leu Asn Arg Gln Leu Glu
            180                 185                 190
Glu Pro Leu Ile Val Ala Ser Ser Cys Leu Pro Ser Trp Ser Glu Asp
```

```
        195                 200                 205
Leu Ala Arg Leu Phe Pro Phe Leu Phe Pro Phe Glu Thr Arg His Leu
    210                 215                 220
Phe Leu Gln Ser Thr Ala Phe Gly Tyr Ala Arg Ala Met Met Arg Trp
225                 230                 235                 240
Gln Asn Ser Gln Asn Ala Asp Asp Ser Arg Ser Asp His Arg Arg Asp
                245                 250                 255
Asp Arg Pro Phe Leu Gly Arg Leu Gln Arg Gln Lys Val Arg Ile Ser
            260                 265                 270
Arg Ser Arg Ile Leu Glu Ser Ala Met Lys Val Met Glu Leu Tyr Gly
        275                 280                 285
Ser Ser Pro Ser Val Leu Glu Val Glu Tyr Phe Glu Glu Val Gly Thr
    290                 295                 300
Gly Leu Gly Pro Thr Leu Glu Phe Tyr Ser Thr Val Ser Lys Glu Phe
305                 310                 315                 320
Ser Lys Lys Lys Leu Lys Ile Trp Arg Glu Asn Asp Cys His Asn Asp
                325                 330                 335
Glu Glu Phe Ala Phe Gly Lys Arg Gly Leu Phe Pro Ala Pro Met Ser
            340                 345                 350
Glu Glu Gln Ala Asn Ser Glu Ser Gly Lys Lys Gln Leu Ser Leu Phe
        355                 360                 365
Lys Thr Leu Gly Lys Phe Val Ala Arg Ser Met Leu Asp Ser Arg Ile
    370                 375                 380
Ile Asp Ile Ser Phe Asn Pro Ala Phe Phe Arg Ile Ala Asp Ser Ser
385                 390                 395                 400
Ser Ser Val Ala Pro Ser Leu Gly Thr Val Lys Ala Val Asp Gln Asp
                405                 410                 415
Leu Ala Asn Ser Leu Met Leu Leu Lys Arg Phe Ala Asn Ala Lys Arg
            420                 425                 430
Ala Ile Asp Arg Asp Arg Thr Leu Ser Ala Ala Ala Lys Ser Gln Ala
        435                 440                 445
Leu Gln Asn Val Glu Ile Asp Gly Val Arg Val Glu Asp Leu Ser Leu
    450                 455                 460
Asp Phe Thr Leu Pro Gly Tyr Pro Ser Ile Glu Leu Ile Asp Asn Gly
465                 470                 475                 480
Ser Asn Val Pro Val Thr Ile Glu Asn Val Asp Thr Tyr Val Asp Arg
                485                 490                 495
Val Val Asp Met Thr Leu Gly Ser Gly Val Gln Arg Gln Val Glu Ala
            500                 505                 510
Phe Arg Thr Gly Phe Ser Gln Val Phe Pro Tyr Ser Ala Leu Arg Thr
        515                 520                 525
Phe Thr Pro Asn Glu Leu Val Met Leu Phe Gly Arg Ala Glu Glu Asp
    530                 535                 540
Trp Thr Ile Glu Ser Gln Leu Pro Ser Ile Phe Asp Asn Arg Glu Ala
545                 550                 555                 560
Val His
```

<210> 35719
<211> 126
<212> PRT
<213> A.fumigatus

<400> 35719

```
His Trp Val Ala Ala Cys Asn Val Lys Trp Lys Arg Ser Gly Leu Gly
1               5                   10                  15
```

```
Ser Arg Arg Ser Ser Arg Thr Leu Arg Phe Gly Leu Ser Pro Pro Thr
            20                  25                  30
Ser Ser Ser Cys Phe Ser Glu Glu Leu Lys Lys Ile Gly Leu Leu Arg
        35                  40                  45
Val Ser Tyr Leu Pro Tyr Leu Ile Thr Glu Lys Leu Phe Thr Asn Ile
    50                  55                  60
Met Ala Leu Ala Leu Met Asp Ser Ile Lys Ala Asp His Gly Phe Asn
65                  70                  75                  80
Met Asp Ser Lys Ser Val Arg Asn Leu Leu Gln Thr Met Ser Glu Leu
                85                  90                  95
Asp Thr Gln Gln Arg Arg Asp Phe Leu Gln Phe Val Thr Gly Ser Pro
            100                 105                 110
Lys Leu Pro Ile Gly Gly Lys His His Leu Leu Ser Leu Phe
        115                 120                 125
```

<210> 35720
<211> 71
<212> PRT
<213> A.fumigatus

```
<400> 35720
Leu Ser Ile Leu Leu Leu Gly Phe Lys Ser Leu Thr Pro Thr Phe Thr
1               5                   10                  15
Val Val Cys Arg Pro Ser Glu Pro Pro Tyr Thr Pro Asp Asp Tyr Leu
            20                  25                  30
Pro Ser Val Met Thr Cys Val Asn Tyr Leu Lys Leu Pro Asp Tyr Ser
        35                  40                  45
Ser Leu Glu Val Leu Arg Glu Arg Leu Ser Val Ala Ile Arg Glu Gly
    50                  55                  60
Gln Gly Ala Phe His Leu Ser
65                  70
```

<210> 35721
<211> 66
<212> PRT
<213> A.fumigatus

```
<400> 35721
Ser Gln Arg Arg Gln Arg Arg Ser Asn Arg Asn Asn Tyr Ser Arg Trp
1               5                   10                  15
Ser Ser Arg Glu Tyr Ile Ala Lys Gly Tyr Asp Ala Val Thr Arg Tyr
            20                  25                  30
Arg Thr Asn Met Gln Thr Glu Asn Ala Val Leu Ser Ser Phe Phe Leu
        35                  40                  45
Phe Leu Phe Met Ile Arg Gln Leu Leu His Lys Phe Phe Leu His Phe
    50                  55                  60
Arg Leu
65
```

<210> 35722
<211> 104
<212> PRT
<213> A.fumigatus

```
<400> 35722
Thr Ile Tyr Glu Ser Ile Ser Val Met His Asp Ser Ile Ile Tyr Ser
```

```
1               5                   10                  15
Leu Val Phe Ser Pro Tyr Phe Lys Asn Ala Leu Gln Val Gln Leu Ile
            20                  25                  30
Ser Met Thr Pro Ser Ser Leu Ser His Lys Gln Arg Thr Val Ser Val
        35                  40                  45
Cys Ser Pro Leu Gln Lys Leu Ile Gly Ala His His His Asn Val Ser
    50                  55                  60
Pro Asn Leu His Val Pro Ser Leu Tyr Thr Arg Arg Thr Glu His Ile
65                  70                  75                  80
Phe Ser Pro Leu Leu Ser Arg Gln Thr Asp Thr Lys Asn Gln Thr Leu
                85                  90                  95
Gly Met Pro Ile Phe Leu Ser Lys
            100
```

<210> 35723
<211> 282
<212> PRT
<213> A.fumigatus

<400> 35723

```
Leu Lys Thr Ala Met Ser Trp Leu Ala Arg Pro Phe Arg Cys Leu Ser
1               5                   10                  15
Arg Val Asn Pro Ala Thr Arg Leu Val Ala Pro Val Ser Thr Cys Arg
            20                  25                  30
Ser Ser Gln Arg Cys Ile Gln Gly Ala Ser Ala Val Ala Gln Asp His
        35                  40                  45
His Ser Ser His Thr Ser Ser Thr Val Asp Asp Gly Ser Ser Ile Leu
    50                  55                  60
Leu Asn Gln Thr Ala Ser Ala Ala Gln Arg Pro Arg Pro Gln Thr Asn
65                  70                  75                  80
Pro Ile Asp Asp Leu Ile Ser Gln Thr Pro Ile Val Gln Ala Leu Arg
                85                  90                  95
Arg Asp Pro Ala Tyr Thr Glu Ser Arg Pro His Leu Ala Met Asn Pro
            100                 105                 110
Ser Leu Arg Pro Asn His Phe Val Ala Gly Pro Asn Ser Gly Pro Gly
        115                 120                 125
Lys Ile Ser Val Pro Pro Tyr Val Trp Met Ala Lys Lys Pro His Thr
    130                 135                 140
Ala Thr Gly Thr Thr Thr Ser Arg Met Val Ser Val Phe His Ile Gly
145                 150                 155                 160
Val Gln Leu Cys Gly His Pro Gly Phe Val His Gly Gly Leu Leu Thr
                165                 170                 175
Val Met Phe Asp Glu Ala Phe Ala Arg Cys Val Ser Thr Ser Phe Arg
            180                 185                 190
Ser Gly Leu Gly Met Thr Ala Asn Leu Asn Val Asp Phe Arg Lys Pro
        195                 200                 205
Ala Leu Pro Asp Arg Leu Tyr Val Leu Arg Ala Glu Thr Val Lys Val
    210                 215                 220
Glu Gly Arg Lys Ala Trp Val Glu Gly Thr Leu Thr Ser Leu Pro Pro
225                 230                 235                 240
Val Gly Asp Thr Ser Glu Pro Val Met Val Ala Glu Gly Lys Ala Leu
                245                 250                 255
Phe Val Glu Pro Lys Phe Ala Glu Val Cys Cys Asn His Lys Phe Pro
            260                 265                 270
Gln Asp Asp Cys His Thr Asp Ser Ala Asn
        275                 280
```

<210> 35724
<211> 86
<212> PRT
<213> A.fumigatus

<400> 35724
Lys Pro Thr Val Thr Met Lys Phe Thr Gly Ile Val Ala Ser Leu Ala
1 5 10 15
Val Ala Ser Ser Ala Ser Ala Leu Ala Ile Pro Gln Thr Pro Val Asp
20 25 30
Ala Thr Leu Ser Lys Leu Asn Asn Ala Leu Asn Asn Val Glu Gly Leu
35 40 45
Val Gly Gly Leu Leu Gly Gly Val Cys Glu Glu Val Asp Leu Thr Gln
50 55 60
Val Gln Thr Gly Met Ser Phe Thr Glu Gly Thr Ser Glu Thr Cys Lys
65 70 75 80
Ser Ile Val Trp Pro Arg
85

<210> 35725
<211> 112
<212> PRT
<213> A.fumigatus

<400> 35725
Ser Gln Phe Cys Ala Leu Glu Leu Ile Thr Ile Lys Gly Gln Leu Thr
1 5 10 15
Lys Leu Val Pro Val Ser Ala Thr Lys Arg Asp Val Met Ser Thr Ala
20 25 30
Asn Asn Val Ala Thr Pro Val Thr Gly Ala Ala Gly Ser Glu Leu Asp
35 40 45
Asn Val Glu Gly Ala Val Lys Pro Val Thr Asn Val Ala Gly Asn Ala
50 55 60
Val Asn Thr Val Glu Asp Val Ala Gln Pro Val Ala Asp Val Ala Gly
65 70 75 80
Gly Ala Val Gly Thr Val Lys Asn Thr Val Gly Gly Ala Val Gly Thr
85 90 95
Val Glu Asn Ile Ala Ser Gly Pro Ile Asp Thr Val Thr Gly Ser Met
100 105 110

<210> 35726
<211> 840
<212> PRT
<213> A.fumigatus

<400> 35726
Leu Ala Thr Gly Gly Tyr Glu Phe Leu Ala Phe Gly Asn Ser Gln Phe
1 5 10 15
Arg Glu His Gly Ala Tyr Phe Phe Ala Pro Leu Pro Ser Leu Thr Ala
20 25 30
Ala Asn Ile Arg Ala Trp Met Gly Thr Phe Asn Asp Ile Arg Asn Val
35 40 45
Ala Lys His Ala Ala Arg Leu Gly Gln Cys Phe Ser Thr Thr Arg Ala
50 55 60
Ile Ala Gly Cys Pro Val Gln Ile Arg Leu Ile Asp Asp Val Val Arg

```
65                  70                  75                  80
Asn Gly Tyr Thr Phe Ser Asp Gly Val Gly Arg Ile Ser Lys Phe Leu
                85                  90                  95
Ala Gln Met Ala Ala Ser Glu Leu Lys Ile Arg Thr Pro Ser Gly Asp
            100                 105                 110
Pro Pro Ser Ala Phe Gln Phe Arg Leu Gly Gly Cys Lys Gly Met Leu
        115                 120                 125
Thr Val Ser Pro Glu Ala Gln Arg Gln Glu Val His Ile Arg Lys Ser
    130                 135                 140
Gln Tyr Lys Phe Ala Ser Val His Asn Gly Leu Glu Ile Ile Arg Trp
145                 150                 155                 160
Ser Gln Tyr Ser Met Ala Thr Leu Asn Arg Gln Leu Ile Ile Val Leu
                165                 170                 175
Ser Ser Leu Gly Ile Gln Asp Ser Val Phe His Asp Lys Leu Arg Ala
            180                 185                 190
Met Leu Gln Ser Leu Asn Glu Ser Met Glu Ser Asp Ser Gln Ala Leu
        195                 200                 205
Cys Trp Leu Lys Lys Tyr Val Asp Pro Asn Gln Met Thr Leu Val Val
    210                 215                 220
Ser Gln Met Val Leu Asp Gly Phe Arg Ser Ser Arg Glu Pro Phe Val
225                 230                 235                 240
Thr Ser Ile Met Arg Leu Trp Lys Ala Trp His Leu Lys Tyr Leu Lys
                245                 250                 255
Glu Lys Ala Lys Ile Val Ile Glu Lys Gly Ala Asn Leu Leu Gly Cys
            260                 265                 270
Met Asp Glu Thr Gly Ile Leu Arg Gly Tyr Ser Glu Trp Ile Pro Ala
        275                 280                 285
Lys Gly Ala Ser Asp Glu Glu Lys Leu Ala Ala Leu Pro Glu Ile Phe
    290                 295                 300
Val Gln Ile His His Pro Asp Thr Gly Lys Cys Glu Val Ile Glu Gly
305                 310                 315                 320
Val Cys Ile Leu Ala Arg Asn Pro Ser Leu His Pro Gly Asp Ile Arg
                325                 330                 335
Val Val Arg Ala Val Asn Val Pro Gln Leu Ser His Leu Lys Asp Val
            340                 345                 350
Val Val Phe Pro Gln Thr Gly Asp Arg Asp Ile Pro Ser Thr Cys Ser
        355                 360                 365
Gly Gly Asp Leu Asp Gly Asp Asp Tyr Leu Val Ile Trp Asp Gln Asp
    370                 375                 380
Leu Val Pro Glu Asp Trp Phe Arg Lys Pro Met Lys Tyr Thr Ser Asp
385                 390                 395                 400
Lys Ala Gln Asp Leu Asp Gln Asp Val Thr Val Asn His Ile Thr Ser
                405                 410                 415
Phe Phe Val Leu Tyr Met Lys Asn Asp Phe Leu Pro Arg Ile Ala His
            420                 425                 430
Ala His Leu Ala Trp Ala Asp Arg Leu Glu Asp Gly Val Asn Glu Glu
        435                 440                 445
Lys Cys Ile Arg Leu Ala Gln Leu His Ser Asp Ala Val Asp Tyr Asn
    450                 455                 460
Lys Thr Gly Lys Pro Ala Asn Met Ala Arg Ser Leu Gln Pro Lys Val
465                 470                 475                 480
Trp Pro His Phe Met Glu Lys Lys His Lys Pro Lys Glu Met Ile Tyr
                485                 490                 495
Lys Ser Asn Lys Ile Leu Gly Gln Leu Tyr Asp Ala Val Glu Arg Ile
            500                 505                 510
Asp Phe Val Pro Ser Leu Glu Met Pro Phe Asp Glu Arg Ile Leu Thr
```

```
        515                 520                 525
Cys Ser Leu Gly Val Ser Asp Asp Leu Val Gln Phe Ala Arg Asp Leu
    530                 535                 540
Lys Ala Asp Tyr Asp Ala Ala Met His Arg Ile Met Ala Gln His Glu
545                 550                 555                 560
Ile Thr Thr Glu Phe Glu Val Trp Ser Thr Phe Val Leu Ser His Ser
                565                 570                 575
Asn Met Ser Lys Asp Tyr Lys Phe His Glu Glu Leu Gly Leu Ile Ser
            580                 585                 590
Ser Ser Leu Arg Asp Met Tyr Arg Lys Lys Cys Tyr Glu Lys Val Gly
        595                 600                 605
Gly Arg Ser Phe Glu Leu Leu Ala Pro Leu Ala Val Ala Met Tyr Arg
    610                 615                 620
Val Thr His Glu Glu Met Thr Ser Ala Leu Glu Lys Cys Arg Ser Glu
625                 630                 635                 640
Asn His Ser Asp Gly Gln Leu Phe His Lys Pro Thr Pro Lys Ile Asp
                645                 650                 655
Gln Leu Pro Phe Ile Ser Phe Pro Trp Ile Leu Tyr Asn Ile Leu Gly
            660                 665                 670
Lys Ile Ala Leu Gly His Tyr Glu Asp Ser Glu Pro Gly Ser Ala Pro
        675                 680                 685
Thr Val Ile Ala Pro Ala Thr Ala Ser Val Asp Pro Leu Asp Pro Val
    690                 695                 700
Pro Gly Gln Ala Val Ser Val His Lys Glu Asn Ser Asn Arg Thr Glu
705                 710                 715                 720
Pro Thr Ser Asp Ser Leu Asn Gly Ile His Glu Asp Pro Phe Gly Leu
                725                 730                 735
Phe Glu Gly Asp Gln Glu Ser Arg Pro Ser Ser Arg Pro Ser Arg Glu
            740                 745                 750
Ala Glu Val Ser Ala Thr Gln Asn Arg Arg Glu Ser Ile Pro Ser Leu
        755                 760                 765
Asp Gln Leu Leu Asp Phe Gly Leu Val Glu Leu Ser Leu Pro Ile Ser
    770                 775                 780
Ser Asp Arg Leu His Leu Ser Ala Gln Ala Pro Asp Gly Phe Asn Leu
785                 790                 795                 800
Leu Glu Leu Asn Asp Asn Thr Ala Leu Asp Lys Pro Thr Glu Gly Arg
                805                 810                 815
Ala Glu Glu Thr Asp Leu Ala Thr Gln Met Ser Leu Val Phe Thr Thr
            820                 825                 830
Gly Leu Glu Gly Ala Ala Ser Thr
        835                 840
```

<210> 35727
<211> 67
<212> PRT
<213> A.fumigatus

<400> 35727

```
Leu Phe Thr Val Ala Asn Gly Cys Asn Val Lys Phe Ser Thr Tyr Ile
1               5                   10                  15
Ala Asn Ser Phe Leu Ser Ser Leu Asn His Cys Ala Leu Thr Ala Lys
            20                  25                  30
Ser Ser Gly Leu Ser Gly Pro Pro Gly Leu Ser Gly Leu Ser Gly Leu
        35                  40                  45
Ser Gly Pro Pro Gly Leu Ser Gly Leu Ser Gly Leu Val Tyr Ile Glu
    50                  55                  60
```

Phe Lys Val
65

<210> 35728
<211> 241
<212> PRT
<213> A.fumigatus

<400> 35728
Val Leu Leu Leu Ile Pro Leu Trp Met Ala Lys Val Asn Thr Val Val
1 5 10 15
Pro Asp Pro Tyr Leu Asp Glu Val Phe His Val Pro Gln Ala Gln Ala
20 25 30
Tyr Trp Asp His Arg Trp Phe His Trp Asp Pro Lys Ile Thr Thr Pro
35 40 45
Pro Gly Leu Tyr Ile Trp Ser Tyr Ile Leu Cys Ala Ala Ala Leu Val
50 55 60
Leu Arg Gly Ser Pro Lys Glu Leu Asn Ala Gly Ala Leu Arg Ala Thr
65 70 75 80
Asn Val Ala Ala Ala Ala Val Phe Leu Pro Trp Arg Leu Gln Thr Leu
85 90 95
Leu Asp Ala Leu Arg Lys Val Arg Asn Thr Arg Pro Ser Gly Ala Trp
100 105 110
Leu Ser His Thr Val Leu Asn Ile Cys Leu Phe Pro Pro Leu Phe Phe
115 120 125
Phe Ser Gly Leu Tyr Tyr Thr Asp Ile Val Ser Leu Leu Ala Val Ile
130 135 140
Glu Ala Tyr Asn Cys Asp Ile Lys Arg Ser Gly Gly Ser Trp Ser Leu
145 150 155 160
Leu Lys Thr Ala Val Phe Val Ala Thr Gly Leu Thr Ala Leu Val Leu
165 170 175
Arg Gln Thr Asn Ile Leu Trp Val Ala Ile Phe Leu Gly Gly Leu Gln
180 185 190
Val Val Arg Arg Leu Arg Gln Ser Ser Lys Ala Ser Gln Ala Ser Ser
195 200 205
Leu Leu Gln Ile Ile Gln Ser Gly Phe Asn Asn Glu Leu Tyr Asp Pro
210 215 220
Leu Val Ser Glu Ala Ser Phe Phe Gly Glu Cys Leu Ser Trp Pro Pro
225 230 235 240
Gly

<210> 35729
<211> 328
<212> PRT
<213> A.fumigatus

<400> 35729
Pro Arg Leu Cys Gly Cys Val Thr Asp Asp Val Leu Gly His Lys Glu
1 5 10 15
Phe His Thr Ala Gly Leu His Leu Ser Gln Met Leu Tyr Ile Trp Pro
20 25 30
Tyr Phe Met Phe Phe Ser Trp Pro Ile Leu Ile Phe Pro Val Ile Asn
35 40 45
Leu Val Leu Pro Asn Ser Val Ile Pro Ala Phe Phe Asp Tyr Gly Phe
50 55 60

```
Thr Lys Lys Gln Lys Gly Leu Pro Arg Ile Trp Thr Ala Leu Val Ile
65                  70                  75                  80
Ile Pro Ile Met Leu Ala Val Val His Phe Asn Thr Ile Ile His Pro
                85                  90                  95
Phe Thr Leu Ala Asp Asn Arg His Tyr Ile Phe Tyr Val Phe Arg Ile
            100                 105                 110
Leu Arg Ser His Pro Ala Ile Arg Tyr Ala Ala Val Pro Thr Ala Tyr
        115                 120                 125
Phe Val Gly Gly Trp Ala Val Ile Ser Ala Phe Gly Phe Ser Thr Thr
    130                 135                 140
Lys Pro Gln Pro Gln Phe Val Pro Ile Thr Lys Ser Asn Glu Leu Ala
145                 150                 155                 160
Ala Ala Gln Lys Gly Gln Leu Lys Glu Ala Ala Arg Lys Lys Glu Lys
                165                 170                 175
Ser Glu Arg Lys Ser Lys Ser Lys Lys Ala Ser Gln Val Thr Ala Ser
            180                 185                 190
Pro Pro Ala Gln Asp Gln Phe Ser Pro Glu Val Leu Ala Arg Ile Gln
        195                 200                 205
Glu His Leu Ala Gln Arg Gln Lys Gln Gln Gln Glu Val Pro Arg Ala
    210                 215                 220
Ser Phe Val Leu Val Trp Leu Ala Ala Thr Ala Leu Ser Leu Val Thr
225                 230                 235                 240
Ala Pro Leu Val Glu Pro Arg Tyr Phe Ile Ile Pro Trp Val Met Trp
                245                 250                 255
Arg Leu His Leu Pro Pro Gln Pro Val Pro Leu Val Tyr Arg Gln Gln
            260                 265                 270
Arg Pro Arg Asp Glu Arg Glu Ala Leu His Ala Asp Leu Ala Thr Asn
        275                 280                 285
Phe Ser Leu Phe Met Glu Thr Tyr Trp Phe Leu Ala Ile Asn Ala Ala
    290                 295                 300
Thr Gly Tyr Ile Phe Leu Tyr Lys Gly Phe Glu Trp Pro Gln Glu Pro
305                 310                 315                 320
Gly Lys Val Gln Arg Phe Met Trp
                325
```

<210> 35730
<211> 204
<212> PRT
<213> A.fumigatus

<400> 35730

```
Gly Tyr Ser Thr Gly Gly Tyr Asp Asn Arg Val Gln Glu Asn Val Gln
1               5                   10                  15
Tyr His Arg Glu Leu Asp Gln Leu Ala Thr Ser Leu Gly Leu Gln Thr
            20                  25                  30
Ala Thr Ser Lys Thr Val Ile Ser Ala Leu Ser Ile Pro Asp Ser Ile
        35                  40                  45
Asp Val Leu Phe Leu Leu Ser Val Pro Thr Ala Phe Arg Asp Thr Leu
    50                  55                  60
Leu Ser Gln Ala Lys Leu Leu Leu Tyr Thr Pro Ile Asn Glu His Phe
65                  70                  75                  80
Gly Ile Val Pro Val Glu Ala Met Arg Ala Gly Ile Pro Val Leu Ala
                85                  90                  95
Ser Asn Thr Gly Gly Pro Leu Glu Thr Ile Val Glu Gly Glu Thr Gly
            100                 105                 110
Trp Leu Arg Asp Ala Thr Val Val Ala Asp Trp Thr Ala Val Met Asp
```

```
        115                 120                 125
Arg Val Leu Tyr Glu Met Asp Gln Lys Asp Leu Asp Arg Met Ser Ala
    130                 135                 140
Val Ser Lys Ala Arg Val Glu Lys Glu Phe Ser Leu Thr Ala Met Gly
145                 150                 155                 160
Asp Arg Leu Glu Glu Glu Ile Thr Asp Met Leu Ser Lys Glu Arg Arg
                165                 170                 175
Pro Phe Ser Gly Phe His Gln Leu Ile Leu Val Phe Ala Leu Leu Gly
            180                 185                 190
Ile Met Ser Ser Ile Leu Ala Val Trp Ala Leu Lys
        195                 200
```

<210> 35731
<211> 687
<212> PRT
<213> A.fumigatus

<400> 35731

```
Val Tyr Leu Lys His Ile Leu Asn Gly Gly Cys His Val Thr Ser Cys
1               5                   10                  15
Lys Gly Gln Arg Gly Pro Ile Ala Thr Arg Val Arg Asn Cys Arg Asn
            20                  25                  30
Val Ala Ala Ala Ser Asp Lys Pro Ser Thr Asn Pro Gln Pro Arg Cys
        35                  40                  45
Ala Ser Thr Arg Lys Met Pro Glu Val Ile Asn Leu Leu Ser Ser Thr
    50                  55                  60
Pro Pro Pro Pro Ala Ser Gln Pro Arg Gln Arg Phe Val Ala Thr Leu
65                  70                  75                  80
Pro Ser Asp Pro Pro Leu Ser Ser Ala Pro Arg Pro Leu Leu Ser Asp
                85                  90                  95
Asp Ile Glu Ser Leu Phe Ala Tyr Asp Asp Ile Asp Lys Pro Ala Lys
            100                 105                 110
Arg Arg Arg Leu Ser Glu Glu Val Glu Ser Pro Met Asp Val Tyr Ala
        115                 120                 125
Gln Leu Ser Thr Thr Asn Leu Phe Leu Phe Ser Asp Asp Asp Val Ala
    130                 135                 140
Leu Ala Ser Asp Gly Pro Ser Thr Leu Gly Ile Pro Ala Arg Asn Glu
145                 150                 155                 160
Glu Ser Asp Pro Ile Val Phe Thr Ser Pro Ala Pro Val Pro Gly Ala
                165                 170                 175
Arg Ser Leu Thr Ser His Gln Thr Asn Phe Ile Glu Thr Asn Thr Ile
            180                 185                 190
Thr Ile Asp Asp Asp Gly Asp Asp Asp Gly Asp Ala His Val Asp Ile
        195                 200                 205
Cys Lys Asp Ala Ala Thr Gly Lys Asp His Ile Glu Asp Phe Ser Asp
    210                 215                 220
Gln Leu Ala Ile Pro Asp Ile Asp Glu Leu Met Arg Gln Ala Arg Glu
225                 230                 235                 240
Thr Lys Glu Ser Gly Asn Glu Asn Ser Leu Phe Ser Ser Arg Thr Ala
                245                 250                 255
Ser Leu Leu Ala Gly Leu Lys Glu Arg Ser Lys Ala Thr Ser Ser Thr
            260                 265                 270
Gly Ser Arg Pro Arg Ser Arg Ala Ala Arg Pro Ser Lys Lys Ser Lys
        275                 280                 285
Ser Gln Ala Arg Asn Val Leu Asp Leu Asp Tyr Asp Leu Ser Glu Val
    290                 295                 300
```

```
Val Val Glu Ser Arg Arg Pro Ala Arg Lys Thr Thr Thr Leu Thr Ala
305                 310                 315                 320
Ala Glu Lys Asp Ala Arg Ala Ile Glu Arg Glu Ser Ala Lys Ala Gln
                325                 330                 335
Arg Glu Tyr Glu Lys Gln Leu Glu Lys Glu Arg Gln Lys Lys Leu Arg
            340                 345                 350
Glu Glu Lys Ala Arg Glu Lys Gln Leu Ala Ala Asp Leu Ala Glu Val
        355                 360                 365
Asn Lys Leu Lys Val Asp Lys Arg Glu Ser Thr Pro Glu Met Ile Leu
    370                 375                 380
Asp Leu Ala Ser Ser Phe Arg Glu Thr Ser Val Gly Asn Gln Ser Ile
385                 390                 395                 400
Glu Leu Met Lys Arg Leu Gly Val Glu His Thr Phe Phe Thr Ser Ser
                405                 410                 415
Ile Pro Asn Leu Val Lys Trp Arg Arg Lys Val Thr Ala Arg Tyr Asn
            420                 425                 430
Glu Ala Ala Gly His Trp Glu Pro Cys Pro His His Ile Arg Glu Glu
        435                 440                 445
Asp His Val Leu Cys Leu Val Thr Ala Gln Glu Phe Val Asn Met Ala
    450                 455                 460
Ile Ala Pro Ala Asp Pro Val Thr Gly Thr Thr Glu Leu Glu Leu His
465                 470                 475                 480
Leu Ser His Ile Lys Lys Ala Tyr Pro Arg His Lys Leu Ile Tyr Leu
                485                 490                 495
Ile Glu Gly Leu Thr Ser Trp Met Arg Lys Asn Gln Asn Ser Arg Asn
            500                 505                 510
Arg Ala Phe Gln Ala Gln Val Arg Gln Gln Leu Val Pro Asp Asp Pro
        515                 520                 525
Ser Ser Ser Thr Arg Arg Arg Lys Pro Pro Ala Lys Thr Ala Glu Ser
    530                 535                 540
Thr Pro Pro Val Asp Asp Asp Thr Ile Glu Asp Ala Leu Leu Glu Leu
545                 550                 555                 560
Gln Val Thr His Ala Cys Leu Ile His His Thr Ser Ala Ala Ser Glu
                565                 570                 575
Ser Ala Glu Trp Ile Lys Asn Phe Thr Glu His Ile Ser Thr Ile Pro
            580                 585                 590
Tyr Lys Arg Glu Arg Met Asp Gly Asn Asp Ser Ala Phe Cys Met Asp
        595                 600                 605
Thr Gly Gln Val Lys Pro Gly Glu Asp Lys Ala Asp Thr Phe Val Lys
    610                 615                 620
Met Leu Gln Glu Val Asn Arg Val Thr Ala Ser Met Ala Tyr Gly Ile
625                 630                 635                 640
Ala Ala Lys Tyr Pro Ser Val Val Glu Leu Val Arg Gly Met Arg Arg
                645                 650                 655
His Gly Pro Thr Met Leu Glu Asp Val Lys Val Cys Tyr Val Leu Ser
            660                 665                 670
Gly Leu Ser Asn Leu Met Gln Val Ser Ser Tyr Ala Asn Leu Phe
        675                 680                 685
```

<210> 35732
<211> 261
<212> PRT
<213> A.fumigatus

<400> 35732
Pro Ser Ala Ala Trp Asp Lys Met Gln Ser Arg Gly His Arg Val Thr

```
1               5                   10                  15
Ile Tyr Thr Ser His Arg Asp Lys Ser His Cys Phe Glu Glu Ala Arg
            20                  25                  30
Asp Gly Thr Leu Asp Val Arg Val Arg Gly Asn Ser Leu Phe Pro Ala
        35                  40                  45
His Val Gly Gly Arg Leu His Val Leu Met Ala Val Leu Arg Gln Leu
    50                  55                  60
His Leu Thr Val Ser Val Leu Arg Glu Ile Ala Thr Ser Glu Glu Lys
65                  70                  75                  80
Asp Asn Ile Phe Ile Val Asp Gln Val Pro Ala Cys Val Pro Leu Leu
                85                  90                  95
Lys Thr Leu Gly Pro Arg Ala Ala Arg Ser Ser Arg Ser Arg Gln Arg
            100                 105                 110
Ile Leu Phe Tyr Cys His Phe Pro Asp Gln Leu Leu Ala Arg Arg Asn
        115                 120                 125
Glu Gly Gly Glu Leu Leu Arg Leu Ala Lys Thr Leu Tyr Arg Tyr Pro
    130                 135                 140
Phe Asp Trp Phe Glu Gly Trp Ala Met Ser Ala Ser Asp Lys Val Val
145                 150                 155                 160
Ala Asn Ser Arg Phe Thr Arg Gly Val Val Ser Glu Val Phe Gly Lys
                165                 170                 175
Glu Lys Leu Gly Asp Val Arg Ile Val Tyr Pro Cys Val Asp Thr Lys
            180                 185                 190
Ala Gly Ala Pro Val Gly Thr Glu Glu Gly Pro Leu Trp Gly Gly Lys
        195                 200                 205
Lys Ile Phe Leu Ser Val Asn Arg Phe Glu Arg Lys Lys Asp Leu Ala
    210                 215                 220
Leu Ala Ile Arg Ala Tyr His Gly Leu Gly Gln Glu Lys Arg Arg Gly
225                 230                 235                 240
Thr Lys Leu Val Val Ala Gly Met Ser Ser Ser Lys Trp Val Pro Asp
                245                 250                 255
Gly Glu Ser Ser Tyr
            260
```

<210> 35733
<211> 88
<212> PRT
<213> A.fumigatus

```
<400> 35733
Thr Asn Leu Gln Arg Val Trp Phe Cys His Leu Lys Thr Phe Glu Val
1               5                   10                  15
Arg Pro Pro Lys Gly Phe Cys Trp Arg Tyr Met Leu Thr Phe His Val
            20                  25                  30
Ala Ile Val Glu Lys Thr Ala Gly Tyr Val Ala Arg Asn Gly Phe Val
        35                  40                  45
Phe Glu Gly Ala Leu Ser Val Tyr Val Asp Ser Ser Ile Phe Met Phe
    50                  55                  60
His Phe Lys Leu Thr Val Leu Phe Gln Asn Val Cys Ala Lys Lys Arg
65                  70                  75                  80
Lys Thr Thr Arg Asn Ser Pro Phe
                85
```

<210> 35734
<211> 487
<212> PRT

<213> A.fumigatus

<400> 35734

```
Ala Asn Ser Thr Leu Pro Glu Arg Val Arg Glu Lys Glu Lys Asn Asn
1               5                  10                  15
Pro Lys Phe Ser Phe Leu Asn Pro Gly Asp Ala Tyr Ala Ser Phe Tyr
            20                  25                  30
Gln Trp Arg Leu Asn Glu Ile Lys Glu Gly Arg Gly Thr Ala Val Ala
        35                  40                  45
Ala Gly Arg Pro Gly Glu Ser Thr Ala Ala Pro Glu Pro Glu Lys Pro
    50                  55                  60
Lys Gly Pro Ala Gln Pro Pro Glu Phe His Phe Ser Ala Arg Met Pro
65                  70                  75                  80
Ile Ile Asn Ala Gln Asp Leu Glu Val Val Lys Leu Thr Ala Leu Tyr
                85                  90                  95
Val Ala Lys Arg Gly Lys Ser Phe Met Thr Ala Leu Ser Gln Arg Glu
            100                 105                 110
Ala Arg Asn Phe Gln Phe Asp Phe Leu Arg Pro Gln His Ser Leu Tyr
        115                 120                 125
Gln Phe Phe Thr Arg Leu Val Asp Gln Tyr Thr Ile Leu Leu Arg Ala
    130                 135                 140
Glu Gly Ile Asp Glu Ser Thr Ser Glu Lys Arg Arg Ile Ala Glu Leu
145                 150                 155                 160
Glu Asn Asn Val Lys Asn Lys Phe His Ile Leu Glu Arg Ala Lys Gln
                165                 170                 175
Arg Ala Glu Trp Val Lys Tyr Gln Glu Gln Gln Lys Gln Lys Lys Glu
            180                 185                 190
Glu Glu Glu Glu Gln Glu Arg Ile Ala Tyr Ala Gln Ile Asp Trp His
        195                 200                 205
Asp Phe Val Val Val Glu Thr Val Leu Phe Thr Glu Ala Asp Asp Gln
    210                 215                 220
Ala Asp Leu Pro Pro Pro Thr Ser Leu Asn Asp Leu Gln Ser Ala Ser
225                 230                 235                 240
Leu Glu Gln Lys Ala Met Met Ser Leu Asn Pro Leu Arg Ile Glu Glu
                245                 250                 255
Ala Met Pro Thr Asp Gln Gly Ala Gln Val Tyr Tyr Asn Ala Tyr Pro
            260                 265                 270
Pro Thr Gln Pro Glu Pro Val Ala His Pro Ala Pro Pro Ser Val Ser
        275                 280                 285
Pro Tyr Pro Pro Gln Ala Pro Val Pro Gln Pro Tyr Pro Met Ala Ser
    290                 295                 300
Ala Ala Ala Gln Glu Glu Glu Gln Arg Ile Arg Glu Arg Met Glu Ala
305                 310                 315                 320
Arg Glu Gln Ala Ala Ala Ala Gln Ala Ala Ala Lys Ala Gly Pro Gly
                325                 330                 335
Gln Gln Pro Met Arg Ile Arg Ser Asp Tyr Val Pro Arg Ala Gln Ala
            340                 345                 350
Arg Arg Leu Asn Pro Ser Gly Ala Thr Ala Leu Cys Pro Asn Cys His
        355                 360                 365
Gln Gln Ile Pro Val Ala Glu Leu Asp Gln His Met Arg Ile Glu Leu
    370                 375                 380
Leu Asp Pro Arg Trp Lys Glu Gln Cys Ala Lys Ala Glu Ser Arg Ser
385                 390                 395                 400
Ala Thr Thr Asn Leu Ser Thr Ala Asp Val Val Asn Asn Leu Thr Arg
                405                 410                 415
Leu Ala Ser Gln Arg Ser Asp Val Phe Asp Ser Ser Leu Thr Ala Gly
```

```
            420                 425                 430
Leu Asp Pro Glu Glu Glu Ala Arg Lys Gln Arg Met Ala Tyr Glu Asn
        435                 440                 445
Pro Pro Gly Ala Gly Pro Thr Pro Pro Met Val Gly Pro Ala Gly Gly
    450                 455                 460
Pro Pro Asn Pro Gln Ser Leu Asn Ile Glu Glu Gln Ile Arg Gln Ile
465                 470                 475                 480
His Glu Arg Tyr Lys Gln Gly
                485
```

<210> 35735
<211> 377
<212> PRT
<213> A.fumigatus

<400> 35735

```
Cys Thr Asn Asp Phe Ser Cys Met Gln Ile Ile Tyr Pro Ala Leu Phe
1               5                   10                  15
Phe Ala Ile Ile Gly Ala Gly Gly Val Phe Met Gly Ser Asn Ser Arg
            20                  25                  30
Ser Gln Pro Gln Glu Leu Glu His Ile Leu His Leu Ala Asp Pro Lys
        35                  40                  45
Leu Ile Ile Thr Ser Arg Asp Ala Leu Pro Asn Val Leu Ser Val Ser
    50                  55                  60
Ala Ala Arg Gly Met Leu Ser Ser Gln Val Cys Leu Leu Asp Glu Tyr
65                  70                  75                  80
Ala Pro Asn His Ile Ala Gln Leu Leu Leu Ser Gly Pro Gln Ala Leu
                85                  90                  95
Val Pro Asp Asn Asp Ala Val Tyr Leu Asn Phe Ala Gln Leu Leu Ser
            100                 105                 110
Tyr Gly Glu Asn Asp Trp Val Arg Phe Asn Asp Pro Glu Ile Ala Lys
        115                 120                 125
Ser Thr Pro Ala Ala Met Phe Ser Thr Ser Gly Thr Gly Gly Leu Pro
    130                 135                 140
Lys Gly Ala Leu Leu Ser His His Ala Ile Val Ser His His Leu Ser
145                 150                 155                 160
Ile Asn Tyr Asp Val Pro Tyr Val Val Thr Arg Leu Ile Ser Leu Pro
                165                 170                 175
Met Phe His Leu Phe Gly Ser Leu Trp Thr His Ile Phe Pro Ile Arg
            180                 185                 190
Tyr Gly Gln Pro Leu Phe Val Leu Pro Arg Phe Glu Leu Thr Gln Tyr
        195                 200                 205
Val Ala Ala Ile Tyr His Tyr Gln Ile Thr Glu Thr Tyr Met Val Pro
    210                 215                 220
Ala Met Ile His Val Phe Asn Arg Ser Ala Pro Pro Ile Ala Asp Tyr
225                 230                 235                 240
Met Arg Thr Leu Arg Tyr Val Gly Val Ala Gly Ala Pro Ile Asp Gly
                245                 250                 255
Pro Ser Met Glu Gln Phe Gln Arg Leu Leu His Pro His Ala Arg Ala
            260                 265                 270
Thr Gln Leu Trp Gly Met Thr Glu Val Gly Val Val Phe Gln Thr Arg
        275                 280                 285
Tyr Gly Glu Gln Gly Asn Pro Gly Ser Ile Gly Arg Leu Leu Pro Gly
    290                 295                 300
Tyr Glu Val Arg Leu Val Gly Gln Asp Gly Asn Val Val Gln Gly Glu
305                 310                 315                 320
```

```
Ser Arg Pro Gly Glu Leu Tyr Val Arg Gly Ser Gly Val Leu Met Ser
                325                 330                 335
Tyr Lys Gly Arg Asn Asp Ala Lys Asp Ala Tyr Gly Trp Phe Arg Thr
            340                 345                 350
Gly Asp Val Ala Tyr Val Gln Asn Gly Gln Tyr Phe Ile Val Gly Arg
        355                 360                 365
Thr Lys Glu Leu Ile Lys Val Arg Gly
    370                 375
```

<210> 35736
<211> 134
<212> PRT
<213> A.fumigatus

<400> 35736

```
Ser Gly Asn Arg Trp Gln Val Ala Pro Ala Glu Leu Glu Ala Val Leu
1               5                   10                  15
Leu Lys His Pro Gly Ile Glu Asp Ala Ala Val Thr Gly Val Thr Ser
            20                  25                  30
Lys Asp Gly Ser Thr Glu Leu Pro Arg Ala Phe Val Val Arg Ala Lys
        35                  40                  45
Gly Pro Ala Ala Asn Arg Leu Thr Ala Glu Glu Val Tyr Gln Phe Ala
    50                  55                  60
Arg Arg Gln Leu Ala Ser Tyr Lys Ala Leu Asp Gly Gly Ile Val Phe
65                  70                  75                  80
Val Glu Glu Ile Pro Arg Thr Ala Ser Gly Lys Ile Gln Arg Phe Lys
                85                  90                  95
Leu Ser Gln Met Asn Thr Tyr Arg Asp Met Val Ser Ser Leu Leu Ala
            100                 105                 110
Arg Phe Lys Gly Ala Ala Ser Gly Leu Gly Gly Leu Gly Leu Val His
        115                 120                 125
Lys Gly Arg Val Ala Val
    130
```

<210> 35737
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35737

```
Lys Leu Pro Lys Lys Arg Ser Ile Phe Ser Glu Tyr Glu Leu Leu Lys
1               5                   10                  15
Ala Asn Gly Gln Trp Ile Thr Gly Ile Leu Ala Val Gly Leu Trp Ile
            20                  25                  30
Thr Ser Val Leu Ile Gly Arg Thr Asn Met Phe Cys Gly Thr Gln His
        35                  40                  45
Asn Tyr Ser Gly Lys Phe Glu Met Val Pro Gly Pro
    50                  55                  60
```

<210> 35738
<211> 84
<212> PRT
<213> A.fumigatus

<400> 35738

```
Lys Met Thr Leu Ser Leu Leu Met Val Gly Cys Arg Cys Ser Gly Pro
```

```
1               5                   10                  15
Thr Arg Leu Ser Ser Val Leu Arg Phe Val Gly Arg Ile Arg Ala Tyr
            20                  25                  30
Arg Leu Ala Gly Ser Lys Leu Ile Phe Phe Asp Ile Phe Gln Asp Gly
        35                  40                  45
His Lys Val Gln Val Met Cys Asn Ile Arg Lys Leu Asp Gly Val Ala
    50                  55                  60
Pro Asp Ala Phe Lys Arg Phe Tyr Arg Leu Leu Arg Arg Gly Asp Thr
65                  70                  75                  80
Phe Cys Met Leu
```

<210> 35739
<211> 173
<212> PRT
<213> A.fumigatus

<400> 35739

```
Pro Ser Pro Val Ser Leu Pro Glu Thr Glu Arg Phe Ser Ile Ala Val
1               5                   10                  15
Thr Gly Asn Pro His Arg Thr Gly Thr Gly Glu Leu Thr Val Leu Ala
            20                  25                  30
Thr Glu Leu Pro Arg Leu Leu Ala Pro Cys Leu His Asp Val Pro Val
        35                  40                  45
Asp Ala Glu Glu His Glu Thr Ser Pro Tyr Pro Arg His Val Gln Phe
    50                  55                  60
Leu Ala Asp Gln Lys Ala Ala Asp Ile Ile Arg Ala Arg Ser Ala Ile
65                  70                  75                  80
Ile Gln Phe Leu Arg Gln Phe Phe Leu Asp Arg Ser Phe Met Glu Val
                85                  90                  95
Ser Thr Pro Ile Ile Gly Ser Ile Ala Gly Gly Ala Ile Ala Arg Pro
            100                 105                 110
Phe Gln Thr Ser Ala Thr Glu Phe Pro Asp Arg Gln Leu Ser Leu Arg
        115                 120                 125
Ile Ala Pro Glu Leu Trp Leu Lys Arg Leu Val Val Gly Gly Phe Asp
    130                 135                 140
Lys Val Phe Glu Ile Gly Pro Ser Phe Arg Asn Glu Gly Lys Ser Gly
145                 150                 155                 160
Gln Ile Leu Asp Arg Trp Ile Asp Met Asp Met Ser Asp
                165                 170
```

<210> 35740
<211> 260
<212> PRT
<213> A.fumigatus

<400> 35740

```
Tyr Ala Ala Thr Gly Leu Asp Lys Thr His Asn Pro Glu Phe Thr Thr
1               5                   10                  15
Cys Glu Phe Tyr His Ala Tyr Ala Asn Leu Glu Asp Leu Met Ser Ile
            20                  25                  30
Thr Glu Asn Leu Leu Ser Gly Met Ala Ala His Ile Gln Glu Phe Asn
        35                  40                  45
Lys Asn Ala Ser Leu Lys Pro Pro Glu Val Asp Phe Ser Ala Pro Phe
    50                  55                  60
Arg Arg Val Asp Phe Thr Thr Gly Ile Glu Gly Lys Ile Gly Arg Arg
```

65 70 75 80
Leu Pro Asp Leu Thr Thr Pro Asp Ala Leu Asp Gln Val Ser Gln Leu
85 90 95
Phe Arg Asp Leu Ser Leu Pro Ile Pro Lys Glu Pro Thr Leu Leu Arg
100 105 110
Leu Leu Asp Glu Leu Cys Gly Thr Tyr Leu Glu Pro Glu Cys Ile Asn
115 120 125
Pro Thr Phe Ile Ile Asn Pro Pro Glu Cys Leu Ser Pro Leu Ser Lys
130 135 140
Ser Phe Ile His Pro Ala Asn Gln Gln Arg Val Ala Ala Arg Ala Glu
145 150 155 160
Leu Phe Ile Asp Gly Arg Glu Ile Val Asn Thr Tyr Glu Glu Glu Asn
165 170 175
Ser Pro Phe Glu Gln Arg Arg Lys Phe Glu Asp Gln Val Arg Tyr Thr
180 185 190
Lys Gly Thr Asp Glu Pro Ala Glu Ile Asp Glu Ser Tyr Leu Glu Ala
195 200 205
Leu Glu Trp Gly Leu Pro Ser Thr Gly Gly Trp Gly Cys Gly Ile Asp
210 215 220
Arg Leu Cys Met Leu Phe Thr Gly Thr Lys Arg Ile Gly Asp Val Leu
225 230 235 240
Pro Phe Gly Asn Leu Arg Ala Val Thr Arg Arg His Thr Gly Leu Ser
245 250 255
Arg Ser Thr Asn
260

<210> 35741
<211> 100
<212> PRT
<213> A.fumigatus

<400> 35741
Gly Leu Pro Val Thr Ala Met Glu Asn Arg Ser Val Ser Gly Ser Asp
1 5 10 15
Thr Gly Asp Gly Tyr Met Ser Gln His Thr Glu Ser Ile Ala Ala Ala
20 25 30
Lys Glu Thr Val Lys Ser Leu Glu Ser Ile Gly Ser Tyr Ser Val Gln
35 40 45
Leu Ala Asn Val Ala His Asn Leu Asp Phe Val Pro Ile Leu Glu Asp
50 55 60
Ile Glu Glu Tyr Gln Leu Ala Pro Gly Gln Ser Ile Gly Thr Tyr Ser
65 70 75 80
Ser Tyr Lys Ser Lys Tyr Arg Gly Gln Pro Ser Arg Ala Arg Thr Ala
85 90 95
Ala Thr Tyr His
100

<210> 35742
<211> 68
<212> PRT
<213> A.fumigatus

<400> 35742
Ala Thr Gly Leu Met Ile Leu His Val Pro Asp Glu Thr Glu Val Leu
1 5 10 15
Asn Pro Asp Ala Ile Tyr Asp Arg Gly Arg Tyr Val Arg Leu Thr Ala

```
            20                  25                  30
Phe Ile Ala Glu Lys Glu Glu Thr His Pro Asp Pro Arg Ile Tyr Val
        35                  40                  45
Glu Gln Arg Phe Tyr Gln Gly Asn Gln Glu Ile Leu His His Gly Gly
    50                  55                  60
Gln Asp Pro Arg
65
```

<210> 35743
<211> 113
<212> PRT
<213> A.fumigatus

<400> 35743

```
Ile Tyr Ala Thr Ala Gly Ser Glu Ala Lys Val Asp Tyr Leu Val His
1               5                   10                  15
Asn Met Gly Ile Pro Arg Gln Arg Ile Phe Asn Ser Arg Asp Ser Ser
            20                  25                  30
Phe Leu Pro Ala Leu Met Arg Val Thr Gln Gly Arg Gly Val Asp Val
        35                  40                  45
Val Leu Asn Ser Leu Ala Gly Glu Leu Leu His Ala Ser Trp Lys Cys
    50                  55                  60
Val Ala Glu Ser Gly Lys Met Val Glu Ile Gly Lys Arg Asp Phe Leu
65                  70                  75                  80
Glu His Gly Lys Leu Asp Met Asp Ala Phe Cys Gly Asn Arg Ala Phe
                85                  90                  95
Phe Gly Val Asp Leu Ile Arg Leu Gly Glu Lys Pro Gly Phe Ile Ser
            100                 105                 110
Arg
```

<210> 35744
<211> 359
<212> PRT
<213> A.fumigatus

<400> 35744

```
Ile Gly Gly Thr Gly Met Gln Arg Ser His Asp Thr Gly Arg Cys Arg
1               5                   10                  15
Ser Thr Arg Arg Cys Gln Gly Arg Asn Pro Thr Gln Gln Pro Pro His
            20                  25                  30
Trp Arg Arg Ala Ala Thr Val Asn Gly Ala Ser Gly Lys Phe Asn Ala
        35                  40                  45
Lys Arg Ser Arg Gln Thr Gln Arg Val Ala Asn Leu Ala Lys Asp His
    50                  55                  60
Phe Ile Pro Ala Met Ala His Ser Asp Trp Lys Glu Gly Leu Ser Ala
65                  70                  75                  80
Lys Val Ala Gly Thr Trp Asn Leu His Glu Ala Leu Thr Gly His Asp
                85                  90                  95
Ser Arg Leu Gln Phe Phe Val Val Cys Gly Ser Ile Ala Gly Val Met
            100                 105                 110
Gly Asn Ala Gly Gln Ala Asn Tyr Ser Ser Ala Asn Ala Phe Leu Thr
        115                 120                 125
Ser Phe Thr Gln Tyr Arg Leu Arg Ala Gly Leu Pro Ala Ser Val Val
    130                 135                 140
Asn Leu Gly Ala Val Asn Asp Ile Gly His Leu Ala Val Gln Asp Gln
```

```
145                 150                 155                 160
Lys Leu Arg Asp Arg Met Phe Ala Gly His Val Arg Leu Leu Ser Glu
                165                 170                 175
Gln Glu Val Leu Asp Ala Phe Glu Ile Ala Met Leu Glu Cys Gln Pro
            180                 185                 190
Ser Ser Lys Pro Ala Asn Glu Ser Ser Asp Glu Ile Leu Arg Val Arg
        195                 200                 205
Asn Asp Val Ile Met Gly Met Arg Ser Thr Lys Ser Leu Ala Asp Pro
    210                 215                 220
Ser Val Arg Pro Leu Trp Gly Arg Asp Ala Arg Phe Ser Val Tyr Ala
225                 230                 235                 240
Asn Leu Arg Ile Asn Lys Gln Pro Leu Ser Lys Asp Leu Glu Thr Ile
                245                 250                 255
Glu Gly Leu Gln Gln Glu Leu Ala Ala Cys Glu Lys Asn Pro Asp Arg
            260                 265                 270
Leu Lys Asp Pro Ala Phe Pro Lys Arg Ile Val Arg Glu Val Ile Arg
        275                 280                 285
Ser Ile Arg Glu Tyr Ser Asn Phe Ala Arg Gly Gln Asp Tyr Ala Gln
    290                 295                 300
Val Ala Ala Leu Pro Ile Asp Ser Leu Met Thr Val Glu Phe Arg Asn
305                 310                 315                 320
Trp Ser Arg Arg Tyr Phe Asn Leu Asn Leu Pro Leu Thr Ala Ile Ala
                325                 330                 335
Lys Ala Gly Thr Val Glu Gly Phe Ala Glu Leu Val Val Glu Trp Leu
            340                 345                 350
Arg Ser Lys Tyr Leu Lys Gln
        355
```

<210> 35745
<211> 213
<212> PRT
<213> A.fumigatus

<400> 35745

```
Arg Lys Arg Gly Ile Arg Leu Val Ala Gln Ala Met Ala Leu Tyr Glu
1               5                   10                  15
Glu Gly Arg Ile Thr Pro Val Arg Pro Leu Glu Val Val Glu Ala Thr
            20                  25                  30
Asp Ile His Arg Ala Phe Arg Leu Met Gln Leu Gly Tyr His Met Gly
        35                  40                  45
Lys Leu Val Val Lys Met Pro Glu Ser Pro Arg Glu Val Val Val Ser
    50                  55                  60
Lys Ser Arg Leu Lys Leu Thr Leu Pro Asp Asp Val Ser Tyr Leu Leu
65                  70                  75                  80
Val Gly Gly Leu Gly Gly Val Gly Arg Ala Leu Ala Thr Met Met Val
                85                  90                  95
Glu Arg Gly Ala Arg His Phe Val Phe Leu Ser Arg Ser Ala Gly Lys
            100                 105                 110
Ser Ala Gln Asp Gln Ala Phe Arg Gly Glu Leu Glu Ala Gln Gly Cys
        115                 120                 125
Ser Ala Val Met Ile Gln Gly Asp Val Gly Val Leu Asp Asp Val Lys
    130                 135                 140
Ala Ala Ile Gln His Ser Ser His Pro Ile Gly Gly Val Leu Gln Leu
145                 150                 155                 160
Ser Met Ala Leu Arg Val Ser Ser Met Pro Arg Glu Ala Asp Lys Leu
                165                 170                 175
```

```
Asn Gly Leu Leu Ile Trp Gln Arg Ile Thr Leu Ser Gln Leu Trp Arg
            180                 185                 190
Thr Leu Thr Gly Arg Lys Val Ser Pro Gln Lys Trp Arg Ala Leu Gly
        195                 200                 205
Ile Phe Met Lys His
    210
```

<210> 35746
<211> 74
<212> PRT
<213> A.fumigatus

<400> 35746

```
Leu Gly Gly Gly Lys Ala Asp Pro Pro Gly Arg Cys Leu Thr Val Cys
1               5                   10                  15
Leu Leu Val Leu Ser Gly Ser Gly Glu Ile Val Lys Val Leu Cys Ser
            20                  25                  30
Arg Leu Ile Gly Asp Val Asp Lys Pro Asp Lys Gln Met Asp Asp Ser
        35                  40                  45
Pro Asp Ser Ile Ala Met Met Gln Glu His Lys Val Thr Leu Tyr Ser
    50                  55                  60
Leu Ile Asn Met Val Val Val Val Pro Glu
65                  70
```

<210> 35747
<211> 378
<212> PRT
<213> A.fumigatus

<400> 35747

```
Asn Ile Asn Lys Lys Thr Gln His Pro Ala Val Ala Glu Tyr Ile Ile
1               5                   10                  15
Phe Ile Pro Arg Pro Lys Met His Leu Leu Ser Glu Pro Asp Val Ser
            20                  25                  30
Arg Ile Leu Arg Asn Leu Thr Pro Glu Gln Cys His Ile Leu Leu Asp
        35                  40                  45
Ala Leu Ser Glu Ala Leu Val Thr Val Ser Ser Glu Thr Thr Lys Pro
    50                  55                  60
Glu Gly Glu Arg Leu Ile His Gln Pro Leu Arg Thr Thr Ile Ala Thr
65                  70                  75                  80
Lys Asp Gln Asn Leu Ser Leu Phe Met Pro Val Ser Asn Thr Ala Asn
                85                  90                  95
Thr Ser Ile Lys Ile Val Thr Ala Ser Gln Arg Glu Gly Ile Ile Gly
            100                 105                 110
Val Ile Asn Val Phe Ser Pro Glu Gly Arg Leu Leu Gly Leu Leu Ser
        115                 120                 125
Ala Ala Glu Val Thr Ala Phe Arg Thr Ala Leu Ala Thr Met Thr Leu
    130                 135                 140
Phe Thr Arg Cys Thr Thr Ile Pro Lys Lys His Ile Leu Ile Phe Gly
145                 150                 155                 160
Ser Gly Arg Gln Ala Glu Trp His Ala Arg Leu Ala Leu Leu Pro Ala
                165                 170                 175
Pro Ser Leu Val Gln Arg Ile Thr Phe Ile Asn Arg Gly Arg Arg Arg
            180                 185                 190
Leu Glu Glu Leu Glu Arg Glu Val Ile Ala Glu Leu Arg Ala Ser His
        195                 200                 205
```

```
Pro Lys Ile Val Phe Glu Thr Leu Ala Lys Glu Gly Thr Asp Asp Ala
    210                 215                 220
Glu Tyr Glu Ala Arg Leu Arg Ala Glu Val Ala Ser Cys Asp Val Ile
225                 230                 235                 240
Phe Ser Cys Thr Pro Ser Thr Glu Pro Asn Phe Pro Tyr Lys Tyr Leu
                245                 250                 255
Leu Ser Ser Thr Ser Ala Ala Ala Ser Lys Gln Arg Phe Ile Ser Leu
            260                 265                 270
Ile Gly Ser Tyr Lys Pro His Met Cys Glu Val Asp Ser Glu Thr Val
        275                 280                 285
Leu Ser Gly Gly Gly Gln Ile Tyr Val Asp Ser Arg Glu Ala Cys Leu
    290                 295                 300
Glu Glu Ser Gly Glu Leu Ile Lys Ala His Val Gly Gly Glu Gln Leu
305                 310                 315                 320
Val Glu Ile Gly Glu Leu Phe Gly Arg Leu Gly Lys Ser Glu Pro Val
                325                 330                 335
Val Val Pro Glu Gly Cys Asn Val Val Phe Lys Cys Val Gly Met Gly
            340                 345                 350
Ile Met Asp Leu Val Ile Gly Lys Lys Leu Leu Asp Ile Gly Val Glu
        355                 360                 365
Gln Gly Leu Gly Met Asn Val Asp Gly Phe
    370                 375

<210> 35748
<211> 225
<212> PRT
<213> A.fumigatus

<400> 35748
Glu Phe Thr Lys Pro Ser Asn Leu Lys Tyr Gln Gln Glu Asn Thr Ala
1               5                   10                  15
Ser Cys Cys Cys Arg Ile His Tyr Phe His Pro Lys Ala Gln Asn Ala
            20                  25                  30
Ser Ser Leu Arg Thr Arg Arg Leu Ser Tyr Ser Glu Lys Pro Asn Ser
        35                  40                  45
Arg Thr Met Pro His Leu Thr Arg Arg Ser Glu Arg Ser Ala Gly Asn
    50                  55                  60
Arg Leu Ile Arg Asp His Lys Thr Arg Arg Gly Ala Ser His Pro Pro
65                  70                  75                  80
Ala Pro Pro His His His Arg His Gln Arg Pro Glu Pro Ile Ala Leu
                85                  90                  95
His Ala Cys Leu Gln His Ser Gln His Glu His Gln Asp Arg His Gly
            100                 105                 110
Leu Pro Ala Arg Arg His His Arg Arg Asp Gln Arg Ile Leu Ala Gly
        115                 120                 125
Gly Pro Ala Pro Arg Pro Ala Gln Arg Arg Arg Ser His Ser Leu Ser
    130                 135                 140
His Arg Pro Arg Asn His Asp Ala Val Tyr Ala Leu His Tyr His Pro
145                 150                 155                 160
Glu Glu Thr His Leu Asp Leu Arg Leu Gly Thr Pro Ser Arg Val Ala
                165                 170                 175
Arg Ser Ala Gly Ala Ala Ala Cys Ser Lys Pro Gly Ala Ala Asp His
            180                 185                 190
Leu His Gln Pro Gly Ser Pro Ala Ala Gly Gly Val Gly Glu Gly Gly
        195                 200                 205
Tyr Arg Gly Ala Ala Ser Phe Ser Ser Glu Asp Arg Ile Arg Asn Ala
```

210 215 220
Gly
225

<210> 35749
<211> 106
<212> PRT
<213> A.fumigatus

<400> 35749
Phe His Asp Cys His Gly Cys Ser Tyr Pro Gly Ile Ala Gly Glu Ser
1 5 10 15
Glu Ala Ser Pro Arg Phe Gly Gly Lys Pro Gln Lys Ser Cys Glu Ser
20 25 30
Val Arg Ser Ile Leu His Ala Pro His Asn Ala Ala Phe Cys Leu Leu
35 40 45
Leu Tyr Phe Glu Arg Phe Arg Ile Ile Asp Phe Arg Arg Cys Asp Gly
50 55 60
Cys Arg Arg Val Lys Glu Lys Cys Glu Gly Gly Val Pro Cys Arg Arg
65 70 75 80
Cys Leu Arg Tyr Arg Arg Gln Cys Val Phe Thr His Pro Asp His Ala
85 90 95
Glu Lys Leu Ala Arg Ser Ser Ser Val Ser
100 105

<210> 35750
<211> 67
<212> PRT
<213> A.fumigatus

<400> 35750
His Thr Ser Asn Ser Phe Ser Leu Arg Ile Leu Pro Pro Thr Thr Ala
1 5 10 15
Met Val Leu Asp Tyr Ser Lys Trp Asp Ala Leu Glu Leu Ser Asp Asp
20 25 30
Ser Asp Ile Glu Val His Leu Met Ser Thr Ser Ala Pro Ser Leu Glu
35 40 45
Gln Ser Arg Leu Arg Ser Ile Ser Asn Gly Thr Ser Ala Val Trp Arg
50 55 60
Leu Arg Leu
65

<210> 35751
<211> 145
<212> PRT
<213> A.fumigatus

<400> 35751
Asp Ser Leu Ile Asn Ser Ile Thr Thr Lys Asp His Gln Ala Ala Thr
1 5 10 15
Leu Phe Arg Asn Asp Val Asn Glu Thr Tyr Asn Lys Ile Lys Thr Arg
20 25 30
Ala Ala Glu Leu Ala Lys Asp Ser Ser Ala Ala Asn Asp Pro Ala Gly
35 40 45
Val Glu Gln Ile Gln Leu His Ala Val Asp Pro Asn Thr Lys Ile Thr
50 55 60

```
Ile Asn Ile Pro Pro Ala Asp Ser Asn Asp Pro Ala Val Ile Glu Ala
65                  70                  75                  80
Arg Lys Ile Phe Glu Ser Phe Ser Glu Asp Met Gln Lys Ala Leu Ala
                85                  90                  95
Ser Glu Ser Leu Asp Glu Val Asn Lys Val Leu Gly Lys Met Pro Val
            100                 105                 110
Asn Glu Ala Glu Glu Val Val Glu Lys Leu Gly Ala Gly Gly Leu Leu
        115                 120                 125
Ser Leu Glu Glu Ala Ile Val Asp Leu Tyr His Arg Val Glu Asn Pro
    130                 135                 140
Arg
145
```

<210> 35752
<211> 304
<212> PRT
<213> A.fumigatus

<400> 35752

```
Phe Gly His Arg Gly Ser Pro Asn Val Asp Lys Arg Ser Phe Ile Arg
1               5                   10                  15
Ala Lys Gln Ala Gln Ile His Gln Gln Arg His Gln Arg Arg Met Glu
            20                  25                  30
Ile Glu Thr Leu Lys Tyr Glu Arg Ile Ile Asn Asp Gly Leu Leu Ser
        35                  40                  45
Arg Ile Asp Lys Leu Leu Ala Leu Leu Arg Glu His Glu Gly Ser Ser
    50                  55                  60
Arg Asp Pro Glu Glu Leu Val Phe Gln Ala Val Met Glu Ser Ala Ser
65                  70                  75                  80
Asn Pro Ala Glu Asp Gln Ala Pro Val Pro Pro Glu Gly Val His Thr
                85                  90                  95
His Glu Lys Glu Gln Pro Lys Tyr Ser Gln Met Leu Ser Ser Leu Val
            100                 105                 110
Asp Gln Val Lys Lys Glu Ile Gly Glu Ser Ser Pro Asp Asn Arg Tyr
        115                 120                 125
Gln Ala Tyr Ile Lys Gly Val Glu Gly His Gln Asp Lys Val Gln Gly
    130                 135                 140
Leu Gln Lys Glu Leu Leu Ala Arg Leu Ala Gln Leu Glu Lys Glu Glu
145                 150                 155                 160
Ser Ser Lys Ile Thr Ser Asp Met Leu His Thr Gly Phe Asp Thr Ser
                165                 170                 175
Tyr Ile Ser Lys Ser Lys Asp Lys Gly Lys Ala Pro Ala Thr Ala Lys
            180                 185                 190
Ser Glu Thr Val Glu Leu Leu Asn Pro Arg Ala Val Gln Asp Asp Ala
        195                 200                 205
Pro Lys Ala Asp Asp Asn Glu Gln Val Asp Pro Asp Asp Val Lys Ala
    210                 215                 220
Ser Asp Leu Ala Lys Lys Phe Ala Arg Ile Asn Arg Asn Asp Tyr Arg
225                 230                 235                 240
Ala Leu Leu Gln Phe Ile Ser Glu His Pro Glu Ile Val Ala Glu Lys
                245                 250                 255
Glu Thr Asp Gly Leu Leu Val Glu Ala Phe Asn Ser Gln Met Glu Gly
            260                 265                 270
Lys Glu Glu Tyr Ala Arg Gln Cys Val His Gln Gly Leu Leu Leu Gln
        275                 280                 285
Tyr Cys Arg Ser Leu Gly Arg Asp Gly Ile Ser Leu Phe Phe Lys Arg
```

290 295 300

<210> 35753
<211> 472
<212> PRT
<213> A.fumigatus

<400> 35753
Ile Pro Val Gln Phe Arg Ile Phe Ser Pro Asn Phe Gln Met Arg Gly
1 5 10 15
Ile Arg Ser Leu Pro Cys Trp Ala Pro Gly Leu Ser Thr Lys Arg Ile
20 25 30
Pro Pro Arg Glu Leu Phe Ala Asp Leu Phe Pro Asn Ala Cys Val Ile
35 40 45
Ser Ala Arg His Ser Ala Arg Asn Gly Leu Ile Arg Gln Phe Ser Gly
50 55 60
Cys Ser Gly Ser Ile Ser Asn Ser Cys Asn Pro Arg Pro Tyr Arg Ser
65 70 75 80
Ala Ile Thr Ser Leu Leu Ser Ala Asn Val Cys Ser Lys Gly Val Ser
85 90 95
Ala Val Gln Pro Arg Phe Leu Ser Thr Val Arg Leu Phe Ser Thr Ser
100 105 110
Gln Arg Ser Leu Glu Pro Lys Ser Asn Val Lys Ser Thr Gly Gly Gln
115 120 125
Val Val Arg Pro Glu Leu His Gln Asp Gln Glu His Glu Asp Ile Glu
130 135 140
Lys Gly Phe Glu Leu Ser Glu Arg Ala Ala Gln Ala Ala Gln Val Asn
145 150 155 160
Leu Ser Ala Lys Leu Ala Lys Asp Gly Ala Ala Gly Lys Lys Ala Gly
165 170 175
Phe Lys Glu Ile Trp Arg Leu Leu Leu Ile Ala Arg Pro Glu Ala Lys
180 185 190
Lys Leu Ala Leu Ala Phe Leu Phe Leu Leu Val Ser Ser Gly Ile Thr
195 200 205
Met Ser Ile Pro Phe Ser Ile Gly Lys Ile Met Asp Thr Ser Thr Lys
210 215 220
Ala Thr Thr Glu Gly Gly Asn Glu Leu Phe Gly Leu Ser Leu Pro Met
225 230 235 240
Phe Tyr Gly Ala Leu Ala Gly Ile Leu Thr Leu Gly Ala Ala Ala Asn
245 250 255
Tyr Gly Arg Ile Ile Ile Leu Arg Ile Val Gly Glu Arg Ile Val Ala
260 265 270
Arg Leu Arg Ser Lys Leu Phe Arg Gln Thr Phe Val Gln Asp Ala Glu
275 280 285
Phe Phe Asp Ala Asn Arg Val Gly Asp Leu Ile Ser Arg Leu Ser Ser
290 295 300
Asp Thr Ile Ile Val Gly Lys Ser Ile Thr Gln Asn Leu Ser Asp Gly
305 310 315 320
Leu Arg Ala Ala Val Ser Gly Ala Ala Gly Phe Gly Leu Met Ala Tyr
325 330 335
Val Ser Leu Lys Leu Ser Ser Ile Leu Ala Leu Leu Leu Pro Pro Ile
340 345 350
Gly Leu Gly Ala Phe Phe Tyr Gly Arg Ala Ile Arg Asn Leu Ser Arg
355 360 365
Gln Ile Gln Arg Asn Leu Gly Thr Leu Thr Lys Ile Ala Glu Glu Arg
370 375 380

```
Leu Gly Asn Val Lys Thr Ser Gln Ser Phe Ala Gly Glu Val Leu Glu
385                 390                 395                 400
Val Arg Arg Tyr Asn Asn Gln Val Arg Lys Ile Phe Glu Leu Gly Lys
                405                 410                 415
Lys Glu Ser Leu Ile Ser Ala Thr Phe Phe Ser Ser Val Arg Asn Cys
            420                 425                 430
Pro Asn Pro Ser Ala Tyr Leu Arg Ser Asn Phe Cys Leu Asp Arg Val
        435                 440                 445
Cys Trp Gln His Asp His Pro Gly Ile Ala Val Arg Arg Arg Arg His
    450                 455                 460
Gly Pro Ile Arg Cys Gln Asn Ala
465                 470
```

<210> 35754
<211> 624
<212> PRT
<213> A.fumigatus

<400> 35754

```
Lys Cys Glu Val Cys Gly Lys Ser Glu Asp Arg Pro Ser Ile Leu Val
1               5                   10                  15
Cys Asp Ser Cys Asp Gln Gly Tyr His Arg Asn Cys Leu Asp Pro Pro
            20                  25                  30
Leu Thr Asn Ile Pro Glu Tyr Asp Trp His Cys Pro Lys Cys Leu Val
        35                  40                  45
Gly Thr Gly Glu Phe Gly Phe Glu Glu Gly Gly Val Tyr Ser Leu Lys
    50                  55                  60
Gln Phe Gln Glu Lys Ala Asn Thr Phe Lys Lys Asn Tyr Phe Ala Ser
65                  70                  75                  80
Lys Met Pro Phe Asp Pro Val Leu Asn Thr His Arg Arg Glu Ser Glu
                85                  90                  95
Asp Asp Val Glu Arg Glu Phe Trp Arg Leu Val Glu Ser Leu Thr Glu
            100                 105                 110
Thr Val Glu Val Glu Tyr Gly Ala Asp Ile His Ser Thr Thr His Gly
        115                 120                 125
Ser Gly Phe Pro Thr Ile Glu Arg Asn Pro Leu Asp Pro Tyr Ser Thr
    130                 135                 140
Asp Pro Trp Asn Leu Asn Val Leu Pro Phe His Gly Asp Ser Leu Phe
145                 150                 155                 160
Arg His Ile Lys Ser Asp Ile Ser Gly Met Thr Val Pro Trp Val Tyr
                165                 170                 175
Val Gly Met Cys Phe Ser Thr Phe Cys Trp His Asn Glu Asp His Tyr
            180                 185                 190
Ala Tyr Ser Ala Asn Tyr Gln His Phe Gly Ala Thr Lys Thr Trp Tyr
        195                 200                 205
Gly Ile Pro Gly Ser Asp Ala Glu Ala Phe Glu Glu Ala Met Arg Gln
    210                 215                 220
Ala Val Pro Glu Leu Phe Glu Ser Gln Pro Asp Leu Leu Phe Gln Leu
225                 230                 235                 240
Val Thr Leu Met Pro Pro Asp Gln Leu Lys Lys Ala Gly Val Asn Val
                245                 250                 255
Tyr Ala Leu Asp Gln Arg Ala Gly Gln Phe Val Ile Thr Phe Pro Lys
            260                 265                 270
Ala Tyr His Ala Gly Phe Asn His Gly Phe Asn Phe Asn Glu Ala Val
        275                 280                 285
Asn Phe Ala Pro Ala Asp Trp Glu Pro Trp Gly Ala Met Gly Val Glu
```

```
    290                 295                 300
Arg Leu Gln Ala Phe Arg Arg His Pro Cys Phe Ser His Asp Glu Leu
305                 310                 315                 320
Leu Leu Thr Ala Ala Ala Arg Asp Thr Ser Ile Thr Thr Ala Lys Trp
                325                 330                 335
Leu Ala Pro Ala Leu Gln Arg Thr Cys His Arg Glu Val Ala Glu Arg
            340                 345                 350
Ala Ala Phe Ile His Arg His Arg Glu Ile Ala Pro His Asn Cys Ala
        355                 360                 365
Leu Gly Ser Leu Asp Ser Ser Ala Ser Gly Glu Cys Gln Leu Lys Phe
    370                 375                 380
Val Ile Glu Glu Glu Asp Leu Pro Glu Asp Asp Tyr Gln Cys Gln Tyr
385                 390                 395                 400
Cys Lys Ala Tyr Thr Tyr Leu Thr Gln Phe Arg Cys His Lys Ser Gly
                405                 410                 415
Lys Thr Val Cys Leu Leu His Thr Glu Thr Phe Asp Cys Cys Gly Asp
            420                 425                 430
Ser Ser Ser Gln Arg Leu Leu Gly Pro Asp His Thr Leu Arg Tyr Arg
        435                 440                 445
Met Ser Asp Asp Thr Leu Lys Ala Val Val Gln Lys Val Gln Glu Arg
    450                 455                 460
Ala Arg Ile Pro Glu Ala Trp Gly Glu Lys Leu Asp Lys Val Leu Glu
465                 470                 475                 480
Asn Glu Pro Lys Pro Gln Leu Lys Val Leu His Ser Leu Leu Ser Glu
                485                 490                 495
Gly Glu Lys Ile Pro Tyr His Leu His Gly Leu Gln Asp Leu Ala Ala
            500                 505                 510
Phe Val Gln Arg Cys Asp Lys Trp Val Glu Glu Ala Asn Asn Tyr Ile
        515                 520                 525
Thr Arg Lys Gln Gln Asn Arg Arg Lys Asn Glu Lys Ala Trp Arg Lys
    530                 535                 540
Ser Thr Ser Lys Ala Ala Gln Leu Glu Glu Arg Asp Arg Glu Val Arg
545                 550                 555                 560
Arg Ile Glu Asn Met Tyr Ala Leu Leu Ala Glu Ala Asp Lys Leu Ser
                565                 570                 575
Phe Asp Cys Pro Gln Met Ala Ala Leu Glu Glu Lys Thr Arg Glu Ile
            580                 585                 590
Glu Lys Phe Arg Gln Asp Val Asn Val Ala Leu Met Asn Pro His Ile
        595                 600                 605
Arg Ser Ile Gln Glu Val Ser Ser Pro Arg Gly Trp Lys Asp Pro Arg
    610                 615                 620
```

<210> 35755
<211> 346
<212> PRT
<213> A.fumigatus

<400> 35755

```
Ser Ala Thr Ala Asp Pro Ser Ser Pro Val Val Lys Thr Asp Ser Gly
1               5                   10                  15
Thr Arg Ala Asn Leu Asn Tyr Leu Asp Gln Leu Ala Lys Phe His Lys
            20                  25                  30
Gln His Gly Thr Asn Leu Asn Arg Phe Pro Ser Val Asp Lys Arg Pro
        35                  40                  45
Leu Asp Leu Tyr Lys Leu Lys Lys Ala Val Glu Ile Arg Gly Gly Phe
    50                  55                  60
```

```
Asp Gln Val Cys Lys Met Lys Lys Trp Ala Glu Ile Gly Arg Asp Leu
65                  70                  75                  80
Gly Tyr Ser Gly Lys Ile Met Ser Ser Leu Ser Thr Ser Leu Lys Asn
                85                  90                  95
Ser Tyr Gln Arg Trp Leu Gln Pro Tyr Glu Glu Tyr Leu Arg Val Val
            100                 105                 110
Lys Pro Gly Val Gln Gln Gln Leu Glu Leu Glu His Gly Gly Pro Tyr
        115                 120                 125
Thr Pro Ser Pro Asn Gln Ser Pro Met Ala Lys Lys Pro Val Leu Tyr
    130                 135                 140
Asp His Thr Thr Pro Ser Thr Thr Pro Gln Ala Pro Pro Gly Ile Pro
145                 150                 155                 160
Ala Thr Gly Gly Pro His Gly Thr Pro Lys Glu Ile Glu Ala Thr Pro
                165                 170                 175
Asp Lys Pro Thr Pro Pro Ala Glu Ser Ala Ala Pro Arg Pro Val Thr
            180                 185                 190
Ser Gly Phe Thr Pro Val Asn Ala Gly Gly Gly Gly Phe Thr Ala Val
        195                 200                 205
Asn Arg Ser Pro Ser Phe Val Ala Val Asn Ser Gly Pro Val Val Lys
    210                 215                 220
Lys Glu Ala Glu Thr Gly Ser Leu Thr Pro Gln Ser Val Ala Glu His
225                 230                 235                 240
Pro Gln Ser Ser Thr Pro Val Thr Asn Gly Asn Gly Gly His Pro Met
                245                 250                 255
Lys Arg Ala Ile Ser His Glu Ser Gly Ser Pro Thr Glu Gly Gly Glu
            260                 265                 270
Thr Asp Ala Ser Gly Arg Arg Ser Lys Arg Leu Arg Lys Gly Lys His
        275                 280                 285
Val Phe Ser Gln His Ser Ser Trp Leu Asp Met Ser Asp Val Leu Leu
    290                 295                 300
Asp Ala Pro Pro Pro Thr Val Ala Gly Ser His Met Ser Leu Leu Arg
305                 310                 315                 320
Pro Ala Pro Pro Arg Ala Arg Lys Ser Asp Ser Arg Lys Ile Gly Asp
                325                 330                 335
Val Ser Lys Lys Lys Ser Ser Ile Val Met
            340                 345
```

<210> 35756
<211> 275
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (72),(74),(90)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35756

```
Lys Thr Thr Ser Leu Asn Lys Tyr Gln Asp Met Thr Ser Pro Ser Asp
1               5                  10                  15
Ser Trp Pro Ala Ile Leu Thr Thr Ala Lys His Thr Pro Arg Thr Ser
            20                  25                  30
Thr Pro Lys Pro Asp Leu Pro Ser Pro Gln Gln Gln Ser Leu Ile Asp
        35                  40                  45
Ser Leu Arg Thr Leu Pro Arg Met Asn Gln Asp Val Glu Ala Asp Ala
    50                  55                  60
```

```
Ala Gln Ser Gln Ala Glu Leu Xaa Ser Xaa Ile Ala Asp Ile Leu Ser
65                  70                  75                  80
Glu Tyr Gln Asp Glu Asp Glu Arg Gln Xaa Gln Gln Ser Cys Thr Ser
                85                  90                  95
Thr Ser Asn Glu Asn Lys Thr Thr Ile Glu Glu Trp Glu Asn Leu His
            100                 105                 110
Ala Phe Leu Ala Phe Ile Thr Lys Glu Arg Ile Val Arg Leu Glu Asp
        115                 120                 125
Val Gly Ile His Val Leu Arg Val Ala Leu Glu Arg Gly Glu Pro His
    130                 135                 140
Gln His Gln His Gln His His Tyr Ser His Arg Arg Tyr Pro Glu Thr
145                 150                 155                 160
Gly Thr Lys Met Glu Met Lys Thr Glu Gln Gly Gly Asn Arg Lys Lys
                165                 170                 175
Met Ala Val Phe Val Ser Cys Ala Ala Ile Trp Ala Val Val Met Gly
            180                 185                 190
Glu Glu Leu Trp Glu Arg Arg His Glu Thr Asp Glu Cys Pro Val Gly
        195                 200                 205
Leu Ser Leu Ser Pro Ala Gln Arg Ala Ser Ala Ala Ala Ala Pro Thr
    210                 215                 220
Ala Ala Gly Glu Ala Ala Ala Ala Thr Thr Val Ser Lys Ser Arg Trp
225                 230                 235                 240
Gln Met Trp Ile Asp Arg Phe Gln Phe Leu Ser Leu Ala Glu Asp Leu
                245                 250                 255
Asp Ile Lys Thr Arg Glu Leu Ala Ala Glu Ala Ala Ala Val Met Arg
            260                 265                 270
Arg Val Thr
        275
```

<210> 35757
<211> 338
<212> PRT
<213> A.fumigatus

<400> 35757

```
Ala Asp Ile Thr Ser Leu Leu Ser Ser Leu Asn Leu Pro Gly Ser Leu
1               5                   10                  15
Gln Ala Leu Glu Lys Pro Leu Gly Leu Pro Pro Thr Leu Val Ala His
            20                  25                  30
Ala Glu Glu Met Arg Gln Gln Asn Gly Leu His Arg Leu Arg Arg Ser
        35                  40                  45
Leu Glu Asp Ile Ala Lys Val Lys Ala Asn Asp Lys Ala Val Tyr Asn
    50                  55                  60
Glu Gly Val Glu Leu Leu Ala Ala Glu Lys Ala Glu Asp Glu Ala Ser
65                  70                  75                  80
Arg Arg Lys Tyr Gly Thr Asp Arg Trp Thr Arg Gln Thr Ser Glu Ala
                85                  90                  95
Ala Ala Pro Lys Leu Tyr Thr Thr Ser Ser Glu Ile Ser Gly Tyr Phe
            100                 105                 110
Thr Ser Ala Gln Ser Ser Asp Asn Leu Val Glu Gln Lys Leu Arg Asp
        115                 120                 125
Ser Glu Thr Val Phe Arg Val Leu Thr Gly Thr Asn Arg Asp Leu Glu
    130                 135                 140
Met Tyr Val Pro Ser Ser Arg Arg Ala Ala Ile Pro Pro Glu Val Glu
145                 150                 155                 160
Arg Glu Leu Ile Arg Leu Arg Gly Cys Leu Ser Glu Val Ser Arg Leu
```

```
                165                 170                 175
Glu Ser Arg Arg Lys Arg Arg Ala Gln Ala Leu Lys Glu Lys Ala Arg
            180                 185                 190
Ala Asp Asp Val Thr Gln Ala Leu Leu Lys Glu Thr Ala Arg Leu Glu
        195                 200                 205
Arg Glu Phe Pro Met Gln Pro Ile Gln Ala Ser Gln Phe Glu Asp Leu
    210                 215                 220
Phe Glu Asp Gln Leu His Leu Tyr Asp Ser Asp Leu Glu Met Val Ala
225                 230                 235                 240
Gln Glu Gln His Asp Gln Asp Gln Ile Ala Ala Gln Val Arg Glu Ala
                245                 250                 255
Asn Arg Ala Phe Thr Arg Ala His Lys Gly Asp Ala Ser Thr Lys Glu
            260                 265                 270
Arg Glu Lys Ala Leu Gln Glu Leu Glu Asn Gly Tyr Leu Lys Tyr Lys
        275                 280                 285
Glu Ile Ile Ser Asn Ile Glu Val Gly Arg Lys Phe Tyr Asn Asp Leu
    290                 295                 300
Ala Lys Ile Val Gly Arg Phe Arg Asp Asp Cys Lys Ala Phe Val His
305                 310                 315                 320
Gln Arg Arg Met Glu Ala Ser Gln Leu Glu Arg Tyr Phe Leu Leu Ser
                325                 330                 335
Ser Ala
```

<210> 35758
<211> 331
<212> PRT
<213> A.fumigatus

<400> 35758

```
Ala Pro Asp Arg Cys Gln Val Ser Gln Asn Asn Leu Arg Phe Glu Leu
1               5                   10                  15
Ala Asn Ile Leu Phe Asn Leu Ala Ala Leu Tyr Ser Gln Leu Ala Phe
            20                  25                  30
Ser Val Asn Arg Thr Thr Ser Asp Gly Leu Lys Gln Ala Cys Asn Tyr
        35                  40                  45
Phe Cys Gln Ser Ala Gly Val Leu Leu His Leu Arg Ala Asp Ile Leu
    50                  55                  60
Pro Asp Leu Arg Thr Ser Pro Pro Glu Asp Met Asp Glu Met Thr Leu
65                  70                  75                  80
Gln Ser Leu Glu Gln Leu Leu Leu Ala Gln Ala Gln Glu Cys Phe Trp
                85                  90                  95
Gln Lys Ala Val Lys Asp Gly Leu Lys Asp Ala Ser Ile Ala Arg Leu
            100                 105                 110
Ala Ala Lys Val Ser Asp Phe Tyr Ala Glu Ala Gly Asp Cys Ala Val
        115                 120                 125
Lys Ser Asn Ala Val Ser Pro Glu Trp Ile His His Met Thr Ala Lys
    130                 135                 140
His His His Phe Ala Ala Ala Ala Gln Tyr Arg Gln Ser Leu Asp Cys
145                 150                 155                 160
Leu Glu Lys Arg Lys Tyr Gly Glu Glu Val Ala Arg Leu Arg Asp Ser
                165                 170                 175
Glu Ala Cys Val Asn Glu Ala Leu Lys Glu Ser Arg Trp Ile Asn Arg
            180                 185                 190
Ala Val Leu Gly Asp Leu Asn Gly Leu Lys Ser Arg Val Ser Glu Asp
        195                 200                 205
```

```
Leu Lys Arg Ala Thr Lys Asp Asn Asp Val Ile Tyr Leu Asn Pro Val
    210                 215                 220
Pro Pro Lys Ser Glu Leu Lys Ile Ile Asp Arg Ala Cys Met Val Ala
225                 230                 235                 240
Ala Lys Ala Pro Ser Gln Val Thr Asp Ala Ile Ser Met Leu Gly Glu
                245                 250                 255
Asn Gly Pro Leu Gly Gln Pro Leu Phe Ala Lys Leu Val Pro Tyr Ala
            260                 265                 270
Val His Ile Ala Ala Ser Ile Tyr Ser Asp Arg Arg Asp Arg Leu Val
        275                 280                 285
Asn Glu Arg Val Ile Gly Glu Leu Glu Thr Met Thr Asp Lys Leu Arg
    290                 295                 300
Glu Tyr Val Leu Ala Thr Leu Asn Val Leu Ala Ala Phe Phe Lys Trp
305                 310                 315                 320
Ile Lys Leu Thr Leu Leu Val Cys Tyr His Arg
                325                 330
```

<210> 35759
<211> 65
<212> PRT
<213> A.fumigatus

<400> 35759

```
Tyr Arg His Ser Ile Pro Val Thr Leu Ser Phe Glu Gln Ala Thr Gly
1               5                   10                  15
Lys Asn Val Leu Leu Leu Pro Met Gly Ser Ser Thr Asp Ala Ala His
            20                  25                  30
Ser Val Asn Glu Lys Leu Asp Lys Lys Asn Tyr Ile Glu Gly Thr Lys
        35                  40                  45
Leu Leu Gly Ala Tyr Leu His Tyr Val Ala Glu Glu Pro Ala Ser Glu
    50                  55                  60
Val
65
```

<210> 35760
<211> 210
<212> PRT
<213> A.fumigatus

<400> 35760

```
Arg Ser Ala Thr Ile Ile Val Arg Leu Lys Asn Gln Gly Asp Gly Ala
1               5                   10                  15
Phe Met Pro Asp Asp Tyr Gly Lys Ser Ile Ile Ile Glu Arg His Phe
            20                  25                  30
Ser Lys Asn Gly Thr Ser Gly Phe Lys Ile Lys Ala Glu Asn Gly Arg
        35                  40                  45
Ile Ile Ser Thr Lys Lys Ala Glu Leu Asp Ser Ile Ile Asp Tyr Phe
    50                  55                  60
Thr Leu Gln Phe Asp Asn Pro Met Asn Val Leu Ser Gln Asp Met Ala
65                  70                  75                  80
Arg Gln Phe Leu Ser Thr Ser Ser Pro Ala Asp Lys Tyr Arg Phe Phe
                85                  90                  95
Val Lys Gly Val Gln Leu Glu Gln Leu Asp Gln Asp Tyr Arg Leu Ile
            100                 105                 110
Glu Glu Ser Ala Asp Gln Ile Glu Glu Lys Leu Arg Asn Arg Glu Gln
        115                 120                 125
```

```
Asp Ile Lys Ile Leu Arg Asp Leu Lys Asp Thr Ala Asp Arg Arg Leu
    130                 135                 140
Glu Lys Ser Asp Gln Gln Glu Ser Leu Arg Ser Arg Ile Arg Asn Val
145                 150                 155                 160
Arg Asn Gln Val Ala Trp Ala Gln Val Glu Glu Gln Glu Lys Ala Ser
                165                 170                 175
His Thr Val Phe Arg Ala Ser Ile Pro Met Ser Lys Lys Gln Leu Val
            180                 185                 190
Glu Arg Leu Pro Gly Gly Arg Ala Arg Ala Asp Arg Gln Arg Asp Ser
        195                 200                 205
Ser Gly
    210
```

<210> 35761
<211> 207
<212> PRT
<213> A.fumigatus

<400> 35761

```
Pro Gly Ser Pro Ala Val Lys Lys Ser Lys Leu Val Asp Pro Arg Gly
1               5                   10                  15
Asn Ile Leu Ile Pro Gly Ile Met Asp Leu Val Ala Pro Leu Thr Glu
            20                  25                  30
Glu Glu Asn Ser Leu Tyr Ser Lys Ile Ser Tyr Thr Met Asp Asn Leu
        35                  40                  45
His Glu Ser Leu Gly Ser Lys Thr Asn Ile His Glu Thr Lys Glu Arg
    50                  55                  60
Thr Leu Met Ala Arg Trp Arg Tyr Pro Ser Leu Ser Ile His Gly Ile
65                  70                  75                  80
Glu Gly Ala Phe Ser Ala Pro Gly Ala Lys Thr Val Ile Pro Ala Lys
                85                  90                  95
Val Ile Gly Lys Phe Ser Ile Arg Thr Val Pro Asn Met Glu Ser Asp
            100                 105                 110
Ala Val Asn Lys Leu Val Phe Asp Tyr Ile Lys Ala Glu Phe Ala Lys
        115                 120                 125
Leu Asn Ser Lys Asn Thr Leu Asp Val Trp Leu Gln His Asp Gly Lys
    130                 135                 140
Trp Trp Val Ala Ser Pro Lys His Trp Asn Phe Thr Ala Ala Ser Lys
145                 150                 155                 160
Ala Val Lys Gln Val Phe Gly Val Glu Pro Asp Met Thr Arg Glu Gly
                165                 170                 175
Gly Arg Tyr Val Asn Tyr Leu Ser Leu Leu Ser Arg Phe Asp Tyr Leu
            180                 185                 190
His Arg Asp Thr Ser Ala Asn Ile Asp Ile Ala Phe Leu Leu Leu
        195                 200                 205
```

<210> 35762
<211> 193
<212> PRT
<213> A.fumigatus

<400> 35762

```
Leu Gln Phe His Asp Gln Lys Leu Ile Arg Ser Leu Met Met Ala Ser
1               5                   10                  15
Ala Lys Arg Leu Gln Ala Ser Gln Asp Pro Glu Ser Phe Asn Asp Glu
            20                  25                  30
```

```
Ser Asn Gly Thr Ser Leu Thr Ser Thr Ser Val Arg Leu Pro Tyr Met
        35                  40                  45
Leu Cys Ile Gln Gln Val Asn Leu Val Ile Gln Arg Lys Arg Ile Arg
    50                  55                  60
Arg Ser Glu Thr Ser Arg Ser Glu Glu Asp Asn Glu Ser Ser Asp Ala
65                  70                  75                  80
Glu Thr Thr Arg Ser Cys Ser Ile Thr Glu Ala Leu Asp Asp Asp Glu
                85                  90                  95
Asp Glu Leu Glu Leu Arg Ala Thr Gln Ala Ile Gln Glu Lys Tyr Ser
            100                 105                 110
Phe Val Asn Glu Glu Pro Asn Ile Pro Ala Glu His Gly Ile Leu Glu
        115                 120                 125
Arg Val Glu Cys Tyr Asn Phe Met Cys His Asp His Phe Arg Val Glu
    130                 135                 140
Leu Gly Pro Leu Ile Asn Phe Ile Val Gly Lys Asn Gly Ser Gly Lys
145                 150                 155                 160
Ser Ala Val Leu Thr Ala Ile Thr Leu Cys Leu Gly Gly Lys Ala Ser
                165                 170                 175
Ala Thr Asn Arg Gly Gln Ser Leu Lys Ser Phe Ile Lys Glu Gly Lys
            180                 185                 190
Glu
```

<210> 35763
<211> 75
<212> PRT
<213> A.fumigatus

<400> 35763

```
Ile Leu Val Asp Glu Asp Ala Pro Val Pro Ser Lys Lys Asn Trp Ile
1               5                   10                  15
Tyr Pro Arg Glu Lys Asn Pro Thr Gln Asp Thr Ile Glu Phe Leu Trp
            20                  25                  30
Arg Leu Leu Phe Val Glu Leu Thr Glu Cys Trp Ala Thr Leu Asp Ala
        35                  40                  45
Thr Phe Lys Tyr Glu Glu Cys Arg Val His Ala Ala Thr Lys Lys Asp
    50                  55                  60
Arg Thr Arg Asp Ile Arg Val Ser Ser Asp Leu
65                  70                  75
```

<210> 35764
<211> 212
<212> PRT
<213> A.fumigatus

<400> 35764

```
Ser Ser Val Phe Leu Ala Tyr Ala Asn Ile Pro Leu Lys Leu Ser Thr
1               5                   10                  15
Ala Val Tyr Gln His Ser Ile Asn Lys Leu Lys Leu Met Thr Arg Ser
            20                  25                  30
Ala Leu Val Gly Leu Ile His Asp Lys Thr Met Lys Ser Pro Ser Ile
        35                  40                  45
Ala Tyr Asp Asn Gly Glu Ala Thr Thr Leu Met Ser Thr Asp Ala Asp
    50                  55                  60
Ser Leu Asp Arg Ile Ala Glu Met Val His Glu Thr Trp Ala Gln Val
65                  70                  75                  80
```

```
Ile Glu Val Leu Ile Gly Ile Gly Leu Leu Ala Ser Glu Val Gly Trp
                85                  90                  95
Ile Trp Pro Leu Pro Leu Phe Leu Ile Tyr Cys Lys Tyr Ile Cys Met
            100                 105                 110
Thr Phe Leu Leu Ile Leu Arg Cys Val Val Cys Ser Tyr Met Ser Arg
        115                 120                 125
Phe Val Ala Lys His Leu Gln Pro His Gln Lys Ala Trp Ser Asn Ala
    130                 135                 140
Thr Gln Ser Arg Ile Ala Ala Thr Thr Ser Val Leu Ser Ala Met Lys
145                 150                 155                 160
Asp Val Lys Met Leu Gly Leu Gln His Lys Leu Thr His Arg Ile Gln
                165                 170                 175
Gln Leu Arg Asp Gly Glu Leu Trp Ala Ala Ser Lys Leu Arg Trp Ile
            180                 185                 190
Met Val Tyr Tyr Asn Ala Ser Gly Val Ser Gly Ala Leu Asn Glu Val
        195                 200                 205
Glu Arg Tyr Val
    210
```

<210> 35765
<211> 61
<212> PRT
<213> A.fumigatus

<400> 35765

```
Met Ala His Pro Met Gly Glu Ile Met Arg Leu Phe Ala Ala Leu Thr
1               5                   10                  15
Thr Glu Asp Val Phe Cys Trp Asn Cys Gly Ala Gly Gln Leu Tyr Gln
            20                  25                  30
Ala Gln Asp Leu His Asp Ser Val Arg Leu Asp Val Leu Thr Met Ile
        35                  40                  45
Tyr Val Tyr Lys Leu Lys Tyr Ile Met Ile Ser Met Ser
    50                  55                  60
```

<210> 35766
<211> 770
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (5),(6),(7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35766

```
Pro Arg Pro Ile Xaa Xaa Xaa Arg Val Pro Phe Tyr His Gly Gly Val
1               5                   10                  15
Glu Arg Ala Arg Lys Leu Ala Gln Glu His Glu Leu Phe Ser Gln Gly
            20                  25                  30
Glu Pro Asp Leu Arg Cys His Val Val Val Thr Ser Tyr Glu Thr Ile
        35                  40                  45
Ile Asp Asp Ala Ser Arg Arg Val Leu Met Lys Ile Pro Trp Ala Gly
    50                  55                  60
Leu Val Val Asp Glu Gly Gln Arg Leu Lys Asn Asp Lys Ser Gln Leu
65                  70                  75                  80
Tyr Glu Ser Leu Ser Arg Phe Lys Phe Pro Phe Lys Leu Leu Leu Thr
```

```
                85                  90                  95
Gly Thr Pro Leu Gln Asn Asn Thr Arg Glu Leu Phe Asn Leu Leu Gln
            100                 105                 110
Phe Cys Asp Pro Thr Lys Asp Ala Ala Arg Leu Asp Glu Lys Tyr Gly
        115                 120                 125
Thr Leu Ser Lys Glu Asn Ile Pro Glu Leu His Asn Met Ile Arg Pro
    130                 135                 140
Phe Phe Leu Arg Arg Thr Lys Ala Gln Val Leu Thr Phe Leu Pro Pro
145                 150                 155                 160
Ile Ala Gln Ile Ile Val Pro Val Ser Met Ser Val Val Gln Lys Lys
                165                 170                 175
Leu Tyr Lys Ser Ile Leu Ala Lys Asn Pro Gln Leu Ile Lys Ala Ile
            180                 185                 190
Phe Gln Arg Asn Asn Asn Ser Glu Gly Val Lys Gln Ala Asp Arg His
        195                 200                 205
Asn Leu Asn Asn Ile Leu Met Gln Leu Arg Lys Cys Leu Cys His Pro
    210                 215                 220
Phe Val Tyr Ser Glu Ala Ile Glu Glu Arg Thr Ala Asn Ser Ala Ala
225                 230                 235                 240
Ser His Lys His Leu Val Glu Ala Ser Gly Lys Leu Lys Leu Leu Glu
                245                 250                 255
Ile Met Leu Pro Lys Leu Lys Gln Arg Gly His Arg Val Leu Ile Phe
            260                 265                 270
Ser Gln Phe Leu Asp Asn Leu Asp Ile Val Glu Asp Phe Leu Asp Gly
        275                 280                 285
Leu Gly Leu Leu His Arg Arg Leu Asp Gly Arg Met Thr Ser Leu Glu
    290                 295                 300
Lys Gln Lys Arg Ile Asp Glu Tyr Asn Ala Asp Asn Ser Pro Tyr Phe
305                 310                 315                 320
Ala Phe Leu Leu Ser Thr Arg Ser Gly Gly Val Gly Ile Asn Leu Ala
                325                 330                 335
Thr Ala Asp Thr Val Ile Ile Met Asp Pro Asp Phe Asn Pro His Gln
            340                 345                 350
Asp Met Gln Ala Leu Ser Arg Ala His Arg Ile Gly Gln Lys Asn Lys
        355                 360                 365
Val Leu Val Phe Gln Leu Met Thr Arg Gly Ser Val Glu Glu Lys Ile
    370                 375                 380
Met Gln Ile Gly Lys Lys Lys Met Val Leu Asp His Val Leu Ile Asp
385                 390                 395                 400
Arg Met Val Ala Glu Glu Gly Asp Gly Arg Asp Leu Glu Ser Ile Leu
                405                 410                 415
Arg His Gly Ala Gln Thr Leu Phe Asn Asp Asp Asp Ser Gly Asp Ile
            420                 425                 430
Gln Tyr Asp Ser Glu Ser Val Asp Lys Leu Leu Asp Arg Ser Gln Glu
        435                 440                 445
Glu Gln Ala Lys Met Pro Asp Glu Ser Ala Pro Glu Ser Gln Phe Ser
    450                 455                 460
Phe Ala Arg Val Trp Ala Asn Asp Asn Gln Asn Leu Glu Gly Gln Leu
465                 470                 475                 480
Gln Asp Thr Glu Asp Lys Asp Glu Asp Pro Ala Ile Ser Asn Thr Leu
                485                 490                 495
Trp Glu Lys Ile Leu Gln Glu Arg Glu Gln Ala Ala Ala Glu Glu Ala
            500                 505                 510
Arg Arg Lys Ala Glu Thr Leu Gly Arg Gly Lys Arg Lys Arg Ala Ala
        515                 520                 525
Val Asp Tyr Gly Ile Asp Thr Met Asp Val Ser Pro Val Asn Val Arg
```

```
    530                 535                 540
His Lys Ala Asp Asn His Asp Glu Tyr Lys Ala Asp Glu Val Ile Asp
545                 550                 555                 560
Ser Glu Ser Asp Asn Asp Pro Gly Met Asp Ser Glu Gly Val Asp Arg
                565                 570                 575
Ser Ser Lys Lys Ser Lys Gly Asn Ala Ala Pro Cys Leu Ser Thr Gly
            580                 585                 590
Phe Ser Val Leu Thr Thr Arg Thr Val Arg Pro Phe Lys Arg Ile Ala
        595                 600                 605
Ala Glu Glu Asp Gly Val Pro Ala Tyr Gly Ala Thr Gly Met Asp Gly
    610                 615                 620
Asn Ala Glu Ala Arg His Pro Pro Cys Phe Val Cys Thr Lys His His
625                 630                 635                 640
Pro Val Gly Ser Cys Pro Leu Lys His Ala Gly Val Glu His Cys Gly
                645                 650                 655
Leu Cys Gly Leu Ala His Tyr Gly Ile Ala Arg Thr Cys Pro His Leu
            660                 665                 670
Arg Ser Glu Thr Gln Val Ala Arg Met Leu Asp Ala Leu Arg His Ser
        675                 680                 685
Thr Glu Asp Gly Glu Leu Ile Glu Lys Ala Lys Lys Tyr Leu Gln Gly
    690                 695                 700
Ile Arg Gly Ser Leu Ala Gln Arg Arg Arg Ile Leu Ala Ser Arg Ala
705                 710                 715                 720
Ala Ala Ser Gln Ile Ser Asn Gly Val Pro Gly Thr Thr Asn Thr Gly
                725                 730                 735
Ser Thr Gly Ser Pro Val Ile Asp Leu Thr Ser Tyr Pro Ala Arg Asn
            740                 745                 750
Gly Thr Thr Ser Phe Gly Pro Ser Gln Pro Gly Gln Lys Phe Pro Thr
        755                 760                 765
Ser Gly
    770

<210> 35767
<211> 469
<212> PRT
<213> A.fumigatus

<400> 35767
Ser Met Ile Ile Val Pro Asp Phe Arg Ser Thr Asp Gly Leu Phe Lys
1               5                   10                  15
Ser Leu Gln Lys Lys His Asn Leu Lys Ala Ser Gly Lys Leu Leu Phe
            20                  25                  30
Asp Ala Ala Val Tyr Gln Asp Glu Ser Leu Thr Ala Ser Phe Gln Asp
        35                  40                  45
Met Val Arg Ser Leu Ser Glu Glu Ala Ala Lys Thr Cys Pro Thr Ala
    50                  55                  60
Phe His His Met Leu Ala Arg Leu Ala Gln Glu Lys Arg Leu Thr Arg
65                  70                  75                  80
Leu Tyr Thr Gln Asn Ile Asp Gly Ile Glu Thr Ser Met Pro Pro Leu
                85                  90                  95
Ala Thr Gln Ile Pro Leu Asn Val Lys Ala Pro Trp Pro Arg Thr Ile
            100                 105                 110
Gln Leu His Gly Ser Leu Asp Lys Met Val Cys Gln Lys Cys Arg His
        115                 120                 125
Leu Leu Asp Phe Asp Arg Glu Met Phe Asn Arg Pro Asp Ala Pro Glu
    130                 135                 140
```

```
Cys Pro Glu Cys Ser Lys Asn Asn Gln Phe Arg Ile Glu Thr Gly Gln
145                 150                 155                 160
Arg Ser His Gly Ile Gly Lys Met Arg Pro Arg Ile Val Leu Tyr Asn
                165                 170                 175
Glu His Asn Pro Asp Glu Glu Ala Ile Thr Ser Val Met Asn Ala Asp
            180                 185                 190
Ile Arg Ser Arg Pro Asp Ala Leu Ile Val Val Gly Thr Ser Leu Lys
        195                 200                 205
Ile Pro Gly Val Arg Arg Leu Val Lys Ser Leu Cys Ser Val Ile Arg
    210                 215                 220
Thr Arg Arg Asn Gly Val Thr Met Trp Ile Asn Asn Glu Pro Pro Ala
225                 230                 235                 240
Gly Lys Glu Phe Glu Asp Cys Trp Asp Leu Met Val Lys Gly Asp Cys
                245                 250                 255
Asp Glu Val Ala Arg Leu Ala Gly Leu Lys Arg Trp Asp Asp Asp Ser
            260                 265                 270
Glu Asp Val Phe Asp Glu Cys Asn Ser Ser Glu Val Glu Arg Val Lys
        275                 280                 285
Lys Glu Gln Gly Ala Val Ser Ile Val Ile Arg Thr Pro Lys Lys Lys
    290                 295                 300
Gln Lys Thr Gln Thr Gly Ile Leu Thr Pro Ser Ser Ser His Asp Glu
305                 310                 315                 320
Glu Ser Thr Glu Leu Arg His Lys His Pro Ser Asn Gly Gly Ser Leu
                325                 330                 335
His Asn Pro Ala Ser Arg Gly Arg Ser Leu Lys Asp Val Leu His Lys
            340                 345                 350
Ala Lys Gly Gly Glu Pro Thr Lys Ala Ala Pro Lys Lys Ser Ala Pro
        355                 360                 365
Lys Lys Arg Gly Lys Lys Val Glu Pro Ala His Asn Ala Lys Ile Thr
    370                 375                 380
Ala Phe Ser Lys Val Thr Lys Thr Ala Arg Ala Ala Thr Gly Asp Ala
385                 390                 395                 400
Gly Lys Ser Val Lys Leu Glu Lys Asp Asp Ala Lys Pro Met His Pro
                405                 410                 415
Leu Pro Pro Gly Ala Ala Arg Asn Asn Gly Pro Leu Phe Pro Asn Leu
            420                 425                 430
Val Gly Lys Gly Asn Thr Ser Pro Cys Gly Gly Phe Trp Ser Asn Pro
        435                 440                 445
Asp Thr Ile Ser Pro Lys Ser Val Pro Lys Gly Met Lys Asp Leu Leu
    450                 455                 460
Asn Pro Pro Ser Pro
465
```

<210> 35768
<211> 197
<212> PRT
<213> A.fumigatus

<400> 35768

```
Gln Leu Arg Leu Val Ala Glu Ser Ile Arg Arg Val Asn Asp Thr Ser
1               5                   10                  15
Ser Ser Asn Asn Ser Ser Val Tyr Val Val Leu Ile Asn Gln Tyr Ser
            20                  25                  30
Leu Arg Ser Leu Met Ser Pro Leu Lys Gln Ser Asn Phe Leu Cys Leu
        35                  40                  45
Ser Gln Thr Lys Pro Ala Leu Gln Leu Arg Pro Arg Ser Arg Leu Ile
```

```
    50                  55                  60
Phe Ala Phe Cys Val Ile Cys Ser Ile Arg Ile His Arg Ser Pro Arg
65                  70                  75                  80
Ser Arg Ile Ala Ile Gln Ile Phe Tyr Ser Ile Asp Val Leu Phe Leu
                85                  90                  95
Cys Leu Ile Phe Ile Leu Leu Leu Ala Ile Ile Leu Ile Leu Leu Leu
            100                 105                 110
Val Phe Leu Gly Leu Leu Leu Ile Leu Gln Ala Arg Phe Leu Phe Leu
        115                 120                 125
Leu Gly Val Ile Val Ile Phe Leu Leu Leu Met Pro Leu Leu Ser Thr
    130                 135                 140
Arg Arg Thr Pro Leu Asn Pro Leu His Pro Leu His Leu Thr Tyr Arg
145                 150                 155                 160
Ala Leu Leu Val Ile Tyr Leu Cys Phe Leu Asp Ser Pro Gly Leu Val
                165                 170                 175
Thr Asp Pro Arg Pro Arg Leu Pro Pro Leu Pro Leu Pro Ser Leu His
            180                 185                 190
Leu Arg Lys Arg Leu
        195
```

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<210> 35769
<211> 179
<212> PRT
<213> A.fumigatus

<400> 35769

```
Gly Ser Phe Gln Pro Arg Gly Glu Glu Thr Ser Ser Thr Thr Thr Ala
1               5                   10                  15
Ser Ser Leu Thr Thr Ser Thr Ser Ser Ser Ser Ser Gln Thr Ser Thr
            20                  25                  30
Val Ser Asp Glu Arg Trp Asn Pro Lys Phe Met Asp Asp Phe Asp Leu
        35                  40                  45
Ser Glu Leu Ser Glu Leu Ser Ser Pro Pro Ala Ser Pro Gln Ser Pro
    50                  55                  60
Pro Ser Phe Ile Pro Ser Pro Pro Pro Ser Gln Asp Ala Gly Glu Ser
65                  70                  75                  80
Ser Ser Ala Ala Arg Gly Gln Asp Gly Leu Ser Pro Ala Arg Lys Lys
                85                  90                  95
Arg Arg Val Ala Thr Pro Lys Glu Arg Thr Thr Gln His Leu Asp Leu
            100                 105                 110
Ser Arg Asp Ser Gly Leu Ser Phe Arg Glu Gln Gln Ala Gln Val Asp
        115                 120                 125
Leu Leu Val Lys Thr Leu Arg Arg His Arg Lys Ile Val Val Ile Ala
    130                 135                 140
Gly Ala Gly Ile Ser Thr Ser Ala Gly Ser Met His Ser Leu Gln Pro
145                 150                 155                 160
His Gly Gly Arg Gln Lys Asn Arg His Ala Asn Trp Leu Ile Tyr Asp
                165                 170                 175
Tyr Ser Ser
```

<210> 35770
<211> 194
<212> PRT
<213> A.fumigatus

<400> 35770
Ser Gly Trp Val Asp Ala Asp Glu Cys Ser Ala Asn Glu Ala Thr Leu
1 5 10 15
Lys Arg Thr Val Ala Pro Ala Asp Val Phe Ser Ala Leu Ser Glu Leu
20 25 30
Glu Phe Glu Ala Phe Arg Pro Arg Leu Glu Lys Glu Leu Glu Ala Phe
35 40 45
Thr Glu Met Lys Ala Gly Lys Arg Lys Gly Arg Lys Ser Gly Ala Gly
50 55 60
Val Gly Asp Glu Ala Gly Ala Val Gln Lys Thr Gln Val Asp Asp Glu
65 70 75 80
Glu Ser Ala Val Arg Glu Val Lys Arg Val Lys Arg Val Glu Gly Gly
85 90 95
Ser Ser Ser Ala Gln Glu Gly His Glu Glu Glu Glu Asp Asp Asp Asp
100 105 110
Thr Gln Glu Glu Gln Glu Pro Gly Leu Glu Asn Glu Glu Glu Ala Glu
115 120 125
Glu Asp Glu Glu Glu Asp Glu Asp Asp Gly Glu Glu Glu Asp Glu Asp
130 135 140
Glu Thr Gln Glu Glu Asp Ile Asp Arg Val Glu Asp Leu Asp Arg Asp
145 150 155 160
Ser Arg Pro Arg Arg Thr Met Asp Pro Asp Ala Ala Asp Asp Thr Glu
165 170 175
Ser Glu Asn Glu Ser Gly Pro Gly Thr Gln Leu Gln Ser Gly Leu Gly
180 185 190
Leu Gly

<210> 35771
<211> 635
<212> PRT
<213> A.fumigatus

<400> 35771
Arg Lys His Leu Ser Asn Trp Leu Thr Ile Ser Pro Leu Leu Asn Val
1 5 10 15
Pro Phe Arg Arg Ser Ser Trp Ile Cys Leu Ala Arg Ile Leu His Gly
20 25 30
Thr Pro Phe Arg Pro Leu Gly Cys Pro Glu Ser Arg Leu Pro Pro Met
35 40 45
Pro Ser Phe Ala Lys Asp Phe Ala Pro Gln Glu Leu His Ser Asp Ala
50 55 60
Glu Ile Ala Leu Ala Leu His Thr Leu Gly Ser Phe Asp Phe Ser Gly
65 70 75 80
His Ile Leu Asn Glu Phe Val Arg Asp Val Ala Ile Asn Tyr Val Glu
85 90 95
Asn Asp Asn Pro Glu Ile Arg Lys Ala Ala Ala Leu Thr Cys Cys Gln
100 105 110
Leu Phe Val His Asp Pro Ile Ile Asn Gln Thr Ser Ser His Ser Ile
115 120 125
Gln Val Val Ser Glu Val Ile Asp Lys Leu Leu Thr Val Gly Ile Gly
130 135 140
Asp Pro Asp Pro Glu Ile Arg Arg Thr Val Leu Trp Ser Leu Asp Arg
145 150 155 160
Lys Phe Asp Arg His Leu Ala Arg Pro Glu Asn Ile Arg Cys Leu Phe
165 170 175

```
Leu Ala Val Asn Asp Glu Val Phe Ala Val Arg Glu Ala Ala Ile Cys
            180                 185                 190
Ile Ile Gly Arg Leu Ser Ser Val Asn Pro Ala Tyr Val Phe Pro Pro
        195                 200                 205
Leu Arg Lys Leu Leu Val Asn Leu Leu Thr Gly Leu Gly Phe Ala Ser
    210                 215                 220
Thr Ala Arg Gln Lys Glu Glu Ser Ala Gln Leu Ile Ser Leu Phe Val
225                 230                 235                 240
Ser Asn Ala Thr Lys Leu Ile Arg Ser Tyr Val Asp Pro Met Val Thr
                245                 250                 255
Thr Leu Leu Pro Lys Ala Thr Asp Ala Asn Pro Gly Val Ala Ser Thr
            260                 265                 270
Thr Leu Lys Ala Val Gly Glu Leu Ala Ser Val Gly Gly Ala Glu Met
        275                 280                 285
Arg Asn Tyr Leu Pro Arg Leu Met Pro Ile Ile Leu Asp Ser Leu Gln
    290                 295                 300
Asp Leu Ser Ser His Ser Lys Arg Glu Ser Ala Leu Arg Thr Leu Gly
305                 310                 315                 320
Gln Leu Ala Ser Asn Ser Gly Tyr Val Ile Asp Pro Phe Leu Glu Tyr
                325                 330                 335
Pro His Leu Leu Ala Val Leu Ile Asn Ile Ile Lys Thr Glu Gln Thr
            340                 345                 350
Gly Ser Leu Arg Lys Glu Thr Ile Lys Leu Leu Gly Ile Leu Gly Ala
        355                 360                 365
Leu Asp Pro Tyr Lys Tyr Gln Gln Ile Ser Glu Ile Glu Pro Asp Val
    370                 375                 380
His His Ile Asn Glu Ile Gln Thr Val Ser Asp Val Ala Leu Ile Met
385                 390                 395                 400
Gln Gly Leu Thr Pro Ser Asn Glu Glu Tyr Tyr Pro Thr Val Val Ile
                405                 410                 415
His Thr Leu Met Gln Asn Ile Leu Arg Glu Asn Ser Leu Ala Gln Tyr
            420                 425                 430
His Ser Ala Val Ile Asp Ala Ile Val Thr Ile Phe Lys Thr Leu Gly
        435                 440                 445
Leu Lys Cys Val Pro Phe Leu Gly Gln Ile Ile Pro Gly Phe Ile Ser
    450                 455                 460
Val Ile Arg Gly Ser Pro Pro Ser Arg Leu Glu Ser Tyr Phe Asn Gln
465                 470                 475                 480
Met Ala Ile Leu Val Asn Ile Val Arg Gln His Ile Arg Ala Phe Leu
                485                 490                 495
Pro Glu Ile Ile Glu Val Ile Gln Glu Phe Trp Asp Ser Ser Tyr Gln
            500                 505                 510
Val Gln Ala Thr Ile Leu Ser Leu Val Glu Ala Ile Ala Lys Ser Leu
        515                 520                 525
Glu Gly Glu Phe Lys Lys Tyr Leu Ala Ala Met Ile Pro Ser Met Leu
    530                 535                 540
Asp Thr Leu Glu Lys Asp Asn Thr Pro Arg Arg Gln Pro Ser Glu Arg
545                 550                 555                 560
Ile Leu His Ala Phe Leu Ile Phe Gly Ala Ser Gly Glu Glu Tyr Met
                565                 570                 575
His Leu Ile Ile Pro Ser Met Val Arg Leu Phe Glu Arg Ala Gln Asn
            580                 585                 590
Pro Gln Ser Ile Gly Gln Ser Ala Thr Asp Ser Leu Thr Lys Leu Ser
        595                 600                 605
Arg Thr Ser Asn Val Ser Asp Phe Gly Ile Leu Asn Glu Ser Leu Leu
    610                 615                 620
```

```
Gly Ser Gly Trp Leu Gln Ala Thr Thr Gly Thr
625                 630                 635

<210> 35772
<211> 326
<212> PRT
<213> A.fumigatus

<400> 35772
Tyr Ser Met Ile Ser Asn Pro Thr Asp Trp Pro Pro Glu Lys Phe Leu
1               5                  10                  15
Glu Phe Tyr Asn Ala Val Ser Gln Arg Ile Ala Gln Leu Val Val Thr
            20                  25                  30
Gly Ser Asp Ala His Glu Arg Ile Gly Gly Leu Leu Ala Leu Asp Arg
        35                  40                  45
Leu Ile Asp Phe Asp Gly Val Asp Ala Ala Gln Lys Thr Thr Arg Phe
    50                  55                  60
Ala Ser Tyr Leu Arg Ser Ala Leu Arg Ser Asn Asp Asn Ala Val Leu
65                  70                  75                  80
Val Tyr Ala Ala Arg Ser Leu Gly Arg Leu Ala Lys Pro Gly Gly Ala
                85                  90                  95
Leu Thr Ala Glu Leu Val Glu Ser Glu Ile Gln Ser Ala Leu Glu Trp
            100                 105                 110
Leu Gln Ser Glu Arg Gln Glu Ser Arg Arg Phe Ala Ala Val Leu Val
        115                 120                 125
Ile Arg Glu Leu Ala Lys Gly Ser Pro Thr Leu Leu Tyr Gly Phe Val
    130                 135                 140
Pro Gln Ile Phe Asp Leu Ile Trp Val Ala Leu Arg Asp Pro Lys Val
145                 150                 155                 160
Leu Ile Arg Glu Thr Ala Ala Glu Ala Val Ser Glu Cys Phe Glu Ile
                165                 170                 175
Ile Ala Ala Arg Asp Ala Gln Val Arg Gln Leu Trp Phe Ala Arg Ile
            180                 185                 190
Tyr Glu Glu Ala Leu Leu Gly Leu Arg Ser Ser Asn Val Asp Ser Val
        195                 200                 205
His Gly Ser Leu Leu Val Leu Lys Glu Leu Leu Leu Lys Gly Ala Met
    210                 215                 220
Phe Met Asn Glu His Tyr Arg Asn Ala Cys Glu Ile Val Leu Arg Leu
225                 230                 235                 240
Lys Asp His Arg Asp His Lys Ile Arg Ala Gln Val Val Gln Thr Ile
                245                 250                 255
Pro Ile Leu Ala Ser Tyr Ala Pro Val Asp Phe Thr Glu Thr Tyr Leu
            260                 265                 270
His Arg Phe Met Ile Tyr Leu Gln Ala Gln Leu Lys Arg Asp Lys Glu
        275                 280                 285
Arg Asp Ala Ala Phe Ile Ala Ile Gly Lys Ile Ala Asn Ala Val Gly
    290                 295                 300
Ala Ala Ile Ala Gln Tyr Leu Asp Gly Ile Ile Ile Tyr Ile Arg Glu
305                 310                 315                 320
Gly Leu Ala Leu Lys Ala
                325

<210> 35773
<211> 72
<212> PRT
<213> A.fumigatus
```

<400> 35773
Arg Leu Thr Ser Asn Val His Pro Gly Val Trp Leu Thr Asn Met Ala
1 5 10 15
Gln Ala Gly Pro Ile Thr Asp Ile Thr Gln Arg Leu Phe Ser Glu Leu
20 25 30
Lys Ser Lys Asn Glu Glu Thr Arg Val Arg Ala Ser Phe Glu Leu Tyr
35 40 45
Asp Asn Val Leu Ala Ile Ser Arg Gly Asn Thr Ser His Phe Gly Arg
50 55 60
Thr Pro Asn Leu Ala Asn Ile Gln
65 70

<210> 35774
<211> 126
<212> PRT
<213> A.fumigatus

<400> 35774
Lys Arg Lys Ser Leu Cys Ser Gln Leu Met Glu Ser Glu Leu Thr Phe
1 5 10 15
Ala Ser Arg Asn Arg Ala Ala Val Asn Glu Ala Pro Met Phe Glu Cys
20 25 30
Ile Ser Met Leu Ser Leu Ala Val Glu Gln Ser Leu Ser Lys Tyr Met
35 40 45
Glu Ser Leu Leu Asp Pro Ile Phe Ala Cys Gly Leu Ser Glu Ser Leu
50 55 60
Thr Gln Ala Leu Val Gln Leu Ala His Tyr Ile Pro Pro Ile Lys Arg
65 70 75 80
Thr Ile Gln Glu Lys Leu Leu Asp Met Leu Ser Pro Asp Pro Ser Trp
85 90 95
Asp Thr Leu Pro Ser Pro Arg Leu Pro Arg Glu Gln Ala Thr Ser His
100 105 110
Ala Val Phe Arg Lys Gly Leu Arg Ser Thr Arg Val Ala Leu
115 120 125

<210> 35775
<211> 78
<212> PRT
<213> A.fumigatus

<400> 35775
Ser Met Ile Leu Pro Val Pro Leu Ser Pro Thr Phe Phe Arg Leu Leu
1 5 10 15
Asp Leu Glu Asp Gly Leu Arg Ala Ser Ser Lys Pro Val Tyr Gly Leu
20 25 30
Ile Phe Leu Phe Arg Trp Arg Glu Asp Asp Pro Asp Lys Gln Glu Ala
35 40 45
Ser Cys Pro Glu Gly Leu Trp Phe Ala Asn Gln Val Cys Leu Leu Ile
50 55 60
Cys Leu Ile Leu Ile Ser Leu Asp Leu Ser Cys Lys Asp Gly
65 70 75

<210> 35776
<211> 106
<212> PRT

<213> A.fumigatus

<400> 35776
Ser Val Val Ser Pro Cys Tyr Arg His Phe Asn Ser His Leu Lys Arg
1 5 10 15
Arg Lys Met Asp Ile Leu Asn Ser Asp Leu Gln Leu Lys Val Glu Ala
20 25 30
Thr Ser Lys Arg Ser Arg Ser Gly Lys Asp Arg His Asp Glu Phe Glu
35 40 45
Thr Asp Ala Gly Phe His Phe Ile Ala Phe Val Pro Ala Leu Gly Lys
50 55 60
Val Trp Lys Phe Asp Gly Leu Glu Arg Gln Pro Gln Ala Leu Gly Lys
65 70 75 80
Tyr Ala Ser Ile Cys Thr Asn Glu Gly Arg His Glu Leu Ile Ile Ile
85 90 95
Gln Gly Asn Met Arg Pro Thr Met Thr Gly
100 105

<210> 35777
<211> 134
<212> PRT
<213> A.fumigatus

<400> 35777
Ser Phe Cys Phe Val Gly Glu Lys Met Ile Leu Ile Asn Arg Lys Gln
1 5 10 15
Ala Ala Gln Lys Gly Phe Gly Leu Gln Thr Arg Ser Val Ser Leu Tyr
20 25 30
Val Ser Tyr Ser Phe Pro Leu Thr Tyr Leu Ala Lys Thr Ala Ser Asn
35 40 45
Ala Cys Ala Ser Val Ala Leu Leu Asn Ile Val Asn Asn Ile Glu Gly
50 55 60
Val Asp Leu Gly Glu Asn Leu Arg His Phe Arg Glu Phe Thr Met Pro
65 70 75 80
Phe Thr Pro Ala Leu Arg Gly Asp Ala Ile Asn Asn Phe Glu Phe Val
85 90 95
Lys Arg Ile His Asn Ser Phe Ala Arg Leu Val Val Cys Tyr Thr Pro
100 105 110
Thr Pro Pro Leu Val Leu Leu His Asn Pro Ser Tyr His Arg Val Ile
115 120 125
Val Thr Ser Thr His Ile
130

<210> 35778
<211> 66
<212> PRT
<213> A.fumigatus

<400> 35778
Arg Ser Thr Val Asp Thr Ser Ser Pro Val Val Lys Thr Ile Thr Tyr
1 5 10 15
Phe Lys Asp Tyr Arg Phe Lys Glu Leu Phe Ile Ala Asp Tyr Pro Phe
20 25 30
Arg Ser Leu His Ile Ile Ile Ser Leu Gln Val Ser Pro Cys Ala Tyr
35 40 45
Ser Gln Asp Ile Ile Thr Thr Thr Ile Leu Arg Thr Gln Asp Thr Ile

50 55 60
Tyr Gly
65

<210> 35779
<211> 77
<212> PRT
<213> A.fumigatus

<400> 35779
Gln Lys Trp Leu Gln Leu Met Ser Ser Arg Leu Met Trp Met Phe Ser
1 5 10 15
Arg Pro Gln Leu Arg Lys Thr Asp Ser Gln Gln Thr Ile Cys Tyr Val
20 25 30
Ile Thr Ile Leu Asn Thr Gly Cys Arg Phe Arg Gln His Gly Thr Ser
35 40 45
Leu Cys Leu Glu Leu Ile Ser Ser Arg His Thr Met Tyr Ile Glu Tyr
50 55 60
Lys His Met Ile Tyr Phe Ile Glu Asp Pro Tyr Leu Leu
65 70 75

<210> 35780
<211> 104
<212> PRT
<213> A.fumigatus

<400> 35780
Pro Gln Leu Tyr Leu Gln Tyr Ala Arg Cys Gly Val Asn Ser Gln Ile
1 5 10 15
Ser Val Leu Ala Tyr Asp Pro Val Gln Ser Leu Met Ala Val Gly Thr
20 25 30
Ser Asp Thr Gln Phe Gly Ser Gly Gln Ile Tyr Val Phe Gly Gln Arg
35 40 45
Arg Val Ser Gly Val Phe Ser Leu Pro Arg Lys Ala Ser Ala Lys Phe
50 55 60
Leu Gln Phe Cys Ala Asp Lys Met Ile Ser Val Asp Ser Asn Ser Glu
65 70 75 80
Ile Thr Ile Phe Ser Leu Glu Thr Gln Lys Ala Leu Val Ser Tyr Ala
85 90 95
Pro Pro Ser His Ala Thr Ala Leu
100

<210> 35781
<211> 280
<212> PRT
<213> A.fumigatus

<400> 35781
Ala Leu Leu Ala Gly Asp Ile Ile Ala Tyr Asp Leu Asp Arg Glu Ser
1 5 10 15
Leu Thr Pro Phe Arg Val Pro Asn Leu Trp Ala Glu Arg Asn Pro Arg
20 25 30
Ala Arg Leu Cys Pro Val Phe Ser Leu Ala Phe Ser Pro Arg Asp Ile
35 40 45
Gly Lys Ile Leu Val Gly Tyr Pro Glu Gly Ala Val Thr Phe Thr Phe
50 55 60

```
Lys Gln Asn Val Ala Gln Lys Tyr Phe Gln Tyr Glu Ile Pro Pro Gly
65                  70                  75                  80
Ala Val Gly Gly Asn Ser Glu Ile Pro Ser Gln Asp Thr Arg Arg Pro
                85                  90                  95
Lys Leu Thr Arg Ala Leu Trp His Pro Asn Gly Ile Phe Val Leu Thr
            100                 105                 110
Val His Asp Asp Asn Ser Leu Val Phe Trp Asp Ser Lys Asp Gly Arg
        115                 120                 125
Lys Ile Leu Ala Arg Thr Met Glu Asn Thr His Ile Asp Glu Pro Gly
    130                 135                 140
Ala Ser Pro Asn Arg Arg Phe Ser Thr Ala Glu Ala Ile Phe Arg Asp
145                 150                 155                 160
Pro Ile Thr Gln Val Ala Trp Cys Val Lys Ala Asn Gly Glu Asp Ser
                165                 170                 175
Gly Leu Leu Ile Ala Gly Gly Arg Pro Lys Ala Glu Ser Asn Lys Gly
            180                 185                 190
Leu Thr Phe Ile Asp Phe Gly Ala Thr Pro Asn Tyr Gln Thr Ser Thr
        195                 200                 205
Trp Pro Met Ile Thr Asn Tyr Phe Glu Asn Pro Lys Gln Val Gln Asn
    210                 215                 220
Ile Pro Ala Pro Pro Gly Ala Glu Val Ile Asp Phe Cys Leu Ile Pro
225                 230                 235                 240
Arg Ser Ser Pro Phe Tyr Ala Gly Ala His Asp Pro Ile Ala Met Ile
                245                 250                 255
Thr Leu Leu Ser Ser Gly Glu Leu Ile Thr Leu Ser Phe Pro Ser Gly
            260                 265                 270
His Ser Ile Thr Pro Thr Ile Met
        275                 280
```

<210> 35782
<211> 314
<212> PRT
<213> A.fumigatus

<400> 35782

```
Gly Trp Cys Ser Ala Asp Ala Ser Cys Arg Leu Val Lys Ile Arg Arg
1               5                   10                  15
Glu Ser Val Met Glu Gly Lys Arg Ser Ala Thr Val Ser Phe Arg Asp
            20                  25                  30
Glu Val Ser Pro Tyr Ser Val Gly Phe Ala Cys Ser Cys Thr Pro Pro
        35                  40                  45
Val Leu Arg Asp Gly Leu Phe Val Asp Ser Gly Ser Lys Ala Leu Thr
    50                  55                  60
Lys Leu Cys Ser Phe Glu Arg Pro Cys Ser Ser Thr Ser Ala Ser Ser
65                  70                  75                  80
Pro Asp Ile Asp Ser Pro Leu Ser Ser Ser Asp Ser Ser Ser Leu Ser
                85                  90                  95
Ser Leu Ser Glu Ser Tyr Ser Ser Asp Ser Ser Gly Ser Ala Cys Phe
            100                 105                 110
Phe Leu Asp Ala Ala Ala Phe Ser Phe Ser Ser Ser Ala Val Phe Arg
        115                 120                 125
Ser Gln Ala Val Val Arg Ser Met Ala Ser Ser Pro Arg Ser Ser Ser
    130                 135                 140
Ser Ser Ile Ser Ser Ser Ser Ser Ser Ser Asp Ser Ser Thr Ser Ser Ser
145                 150                 155                 160
Arg Leu Ile Ser Arg Thr Arg Leu Asp Phe Phe Gly Phe Gly Phe Asp
```

```
                165                 170                 175
Pro Ala Leu Val Val Glu Leu Pro Arg Asn Val Lys Pro Ser Lys Arg
            180                 185                 190
Ser Ser Ser Leu Val Pro Lys Ala Ser Ser Leu Ser Asn Ser Ser Ser
        195                 200                 205
Ser Ser Leu Ser Thr Trp Pro Asn Leu His Leu Cys Pro Ser Pro Ser
    210                 215                 220
Leu Pro Ala Leu Leu Leu Ser Ser Asp Ser Ser Ser Pro Pro Asn Arg
225                 230                 235                 240
Arg Arg Leu Leu Ser Gly Pro Ser Glu Ser Ser Ile Ser Arg Leu Gly
                245                 250                 255
Phe Arg Leu Arg Leu Glu Gly Ser Trp Ile Leu Pro Lys Arg Leu Arg
            260                 265                 270
Leu Thr Pro Asn Leu Ser Val Thr Trp Leu Ser Ala Ile Asp Ser Ala
        275                 280                 285
Phe Ser Ala Phe Phe Pro Val Phe Phe Leu Gly Ala Gly Phe Leu Glu
    290                 295                 300
Asp Gly Ser Leu Ser Phe Gly Pro Arg Asn
305                 310
```

<210> 35783
<211> 105
<212> PRT
<213> A.fumigatus

<400> 35783

```
Cys Arg Pro Ala Cys Thr Thr Phe Ser Gln Pro Gln Gln Arg Pro His
1               5                   10                  15
Pro Arg Arg Leu His Leu Ser His Tyr Cys Ser Ala Ala Ser His Thr
            20                  25                  30
Met Ala Met Phe Lys Pro Ser Gln Pro Met Met Ala Arg Leu Arg Leu
        35                  40                  45
Thr Thr Lys Gln Val Asn Gly Gly Tyr Tyr Lys Gly Asn Arg Thr Gly
    50                  55                  60
Ser Met Gly Tyr Phe Ala Lys Asn Gly Ser Tyr Val Ile Asp Trp Lys
65                  70                  75                  80
Lys Val Arg Thr Tyr Val Val Pro Glu Asn Leu Ala Asp Phe Lys Val
                85                  90                  95
Arg Cys Leu Thr Leu Ala Ile Asn Ile
            100                 105
```

<210> 35784
<211> 80
<212> PRT
<213> A.fumigatus

<400> 35784

```
Leu Leu Ala Leu Glu Ile Thr Ser Pro Asn Gln Leu Thr Pro Phe Val
1               5                   10                  15
Thr Lys Arg Met Ala Pro Thr Lys Gly Lys Tyr Thr Arg Glu Ile Glu
            20                  25                  30
Lys Asn Gly Arg Thr Val Ile Val Glu Arg Ala Phe Gly Ala Lys Asp
        35                  40                  45
Tyr Leu Asp Met Trp Ala Ser Asp Asn Gly Gln Glu Val Leu Glu Gln
    50                  55                  60
Glu Arg Leu Glu Gln Glu Ser Ala Ala Ser Glu Thr Ala Ser Arg Gln
```

65 70 75 80

<210> 35785
<211> 90
<212> PRT
<213> A.fumigatus

<400> 35785
Pro Ala Thr Asn Pro Arg Val Val Asp Val Pro Lys Ser Asp Thr Ser
1 5 10 15
Ala Ile Ser Asp Leu Arg Val Tyr Tyr Met Tyr Ser Met Ser Val Gly
20 25 30
Ala Cys Cys Val Ala Ala Glu Ser Ala Val Phe Gln Asp Ile Ile Thr
35 40 45
Ser Tyr Val Asn Gly Gly Tyr Cys Ser Gly Arg Phe Ser Ile Ser Pro
50 55 60
Gly Val Tyr Phe Val Lys Arg Arg Asn Leu Val Phe Gly Ile Leu Gln
65 70 75 80
Asp Met Ser Met Val His Cys Tyr Thr Ser
85 90

<210> 35786
<211> 71
<212> PRT
<213> A.fumigatus

<400> 35786
Val Asp Phe Ala His Ala Phe Gly Phe Leu Trp Phe Arg Phe Arg Pro
1 5 10 15
Gly Ile Gly Cys Arg Ala Ser Ala Lys Arg Lys Thr Leu Lys Ala Phe
20 25 30
Phe Val Ala Cys Ala Gln Gly Leu Val Thr Val Gln Leu Phe Val Val
35 40 45
Ile Ala Val Asn Leu Ala Gln Ser Pro Ser Val Ser Phe Pro Val Thr
50 55 60
Ala Gly Ile Thr Ala Gln Phe
65 70

<210> 35787
<211> 346
<212> PRT
<213> A.fumigatus

<400> 35787
Val Ala Thr Phe Ser Val Ser His Ile Tyr Phe Leu Thr Leu Val Leu
1 5 10 15
Ile Gly Phe Leu Asp Phe Leu Asp Tyr Thr Met Pro Arg Arg Gln Thr
20 25 30
Gln Leu Arg Gly Pro Lys Asp Lys Asp Pro Ser Ser Lys Lys Pro Ala
35 40 45
Pro Lys Lys Asn Thr Gly Lys Lys Ala Leu Asn Ala Leu Ser Ile Ala
50 55 60
Glu Ser Gln Val Thr Asp Lys Leu Gly Val Arg Arg Asn Arg Leu Gly
65 70 75 80
Lys Ile His Asp Pro Ser Lys Arg Lys Arg Asn Pro Asn Arg Asp Met
85 90 95

```
Asp Asp Ser Asp Gly Pro Asp Asn Lys Arg Arg Arg Phe Gly Gly Asp
            100                 105                 110
Asp Glu Ser Glu Leu Ser Ser Asn Ala Gly Ser Asp Gly Glu Gly His
        115                 120                 125
Arg Trp Arg Leu Gly Gln Val Asp Ser Asp Asp Asp Glu Glu Leu Asp
    130                 135                 140
Ser Asp Glu Ala Leu Gly Thr Ser Asp Glu Glu Arg Phe Glu Gly Phe
145                 150                 155                 160
Thr Phe Arg Gly Ser Ser Thr Thr Asn Ala Gly Ser Lys Pro Lys Pro
                165                 170                 175
Lys Lys Ser Lys Arg Val Arg Glu Ile Asn Leu Asp Glu Asp Val Glu
            180                 185                 190
Glu Ser Glu Glu Glu Asp Glu Asp Met Asp Glu Asp Asp Asp Leu Gly
        195                 200                 205
Glu Asp Ala Ile Asp Leu Thr Thr Ala Trp Asp Leu Asn Thr Ala Glu
    210                 215                 220
Glu Glu Lys Glu Lys Ala Ala Ala Ser Lys Lys Lys Gln Ala Glu Pro
225                 230                 235                 240
Asp Glu Ser Glu Glu Tyr Asp Ser Asp Ser Glu Glu Ser Asp Asp Glu
                245                 250                 255
Ser Asp Glu Glu Ser Gly Leu Ser Met Ser Gly Asp Glu Ala Glu Val
            260                 265                 270
Asp Glu His Gly Leu Ser Lys Leu Gln Ser Phe Val Asn Ala Leu Glu
        275                 280                 285
Pro Glu Ser Thr Asn Lys Pro Ser Arg Arg Thr Gly Gly Val Gln Glu
    290                 295                 300
His Ala Lys Pro Thr Glu Tyr Gly Leu Thr Ser Ser Arg Lys Leu Thr
305                 310                 315                 320
Val Ala Asp Leu Leu Pro Ser Ile Thr Asp Ser Arg Leu Ile Phe Thr
                325                 330                 335
Arg Arg Gln Glu Ala Ser Ala Leu His Gln
            340                 345
```

<210> 35788
<211> 61
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35788

```
Val Xaa Cys Gly Pro Phe Val Ser Ala Trp Leu Tyr Ile Ala Asp Arg
1               5                   10                  15
Asp Glu Phe Asp Pro Arg Leu Leu Glu Gly Glu Asp Ala Gly Ser Lys
            20                  25                  30
Asp Thr Gln Ala Ala Glu Ala Lys Lys Arg Lys Leu Asn Thr Ala Val
        35                  40                  45
Pro Ala Arg His Gly Leu Cys Gly Gly Gly Leu Cys Gly
    50                  55                  60
```

<210> 35789
<211> 362
<212> PRT

<213> A.fumigatus

<400> 35789

```
Thr Gln Ser Thr Leu Pro Ser His Arg Ile Leu Ser Ser Lys Gly Leu
1               5                  10                  15
Ala Pro Ser Phe Trp Gly Pro Val Ser Asp Val Lys Gly Arg Arg Thr
            20                  25                  30
Ala Tyr Ile Cys Thr Phe Ile Val Phe Phe Cys Ala Cys Ile Gly Leu
        35                  40                  45
Gln Glu Thr Lys Asn Tyr Thr Thr Leu Ile Val Val Arg Cys Leu Gln
    50                  55                  60
Ser Ala Gly Ser Ala Ser Thr Ile Ala Ile Gly Ser Gly Val Ile Gly
65                  70                  75                  80
Asp Ile Thr Thr Arg Ala Asp Arg Gly Gly Tyr Met Gly Val Phe Gln
                85                  90                  95
Ala Gly Leu Leu Val Pro Val Ala Val Gly Pro Val Ile Gly Gly Ala
            100                 105                 110
Ile Ala Gly Ser Leu Gly Trp Lys Ala Ile Phe Trp Phe Leu Ala Ile
        115                 120                 125
Tyr Ser Gly Val Phe Leu Cys Leu Leu Thr Leu Val Leu Pro Glu Thr
    130                 135                 140
Leu Arg Ser Ile Val Gly Asn Gly Ser Arg Lys Pro Ser His Pro Val
145                 150                 155                 160
Leu Arg Tyr Pro Leu Asn Leu Tyr Gln Lys Ser Ser Lys Met Pro Trp
                165                 170                 175
Gln Gln Pro Gln Asp Gly Leu Ser Thr Ala Glu Ala Lys Lys Lys Ile
            180                 185                 190
Asp Leu Leu Gly Pro Leu Arg Met Leu Leu Ser Asn His Ala Ala Pro
        195                 200                 205
Ile Ile Leu Phe Leu Ala Val Tyr Tyr Ala Val Trp Gln Met Ser Ile
    210                 215                 220
Thr Ala Met Ser Ser Leu Phe Lys Ser Arg Tyr Gly Leu Ser Glu Leu
225                 230                 235                 240
Gln Ile Gly Leu Thr Phe Ile Ala Asn Gly Val Gly Ser Met Val Gly
                245                 250                 255
Thr Leu Val Thr Gly Lys Ile Leu Asp Ala Asp Tyr Arg Arg Val Lys
            260                 265                 270
Thr Lys Tyr Glu Ala Ser Phe Asp Asn Glu His Arg Asp Ala Met Ser
        275                 280                 285
Gln Thr Ala Arg Glu Glu Asn Phe Pro Leu Glu Ser Ala Arg Leu Arg
    290                 295                 300
Leu Val Pro Ile Phe Ser Ile Thr Gln Cys Val Ser Ile Ile Leu Phe
305                 310                 315                 320
Gly Trp Thr Ile Gln Tyr Pro Asp Lys Val Pro Ile Ala Val Pro Asn
                325                 330                 335
Val Ser Thr Leu Tyr His Arg Val Asp Arg Val Leu His Ala Val Ser
            340                 345                 350
Asp His Asp Ile Phe Gly Asp Leu Phe Pro
        355                 360
```

<210> 35790
<211> 136
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (52)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35790
Thr Met Thr Ser Trp Asp Arg Arg Val Lys Phe Ala Leu Phe Gly Leu
1 5 10 15
Gly Arg Leu Gly Val Leu Arg Ala Arg Ile Leu Ala Phe Gln Gln Pro
20 25 30
Arg Ile Glu Leu Val Ala Val Cys Asp Val Lys Pro Gly Thr Asp Lys
35 40 45
Trp Ala Ala Xaa Asn Leu Pro Thr Ser Val Lys Tyr Phe Ser Asp Pro
50 55 60
Gln Glu Cys Leu Thr Asn Ser Gly Ala Glu Ala Ile Leu Ile Cys Thr
65 70 75 80
Ala Thr Ala Thr His Ala Pro Leu Ile Leu Gln Ala Leu Asp Leu Gly
85 90 95
Leu His Val Met Cys Glu Lys Pro Ile Ser Val Asp Val Ala Thr Thr
100 105 110
Lys Ala Val Val Glu Lys Ser Val Ser Arg Pro Asp Leu Lys Phe Leu
115 120 125
Val Pro Phe Thr Arg Arg Cys Gln
130 135

<210> 35791
<211> 169
<212> PRT
<213> A.fumigatus

<400> 35791
Val Asp Ala Gly Arg Tyr Leu Leu Asp Val Lys Ser Gly Leu Ser Asn
1 5 10 15
Pro Lys Lys Gln Val Asn Arg Val Ile Ala Phe Gly Gln Val Ala Val
20 25 30
Tyr Gly Asp Leu Ala Lys Tyr Gly Asp Ala Asp Asn Ala Trp Gly Leu
35 40 45
Val Glu Phe Ala Asn Gly Lys Ile Leu Lys Thr Tyr Leu Gly Arg Thr
50 55 60
Leu Thr Ser Gly Phe Glu Asp Thr Thr Arg Leu Cys Gly Thr Lys Gly
65 70 75 80
His Leu Ile Ile Ser Ala Thr Ser Asn Val Glu Ile Arg Asp His Leu
85 90 95
Gly Ile Arg Thr Gln Ser Val Pro Asp Ala Phe Thr Leu Phe Asp Ala
100 105 110
Thr Phe Leu Ala Asp Leu Ala Glu Phe Ala Asp Ala Val Leu Asp Asn
115 120 125
Lys Pro Leu Thr Cys Gln Pro Glu Asp Ala Phe Glu Ala Gly Lys Ile
130 135 140
Cys Ala Ala Leu Gln Tyr Ser Phe Arg Lys Gly Val Pro Val Tyr Phe
145 150 155 160
Asp Asp Asn Gly Leu Pro Ile Met Asp
165

<210> 35792
<211> 401
<212> PRT

<213> A.fumigatus

<400> 35792

```
His Ser Pro Leu Ser Ser Ser Lys Pro Met Ile Met Pro His Ser Glu
1               5                  10                  15
Met Ser Ala Pro Val Val Val Ser Lys Thr Pro Ser Gly Val Pro Pro
            20                  25                  30
Thr Val Glu Glu Val Ser Ser Leu Met Asn Thr Ile Phe Thr Ala Glu
        35                  40                  45
Thr Ser Gln Gln Ser Leu Asp Ala Ala Tyr Gly Leu Thr Asn Leu Leu
    50                  55                  60
Ile Gln Ser Val Gly Thr Phe Gly Leu Gln Arg Tyr Asn Ile Leu Pro
65                  70                  75                  80
Glu Ile Lys Arg Ala Ala Thr Asp Lys Lys Ser Gly Ala Arg Arg Glu
                85                  90                  95
Ser Ala Met Leu Ile Ile Gly Ala Leu Phe Glu Arg Phe Pro Arg Glu
            100                 105                 110
His Pro Leu Ser Glu Val Val Phe Leu Leu Gln Asp Gly Gly Val Leu
        115                 120                 125
Asn Leu Ala Leu Asp Ser Leu Ala Asp Lys Gly Ala Val Val Arg Asp
    130                 135                 140
Ala Ala Gln Tyr Ala Ile Asp Ala Leu Phe Asp Cys Leu Lys Pro Glu
145                 150                 155                 160
Ser Leu Val Asn Ala Leu Ile Pro Ala Leu Ser Ala Tyr Leu Asn Lys
                165                 170                 175
Ser Ser Gly Lys Trp Gln Gly Phe Val Gly Ala Tyr Ala Leu Leu Glu
            180                 185                 190
Lys Met Ala Ile Lys Ala Gln Ile Gly Met Gly Thr Met Glu Glu Glu
        195                 200                 205
Arg Gln Lys Asp Leu Leu Arg Ser Ala Met Gly Lys Thr Leu Lys Glu
    210                 215                 220
Leu Ile Pro Leu Val Glu Ser Gly Met His Asp Leu Lys Asn Glu Val
225                 230                 235                 240
Ala Lys Gln Ala Ser Lys Thr Met Thr Ala Leu Thr Thr Leu Leu Asp
                245                 250                 255
Asn Asp Asp Val Ala Pro Arg Ile Pro Leu Leu Ile Lys Thr Met Glu
            260                 265                 270
Gln Pro Ser Glu Gln Thr Leu Gln Asn Ala Ile His Ala Leu Ser Gln
        275                 280                 285
Thr Thr Phe Val Ala Ile Val Thr Ser Pro Val Leu Ala Leu Leu Thr
    290                 295                 300
Pro Leu Leu Glu Arg Ser Leu Asn Ala Pro Thr Thr Pro Gln Glu Thr
305                 310                 315                 320
Leu Arg Arg Thr Val Val Val Val Glu Asn Leu Thr Lys Leu Val His
                325                 330                 335
Asp Pro Ala Glu Ala Arg Thr Phe Leu Pro Lys Leu Lys Pro Gly Val
            340                 345                 350
Gln Ala Val Lys Asp Arg Ala Ser Leu Pro Glu Val Arg Glu Leu Ala
        355                 360                 365
Thr Arg Ala Met Asn Val Ile Asp Lys Ala Leu Gly Asp Ser Ser Leu
    370                 375                 380
Ala Ala Gly Ser Leu Ala Lys Thr Thr Gly Glu Asp Val Leu Thr Val
385                 390                 395                 400
Pro
```

<210> 35793
<211> 261
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (9)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35793
Thr Ala Ser Ser His Leu Thr Asn Xaa Val Arg Ala Phe Ser Arg Glu
1 5 10 15
Leu Ala Glu Gln Ser His Leu Pro Gln His Ile Leu Asp Leu Ile Lys
20 25 30
Ser Phe Pro Arg Ser Met His Pro Met Thr Gln Leu Ser Ile Ala Val
35 40 45
Ala Ala Leu Asn Thr Glu Ser Lys Phe Ala Lys Ala Tyr Glu Lys Gly
50 55 60
Leu Ser Lys Ala Asp Tyr Trp Glu Pro Thr Phe Asp Asp Ser Ile Ser
65 70 75 80
Leu Leu Ala Lys Ile Pro Arg Val Ala Ala Leu Val Phe Arg Pro Asp
85 90 95
Glu Val Asp Gln Val Gly Thr Gln Ala Leu Asp Ala Ser Gln Asp Trp
100 105 110
Ser Tyr Asn Phe Ala Glu Leu Leu Gly Lys Gly Gly Lys Glu Asn Gln
115 120 125
Asp Phe His Asp Leu Leu Arg Leu Tyr Leu Ala Leu His Gly Asp His
130 135 140
Glu Gly Gly Asn Val Ser Ala His Ala Thr His Leu Val Gly Ser Ala
145 150 155 160
Leu Ser Asp Pro Phe Leu Ser Tyr Ser Ala Gly Leu Leu Gly Leu Ala
165 170 175
Gly Pro Leu His Gly Leu Ala Ala Gln Glu Val Leu Arg Trp Ile Leu
180 185 190
Ala Met Gln Asp Lys Ile Gly Thr Lys Phe Thr Asp Asp Asp Val Arg
195 200 205
Asn Tyr Leu Trp Asp Thr Leu Lys Ser Gly Arg Val Val Pro Gly Tyr
210 215 220
Gly His Gly Val Leu Arg Lys Pro Asp Pro Arg Phe Gln Ala Leu Met
225 230 235 240
Asp Phe Ala Ala Thr Arg Pro Asp Val Leu Val Leu Ala Ala Gly Ala
245 250 255
Arg Lys Tyr Ala Ser
260

<210> 35794
<211> 115
<212> PRT
<213> A.fumigatus

<400> 35794
Thr Ala Arg Leu Ala Leu Thr Asn Ser Arg Arg Tyr Ser Thr Ala Glu
1 5 10 15
Pro Asp Leu Lys Thr Ala Leu Lys Ala Val Ile Pro Ala Lys Arg Glu
20 25 30

```
Leu Phe Lys Gln Val Lys Glu Arg Ser Asp Glu Val Ile Gly Glu Val
        35                  40                  45
Lys Val Ala Asn Val Ile Gly Gly Met Arg Gly Leu Lys Ser Met Leu
    50                  55                  60
Trp Glu Gly Ser Val Leu Asp Pro Glu Glu Gly Ile Arg Phe His Gly
65                  70                  75                  80
Lys Thr Ile Lys Asp Cys Gln Lys Glu Phe Pro Gln Gly His Ile Arg
                85                  90                  95
His Arg Asp Ala Pro Arg Gly His Val Leu Ala Ala Leu Glu Arg Pro
            100                 105                 110
Val Pro Ile
        115
```

<210> 35795
<211> 140
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (75)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35795

```
Leu Val Arg Ser Arg Ser Pro Thr Ser Leu Ala Ala Cys Ala Val Ser
1               5                   10                  15
Asn Pro Cys Ser Gly Arg Val Arg Cys Trp Ile Leu Lys Lys Val Ser
            20                  25                  30
Asp Ser Thr Ala Arg Pro Ser Arg Thr Ala Lys Arg Ser Ser Pro Lys
        35                  40                  45
Gly Thr Ser Gly Thr Glu Met Leu Pro Glu Ala Met Phe Trp Leu Leu
    50                  55                  60
Leu Asn Gly Gln Phe Pro Phe Asp Gln Pro Xaa Pro Arg Val Leu Ser
65                  70                  75                  80
Arg Ala Gly Arg Ala Val Pro Pro Ala Ala Ala Tyr Phe Gly Pro Asp
                85                  90                  95
Gln Val Leu Pro Pro Val His Ala Ser His Asp Pro Ala Val His Cys
            100                 105                 110
Arg Gly Gly Pro Gln His Arg Val Gln Val Arg Gln Gly Leu Arg Glu
        115                 120                 125
Gly Pro Gln Gln Gly Arg Leu Leu Gly Ala His Leu
    130                 135                 140
```

<210> 35796
<211> 94
<212> PRT
<213> A.fumigatus

<400> 35796

```
Pro Gly Leu Val Val Gln Leu Arg Arg Ala Pro Gly Gln Gly Arg Gln
1               5                   10                  15
Gly Glu Pro Gly Leu Pro Arg Pro Ala Ala Ser Leu Pro Gly Ala Ser
            20                  25                  30
Trp Arg Pro Arg Gly Arg Gln Arg Leu Arg Ala Arg His Pro Pro Gly
        35                  40                  45
Arg Gln Arg Ala Gln Arg Ser Leu Pro Glu Leu Gln Cys Arg Ser Ala
```

```
    50                  55                  60
Gly Ser Arg Arg Ser Thr Ala Arg Ser Arg Arg Ala Gly Gly Pro Ala
65                  70                  75                  80
Leu Asp Pro Gly His Ala Gly Gln Asp Arg His Gln Val Tyr
                85                  90
```

<210> 35797
<211> 274
<212> PRT
<213> A.fumigatus

<400> 35797

```
Gly Phe Gln Arg Leu Gly Gln Pro Pro Tyr Asn Pro Ser Lys Gly Pro
1               5                   10                  15
Pro Arg Pro Ser Trp Asn Gln Pro Phe Ser Phe Cys Lys Glu Leu Phe
            20                  25                  30
Val Gly Ser Pro Phe Cys Asp Phe His Gln His Val Arg Lys Ala Phe
        35                  40                  45
Arg Pro Ile Met Val Ser Glu Cys Lys Arg Val Leu Arg Pro Gly Gly
    50                  55                  60
Tyr Met Lys Ile Ser Val Leu Asp Leu Asp Met Val Asn Met Gly Ile
65                  70                  75                  80
Arg Asn Arg Ile Ala Val Arg Met Leu Lys Glu Lys Thr Tyr Leu Ala
                85                  90                  95
Asp Pro Asn Ile Ser Leu Lys Leu Ala Ser Asp Ser Leu Gln Lys Leu
            100                 105                 110
Leu Gly Leu Gln Gly Phe Asp Gly Leu Arg Arg Cys Met Val Arg Ile
        115                 120                 125
Pro Val Thr Gly Val Ile Val Arg Ser Ser Ala Ser Ser Ser Ser Thr
    130                 135                 140
Thr Ser Ser Asn Pro Ser Thr Ser Val Ala Arg Gly Thr Pro Ser Thr
145                 150                 155                 160
Ala Phe Ser Ala Leu Thr Asn Ser Ser Thr Ser Ala Gln Gln Pro Lys
                165                 170                 175
Val Tyr Gly Lys Ser Pro Ser Asn Asp Thr Asn Leu Ser Leu Gly Asp
            180                 185                 190
Leu Leu Ser Asp Pro Ser Pro Ser Pro Ser Asn Asp Glu Ser Ile Arg
        195                 200                 205
Lys Ile Val Ala Lys Val Gly Arg Trp Trp Tyr Thr Arg Cys Tyr Glu
    210                 215                 220
Ile Pro Val Leu Pro Asn Gly Asp Ala Ser Ser Ser Ile Trp Ala Asp
225                 230                 235                 240
Lys Arg Val Leu Arg Glu Cys Gln Lys Arg Gly Thr Gly Phe Arg Leu
                245                 250                 255
Leu Ile Ala Tyr Ala Gln Lys Pro Ser Glu Val Lys Arg Arg Thr Ala
            260                 265                 270
Ser Val
```

<210> 35798
<211> 306
<212> PRT
<213> A.fumigatus

<400> 35798

```
Val Pro Ser Trp Val His Leu Pro Cys Gly Ser Leu Gly Thr Arg Arg
```

```
1               5                   10                  15
Trp Arg Pro Leu Pro Phe Arg Leu Gly Ala Cys Pro Arg Gly Thr Gly
            20                  25                  30
Leu Ala Val Tyr Ile Ser Ile Glu Arg Arg Arg Asn Gly Met Glu Arg
        35                  40                  45
Leu Asp Arg Pro Arg His Arg Arg Pro Ser Arg Pro His Gln Glu Pro
    50                  55                  60
Ala Leu Arg Val Arg Pro Ser Cys His Ala Ser Arg His His Leu Asp
65                  70                  75                  80
Ala Ser Pro Val Cys Gly Leu Arg Leu Ala Asp Gly Pro His Ala Glu
                85                  90                  95
Arg Ala Glu Pro Val Ser Arg Tyr Leu Gly Arg Ser Trp Lys Lys Leu
            100                 105                 110
Ile Leu Arg Arg Trp Thr Phe Met Leu Pro Leu Thr Thr Gly Ile Ile
        115                 120                 125
Leu Tyr Pro Phe Gly Lys Arg Pro Thr Thr Arg Lys Leu Gly Ile Tyr
    130                 135                 140
Pro Gln Tyr Ile Leu Gly Ala Ser Ser Ala Leu Thr Ile Leu Pro Ala
145                 150                 155                 160
Trp Ala Ser Val Tyr Gly Asp Ser Val Ala Pro Pro Asp Leu Leu Ala
                165                 170                 175
Lys Cys Leu Pro Leu Cys Val Phe Leu Phe Leu Trp Thr Ile Tyr Phe
            180                 185                 190
Asn Thr Ala Tyr Ser Tyr Gln Asp Val Lys Asp Asp Ser Arg Leu Ser
        195                 200                 205
Val Asn Ser Ser Tyr Val Leu Ala Gly Gln Tyr Val His Gly Leu Leu
    210                 215                 220
Leu Leu Gln Ala Val Ala Val Val Met Val Ile Pro Trp Ile Leu His
225                 230                 235                 240
Glu Asn Gly Ser Ala Trp Leu Trp Phe Ser Trp Leu Gly Val Trp Thr
                245                 250                 255
Ala Ala Leu Ala Glu Gln Leu Tyr Leu Phe Asp Thr Lys Asp Pro Ser
            260                 265                 270
Thr Gly Gly Arg Val His Arg Arg Asn Phe Ala Leu Gly Ile Trp Asn
        275                 280                 285
Val Leu Ala Cys Phe Val Glu Leu Leu Leu Val Ser Gly Ser Leu Asp
    290                 295                 300
Met Phe
305
```

<210> 35799
<211> 142
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (22)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 35799
Phe Ser Pro Ile Asn Pro Asn His Arg Leu Ile Cys Arg Arg Ser Pro
1               5                   10                  15
Gly Lys Lys Thr Leu Xaa Ser Pro Pro Pro Pro Pro Leu Ser Lys Glu
            20                  25                  30
Phe Ile Pro Gly Leu Pro Thr Pro Asn Arg Ser Pro Val Gly Ser Ile
```

```
        35                  40                  45
Phe Leu Ala Ala Ala Ser Gly His Ala Asp Gly Val His Phe Leu Ser
    50                  55                  60
Asp Trp Val Leu Ala Arg Ala Gly Leu Val Leu Arg Tyr Thr Tyr Leu
65                  70                  75                  80
Leu Ser Gly Ala Gly Met Val Trp Asn Asp Trp Ile Asp Arg Asp Ile
                85                  90                  95
Asp Ala Gln Val Ala Arg Thr Lys Asn Arg Pro Phe Ala Ser Gly Arg
            100                 105                 110
Leu Ala Thr Arg Ala Ala Ile Ile Trp Met Leu Val Gln Tyr Ala Ala
        115                 120                 125
Ser Val Trp Leu Met Asp Arg Met Leu Ser Gly Gln Asn Leu
    130                 135                 140

<210> 35800
<211> 167
<212> PRT
<213> A.fumigatus

<400> 35800
Ile Thr Asp Gly Asn Cys Leu Ser Thr Cys Ala Tyr Phe Val Asp Arg
1               5                   10                  15
Met Gln Arg Gln Gly Val Arg Thr Val Ala Phe Gly Gly Arg Pro Gln
            20                  25                  30
Tyr Gly Pro Met Gln Ala Ile Gly Gly Thr Arg Gly Gly Gln Asn Leu
        35                  40                  45
Ala Tyr Gly Gly Ile Tyr Ser Tyr Val Glu Thr Ala His Asn Leu Ile
    50                  55                  60
Arg Lys Ser Leu Arg Asn Gly Ser Thr Pro Leu Met Ser Phe Gln Glu
65                  70                  75                  80
Trp Ala Gln Phe Asn Arg Ser Ile Pro Arg Asp Pro Asp Glu Phe Pro
                85                  90                  95
Phe Val Phe Gly Gly Gly Val Asn Leu Arg Asn Glu Tyr Ala Pro Gly
            100                 105                 110
Asp Asp Ala Thr Pro Gln Gln Phe Thr Tyr Gln Ala Ala Asp Cys Arg
        115                 120                 125
Leu Phe Tyr Thr Ala Glu Ser Trp Phe Ser Gln Glu Glu Val Trp Arg
    130                 135                 140
Ala Ala Ala Val Ala Leu Phe Gly Gly Lys Ser Ser Cys Val Arg Gly
145                 150                 155                 160
Ser Met Ser Asn Ala Arg Gln
                165

<210> 35801
<211> 401
<212> PRT
<213> A.fumigatus

<400> 35801
His Gly Tyr Lys Val Val Trp Pro Cys Ser Ala Glu Leu Pro Ala Gln
1               5                   10                  15
Thr Asp Lys Asp Arg Ile Ile Ala Ser Trp Tyr Gln Met Asn Gln Asp
            20                  25                  30
Ser Asp Phe Pro Ser Pro Gly Ala Gly Met Pro Ser Asp Met Tyr Ala
        35                  40                  45
Pro His Gln Arg Val Ile Gly Arg Asp Ala Ser Ser Lys Gln Thr Leu
```

```
    50                  55                  60
Leu Arg Gly Ala Ile Glu Gly His Val Leu Val Lys Asn Asn His Ser
65                  70                  75                  80
Ala Leu Pro Leu Lys Ser Pro Gln Leu Leu Ser Val Phe Gly Tyr Asp
                85                  90                  95
Ala Lys Gly Pro Asn Ala Leu Lys Gln Asn Phe Asn Trp Leu Ser Tyr
            100                 105                 110
Ser Pro Ala Ile Gln Glu Asn His Thr Leu Trp Val Gly Gly Gly Ser
        115                 120                 125
Gly Ala Asn Asn Ala Ala Tyr Ile Asp Ala Pro Ile Asp Ala Ile Gln
    130                 135                 140
Arg Gln Ala Tyr Glu Asp Gly Thr Ser Val Leu Tyr Asp Ile Ser Ser
145                 150                 155                 160
Glu Asp Pro Glu Val Asp Pro Thr Thr Asp Ala Cys Leu Val Phe Ile
                165                 170                 175
Asn Ser Tyr Ala Thr Glu Gly Trp Asp Arg Pro Gly Leu Ala Asp Asn
            180                 185                 190
Ser Ser Asp Thr Leu Val Lys Asn Val Ala Arg Lys Cys Ala Asn Thr
        195                 200                 205
Ile Val Thr Ile His Asn Ala Gly Ile Arg Val Val Gly Glu Trp Ile
    210                 215                 220
Asp His Glu Asn Val Thr Ala Val Ile Phe Ala His Leu Pro Gly Gln
225                 230                 235                 240
Asp Ser Gly Arg Ala Leu Val Glu Leu Leu Tyr Gly Arg Ala Asn Pro
                245                 250                 255
Ser Gly Lys Leu Pro Tyr Thr Val Ala Lys Lys Ala Glu Asp Tyr Gly
            260                 265                 270
Ser Leu Leu His Pro Ser Leu Pro Glu Thr Pro Tyr Gly Leu Phe Pro
        275                 280                 285
Gln Ser Asp Phe Asp Glu Gly Val Tyr Ile Asp Tyr Arg Ala Phe Asp
    290                 295                 300
Arg Ala Asn Ile Thr Ala Gln Phe Glu Phe Gly Phe Gly Leu Ser Tyr
305                 310                 315                 320
Thr Ser Phe Asp Tyr Ser Gly Leu Gln Ile Ser Asn Pro Lys Gln Ser
                325                 330                 335
Pro Gln Tyr Pro Pro Ser Ala Ala Ile Gln Gln Gly Gly Asn Pro His
            340                 345                 350
Leu Trp Asp Asn Ile Val Thr Val Ser Ala Glu Ile Lys Asn Thr Gly
        355                 360                 365
Arg Val Ala Gly Ala Glu Val Ala Gln Leu Tyr Ile Gly Ile Pro Asn
    370                 375                 380
Gly Pro Val Arg Gln Leu Arg Gly Phe Glu Lys Ala Asp Val Ser Gly
385                 390                 395                 400
Arg
```

<210> 35802
<211> 189
<212> PRT
<213> A.fumigatus

<400> 35802

```
Pro Ile His His Leu Pro Gly Lys Arg Asn Leu Gln Thr Gly Leu Ile
1               5                   10                  15
Pro Arg Arg Ser Gln Gly Gln Thr Asn Gly Val Arg Cys Ala Asp Cys
            20                  25                  30
```

```
Ser Trp Gly Ala Thr Glu Pro Tyr Ser Pro Val Pro His Ala Arg Trp
        35                  40                  45
Ala Ser Val Arg Thr Val Arg Val Asp Tyr Cys Val Cys Lys Leu Gly
    50                  55                  60
Pro Lys Ser Pro Gly Pro Leu Gly Glu Arg Val Leu Phe Ser Val Cys
65                  70                  75                  80
Ser Gly Ser Tyr Leu Leu Ala Ala Ala Gly Val Leu Asp Gly Leu Thr
                85                  90                  95
Ala Thr Ser His Arg Leu Gly Leu Gly Ala Leu Arg Gln Leu Gly Asp
            100                 105                 110
Glu Tyr Lys Ser Arg Thr Pro Gly Ala Lys Gly Met Glu Val Val Pro
        115                 120                 125
Glu Asn Val Thr Gly Thr Val His Tyr Val Asp Ala Gly Met Asn Ala
    130                 135                 140
Ser Gln Val Arg Ile Val Thr Ser Gly Ser Ile Thr Asn Gly Ile Asp
145                 150                 155                 160
Ala Ala Leu Tyr Leu Ile Ser Leu Arg Ser Gly Arg Pro Asp Ala Val
                165                 170                 175
Glu Val Ala Ser Phe Met Gly Tyr Thr Trp Arg Glu Met
            180                 185
```

<210> 35803
<211> 86
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8),(28),(69)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35803

```
Ala Lys Thr Leu Asp Val Val Xaa Lys Ala Gly Thr Arg Ile Pro Lys
1               5                   10                  15
Leu Gly Arg Arg Arg Ser Lys Leu Ala Phe Gln Xaa Asp Arg Ser Gly
            20                  25                  30
Tyr Val Met Thr Asp Trp Gly Ala Gln His Ala Gly Phe Ala Gly Ala
        35                  40                  45
Asn Ala Gly Leu Asp Met Val Met Pro Ser Thr Glu Thr Trp Gly Ala
    50                  55                  60
Asn Leu Thr Thr Xaa Ile Ser Asn Gly Thr Met Asp Ala Ser Arg Leu
65                  70                  75                  80
Asp Asp Met Ala Thr Arg
                85
```

<210> 35804
<211> 121
<212> PRT
<213> A.fumigatus

<400> 35804

```
Ala Ile Leu Ser Asn Leu Arg Asn Ile Leu Arg Gln Leu Leu Ser Ser
1               5                   10                  15
Lys Val Glu Thr Leu Ile Cys Gly Ile Ile Leu Ser Arg Cys Arg Arg
            20                  25                  30
Arg Ser Lys Thr Leu Asp Val Leu Pro Val Pro Arg Trp His Ser Cys
```

```
        35                  40                  45
Thr Ser Ala Ser Pro Met Val Leu Tyr Asp Asn Cys Val Asp Ser Arg
    50                  55                  60
Arg Leu Met Ser Gln Ala Gly Glu Ile Thr Gln Val Gln Phe Ala Trp
65                  70                  75                  80
Asn Arg Arg Asp Leu Ser Thr Trp Asp Val Gly Ala Gln Gln Trp Ser
                85                  90                  95
Trp Gln Arg Gly Arg Tyr Arg Val Tyr Val Gly Arg Ser Ser Arg Asp
            100                 105                 110
Leu Pro Leu Thr Gly Ser Phe Thr Leu
        115                 120
```

<210> 35805
<211> 66
<212> PRT
<213> A.fumigatus

<400> 35805

```
Asp Pro Ser Tyr Pro Leu Ser Ala Ser Asp Thr Cys Pro Thr Arg Tyr
1               5                   10                  15
Asn Arg Glu Tyr Asn Met Pro Thr Val Phe Val Phe Val Tyr Pro Ser
            20                  25                  30
Val Asn Thr Leu Asp Ile Asn Gly Pro Val Gly Ser Tyr Ser Arg Ala
        35                  40                  45
Ala Thr Pro Arg Ser Ser Pro Pro Met Thr Asn Ser Pro Pro Pro Arg
    50                  55                  60
Lys Thr
65
```

<210> 35806
<211> 146
<212> PRT
<213> A.fumigatus

<400> 35806

```
Tyr Ala Lys Cys Gly Ser Phe Gln Pro Pro Trp Val Lys Thr Ala Val
1               5                   10                  15
Thr Ile Leu Leu Ser Leu Ile Asn Ile Gly Ser Gln Val Ala Leu Ala
            20                  25                  30
Ala Ile Val Ser Leu Thr Ile Thr Ser Leu Ile Ser Ala Tyr Ile Leu
        35                  40                  45
Ser Ile Gly Cys Val Leu Leu Lys Arg Ile Arg Gly Glu Pro Leu Pro
    50                  55                  60
Pro Arg Arg Trp Thr Leu Gly Arg Phe Gly Met Ala Val Asn Ile Ala
65                  70                  75                  80
Ala Leu Ala Phe Leu Ile Pro Ile Phe Val Phe Ser Phe Phe Pro Leu
                85                  90                  95
Thr Lys Thr Val Asp Thr Lys Thr Met Asn Trp Ser Val Val Met Tyr
            100                 105                 110
Leu Ala Met Leu Thr Phe Ala Ser Gly Tyr Tyr Val Leu Trp Gly Arg
        115                 120                 125
His Asn Phe Ile Ala Pro Val Ala Leu Val Lys Arg Gln Gly Gly Tyr
    130                 135                 140
Cys Gly
145
```

<210> 35807
<211> 381
<212> PRT
<213> A.fumigatus

<400> 35807
Leu Glu Ile Phe Glu Ser Arg Ser Asp Arg Ser Phe Thr Ile Val His
1 5 10 15
Ala Val Leu Pro Pro Met Thr Ser Ser Thr Lys Asp Ser Arg Phe Ser
20 25 30
His Ser Ser Asn Gly Asp Tyr Arg Thr Ile Pro Val Ser Ser Thr Ser
35 40 45
His Pro Asp Asn Pro Val Pro Glu Glu Pro Arg Thr Arg Ser Leu Ser
50 55 60
Ile Thr Asp Thr Ser Phe Asn Gly Ser Ser Pro Ala Gln Glu Thr Glu
65 70 75 80
Gly Ser Thr Asp Leu Asp Thr Pro Pro Thr Pro Leu Thr Pro Leu Asp
85 90 95
Glu Glu Gln Pro Asp Ser Arg Asp Ser Arg Lys Glu Phe Thr Asp Ser
100 105 110
Gly Asn Gly His Gln Arg Arg Ala Ser Thr Val Leu Ile Ser Gln Asn
115 120 125
Ser Glu Asp Met Arg Arg Val Leu Glu Ser Val Gly Thr Ala Gly Thr
130 135 140
Gln Lys Val Gln Pro Leu Cys Cys Gly Gly Gly Cys Cys Arg Ser Gln
145 150 155 160
Pro Leu Thr Lys Leu Gly Pro Leu Pro Ser Ala Asn Ala Val Thr Pro
165 170 175
Pro Asp Asn Glu Ala Phe Lys Lys Leu Asn Leu Asn Ile Glu Tyr Leu
180 185 190
Thr Leu Asp Ser Glu Leu Thr Asn Ile Val Pro Val Pro Glu Lys Thr
195 200 205
Val Ser Phe Ser Ala Val Ala Ala Ser Ala Leu Asp Leu Lys Leu Gly
210 215 220
Pro Ala Asp His Pro Pro Thr Phe Val Gln Pro His Pro Pro Tyr Asn
225 230 235 240
Val Phe Arg Ala Pro Leu His His Ala Arg Glu Leu Thr Lys Pro Gly
245 250 255
Ala Glu Lys Arg Thr Phe His Phe Asp Ile Asp Val Thr Asp Tyr Pro
260 265 270
Ala Glu Ser Gly Asp Val Asp Phe Val Val Gly Gly Ala Ile Gly Val
275 280 285
Cys Pro Lys Asn Lys Glu Glu Glu Val Asp Asp Ile Phe Asn Gln Leu
290 295 300
Gly Ile Pro Lys Ser Ile Arg Asp Lys Lys Ile Thr Leu His Thr Thr
305 310 315 320
Lys Gly Arg Trp Pro Thr Ile Trp Gly Asp Asp Gln Pro Arg Asp Leu
325 330 335
Ile Thr Thr Arg Arg Glu Leu Leu Thr Trp Cys Ser Asp Ile Gln Ser
340 345 350
Tyr Pro Pro Thr Lys Pro Leu Phe Arg Leu Leu Ala Glu Tyr Val Phe
355 360 365
Thr Arg Arg Arg Asp Pro Asn Arg Trp Leu Glu Gly Ala
370 375 380

<210> 35808

<211> 66
<212> PRT
<213> A.fumigatus

<400> 35808
Thr Asp Leu Lys Gln Leu Ser Ser Thr Pro Tyr Leu Ile Ser Pro Ala
1 5 10 15
Pro Gln Leu Tyr Pro Val Lys Phe Ile Val Leu Gly Ser Ala Pro Ala
20 25 30
Ala Lys Arg Ile Ile Leu His Tyr Pro Thr Thr Lys Ser Asp Asn Asp
35 40 45
Ala Asn Arg Gln Gln Leu Asn Gly Gln Leu Gln Lys Leu Ser Ser Gln
50 55 60
Gln Cys
65

<210> 35809
<211> 462
<212> PRT
<213> A.fumigatus

<400> 35809
His Gly Leu Leu Ser Phe Arg Phe Val Gly Ile Ile Arg Val Val Asp
1 5 10 15
Trp Val Arg Ala Glu Glu His Ile Leu Gly Leu Val Ala Ile Ser Pro
20 25 30
Arg Ala Ser Pro Pro Thr Pro Asp Glu Val Ala Ser Tyr Arg Arg Leu
35 40 45
Leu Arg Ile Pro Glu Ser Ile Phe Asp Met Trp Arg Tyr Trp Asp Arg
50 55 60
Arg Gly Gly Leu His Ser Ala Ser Val Asn Arg Leu Val Gly Thr Asp
65 70 75 80
Ala Asp Pro Asp Thr Arg Glu Leu Gln Met Arg Tyr Asn Lys Gln Ser
85 90 95
Lys Thr Pro Val Trp Arg Arg Met Ala Trp Gly Thr Leu Pro Thr Tyr
100 105 110
Asn Lys Asp Gly Lys Ala Ile Gly Gly Ile Pro Gly Glu Glu Val Trp
115 120 125
Ala Gly Val Lys Thr Ser Val Leu Leu Val Ala Gly Glu Ser Asp Ala
130 135 140
Val Thr Lys Pro Ala Glu Leu Arg Lys Leu Leu Lys Phe Phe Gly Glu
145 150 155 160
Val Gly Pro His Ala Asp Val Gly Ala Asp Gly Ser Ala Ile Ile Pro
165 170 175
Asp Ala Ser Glu Thr His Asp Thr Val Ser Ala Ala Tyr Asp Arg Phe
180 185 190
Ala His Glu Glu Glu Tyr Gly Leu Glu Ala Gln Thr Ser Glu Lys Thr
195 200 205
Ile Ile Asp Asp Cys Arg Ala Ser Cys Glu Lys Lys Arg Ala Val Lys
210 215 220
Thr Val Ile Leu Pro Ala Pro Ala Ser His Ala Leu Leu Tyr Asp Arg
225 230 235 240
Ala Thr Tyr Arg Thr Leu Ala Gly Ile Ile Gln Asp Phe Leu Ser Gln
245 250 255
His Ile Asp Glu Arg Leu Ser Leu Gly Trp Gln Leu Gln Tyr Met Asn
260 265 270

```
Thr Ser Gly Lys Trp Asp Val Lys Asn Leu Ala Lys Trp Lys Lys Val
        275                 280                 285
Thr Pro Val Ser Gln Arg Ile Ala Gly Thr Phe Val Ala Leu Lys Met
    290                 295                 300
Leu Arg Glu Val Asp Glu Glu His Asn Pro Val Leu Phe Ser Gln Lys
305                 310                 315                 320
Tyr Arg Asp Gln Ile Tyr Ala Val Ile Asp Ile Ser Tyr Glu Asn Pro
                325                 330                 335
Val Tyr Asn Pro Ala Ser Leu Glu Lys Gly Gly Ile His Tyr Gln Lys
            340                 345                 350
His Pro Thr Val Ser Lys Ile Pro Pro Thr Ala Asp Glu Val Arg Asp
        355                 360                 365
Phe Ile Ala Leu Val Asp Arg Leu Gln Asn Glu Ile Ser Glu Lys Met
    370                 375                 380
Lys Met Ser Gly Asn Pro Asp Gly Pro Arg Pro Val Val Gly Val His
385                 390                 395                 400
Cys His Tyr Gly Phe Asn Arg Thr Gly Phe Leu Ile Val Ser Tyr Leu
                405                 410                 415
Ile Glu Arg Leu Gly Phe Arg Val Gln Asp Ala Ile Asp Glu Phe Glu
            420                 425                 430
Arg Gln Arg Pro Pro Gly Ile Arg His Gly His Phe Ile Asp Thr Leu
        435                 440                 445
Phe Val Arg Tyr Cys Val Gly Leu Lys Arg Ala Pro Thr Leu
    450                 455                 460
```

<210> 35810
<211> 73
<212> PRT
<213> A.fumigatus

<400> 35810

```
Glu Tyr Trp Val Ser Gly Thr Tyr Arg Cys Ile Ser Lys Asn Ile Tyr
1               5                   10                  15
Met Ser Met Ile Arg Thr Asn His Leu Val Ser Pro Lys Leu Phe Arg
            20                  25                  30
Thr Pro Ile Ser Thr Glu Cys Val Arg Asn Arg Val Tyr Asn Tyr Pro
        35                  40                  45
Ser Glu Arg Gly Leu Ala Thr Gly Gly Ser Leu Gly Leu Cys Cys Ser
    50                  55                  60
Glu His Val Thr Ile Thr Leu Met Arg
65                  70
```

<210> 35811
<211> 64
<212> PRT
<213> A.fumigatus

<400> 35811

```
Trp Ser Ile Ser Thr Lys Leu Asp Ala His Asp Cys Leu Asn Phe Phe
1               5                   10                  15
Ser Leu Asp Leu Val Gln Ile Cys Gly Ile Lys Gly Leu Gly Leu Ser
            20                  25                  30
Gln Glu Phe Ser Leu Arg Gln Gly Thr Pro Gly Gln Val Phe Ile Pro
        35                  40                  45
Ala Thr Leu His Glu Gly Thr Ser Ile Leu Asn Leu Gln Lys Lys Tyr
    50                  55                  60
```

<210> 35812
<211> 335
<212> PRT
<213> A.fumigatus

<400> 35812
Ser Lys Ile Val Ile Ser Lys Leu Ser Tyr Pro Ile Leu Ile Arg Leu
1 5 10 15
Leu Leu Thr Thr Pro Val Ser Pro Thr Thr Asn Pro Ala Lys Gln Pro
20 25 30
Pro Thr Asn Asn Lys Ser Pro Asn Tyr Gly Asn Ser Ser Ser Pro Thr
35 40 45
Thr Ala Gly Pro Thr Ala Thr Ser Trp Ser Leu Ser Leu Asn Ala Cys
50 55 60
Pro Gly Gln Lys Ile Ser Met Cys Phe Arg Pro Arg Thr Arg Glu Ile
65 70 75 80
His Leu Leu Pro Gln Asp His Ala Arg Glu Gln Glu Thr Trp Thr Glu
85 90 95
Arg Cys Glu Arg Ser Leu Asp Ala Leu Ile Ala Leu Ala Arg Ala Arg
100 105 110
Gly Val Phe Pro Arg Leu Gly Lys Pro Arg Asp Glu Arg Phe Pro Ile
115 120 125
Ile Gly Ala Gln Phe Pro Val Ser Ile Glu Arg Ser Ala Ile Ser Leu
130 135 140
Phe Gly Ile Val Gly Arg Gly Val His Met Thr Val Tyr Thr Arg Thr
145 150 155 160
Lys Ser Gly Leu Lys Ile Trp Val Pro Gln Arg Asn Pro Lys Lys Ser
165 170 175
Thr Tyr Pro Gly Met Leu Asp Thr Ala Val Ala Gly Gly Val Ala Ala
180 185 190
Gly Glu Arg Pro Met Asp Cys Leu Ile Arg Glu Ala Glu Glu Glu Ala
195 200 205
Gly Met Glu Glu Ser Met Val Arg Lys Ala His Ala Val Gly Thr Val
210 215 220
Thr Trp Phe Asn Ile Ser Asp Asp Arg Ala Gly Gly Glu Pro Gly Leu
225 230 235 240
Met Asn Pro Gly Leu Leu Tyr Val Tyr Asp Leu Glu Val Gly Pro Glu
245 250 255
Val Val Leu Asn Pro Val Asp Glu Glu Asp Val Cys Ala Phe His Leu
260 265 270
Met Asp Val Arg Glu Val Leu Asp Ala Met Ala Glu Gly Lys Phe Lys
275 280 285
Pro Ala Ser Ala Ser Val Met Val Asp Phe Leu Val Arg His Gly Leu
290 295 300
Ile Thr Ala Glu Asp Asp Asp Asp Tyr Pro Glu Ile Val Ser Arg Leu
305 310 315 320
His Arg Leu Leu Pro Phe Ala Thr Ser Pro Thr Ala Gly Arg Thr
325 330 335

<210> 35813
<211> 269
<212> PRT
<213> A.fumigatus

<400> 35813

```
Leu Val Val Leu Leu Leu Thr Pro Leu Ser Gln Lys Pro Leu Ile Ile
1               5                  10                  15
Ala Arg Val Arg Lys Asp Ser Asp Ile Pro Lys Pro Tyr Pro Pro Gly
            20                  25                  30
Met Asn Thr Gly Pro Trp Asp Gly Asn Ile His Trp Ala Ile Lys Gly
        35                  40                  45
Tyr Ser Ile Phe Glu Ser Gln Gln Glu Glu Ala Ala Ala Phe Ser Tyr
    50                  55                  60
Arg Pro Asn Leu Leu Ser Arg Gln Pro Ile Ser Asp Leu Trp Ile Phe
65                  70                  75                  80
Gln Tyr Gly Leu Arg Tyr Ile Pro Asp Gly Arg Glu Ser Asn Val Phe
                85                  90                  95
Arg Thr Val Arg Ile Glu Arg Leu Ala Ser Asn Val Thr Leu Asn Gln
            100                 105                 110
Val Leu Pro Ser Val Pro Gly Glu Ile Tyr Ser Ala Ser Leu Cys Asn
        115                 120                 125
Thr Ser Pro Ile Thr Gly Tyr Asn Thr Ala Ile Val Val Phe Val Leu
    130                 135                 140
Glu Lys Asp Ala Leu Asp Phe Val Gln Lys Ser Lys Glu Gly Leu Pro
145                 150                 155                 160
Leu Gly Phe Cys Val Ala Ser Val Phe Leu Val Asn Thr Pro Thr Tyr
                165                 170                 175
Pro Met Thr Phe Gln Met Ser Gln Phe Ile Phe His Gln Gly Tyr Thr
            180                 185                 190
Arg Cys Leu Val Ile Ser His Leu Arg Arg Ser Leu Arg Gly Glu Ile
        195                 200                 205
His Arg Val Leu Lys Arg Ser Ala Tyr Tyr Asn Tyr Ile Glu Ser Val
    210                 215                 220
Glu Glu Gly Pro Val Val Gly Asp Ile Tyr Val Arg Phe Tyr Ser Val
225                 230                 235                 240
Lys Met Ala Ala Ala Ala Tyr Asp Leu Phe Gln Gly His Gln Ser Phe
                245                 250                 255
Glu Arg Cys Ser Thr Lys Phe Leu Lys Lys Ala Ala Glu
            260                 265

<210> 35814
<211> 74
<212> PRT
<213> A.fumigatus

<400> 35814
Val Leu Asp Ile Lys Val Phe Ala Val Cys Ser Ile Leu Leu Phe Leu
1               5                  10                  15
Ile His Ser Thr Met Gln Leu Thr Ile Glu Pro Phe Cys Thr Ser Val
            20                  25                  30
Pro Val Lys Tyr Phe Ser Gln Gly Ser Tyr Ile Ser Ile Ile Phe Pro
        35                  40                  45
Val Asp Leu Leu Ser Lys Arg Lys Ser Asn Ser Asp His Arg Asp Ile
    50                  55                  60
Ala Tyr Ile Asn Asn Ser Leu Arg His Leu
65                  70

<210> 35815
<211> 201
<212> PRT
<213> A.fumigatus
```

<400> 35815
Phe Phe Pro Lys Met Glu Gly Cys Val Thr Leu Thr Thr Ser Ser Ile
1 5 10 15
Val Ser Leu Ile Val Leu Phe Ser Leu Leu Leu Cys Leu Phe Ile Leu
20 25 30
Phe Arg Arg Leu Asp Ala Val Val Leu Ala Met Ala Gln Ala Ser Gln
35 40 45
Ala Ser Lys Pro Leu Cys Ser Pro Ala Asn Lys Glu Thr Gln His Gly
50 55 60
Val Asn Asn Thr Ser Ala Glu Asp Asn Asn Asn Thr Ala Ser Glu Asn
65 70 75 80
Val Ser Pro Lys Ser Phe Ser Leu Ser Pro Val Tyr Phe Glu Lys Thr
85 90 95
Ala Val Val Val Leu Asn Pro Arg Lys Cys Ser Asn Ile Leu Asp Ser
100 105 110
His Leu Asp Asp Ile Ser Val Pro Thr Leu Gln Pro Arg Thr Pro Gln
115 120 125
Lys Arg Leu His Pro Ala Ala Ala Tyr Leu Asn Gln Leu Arg Thr Val
130 135 140
Ser Leu Gln Arg Thr Asp Ser Asp Asp Leu Leu Asp Ala Gly Ile Glu
145 150 155 160
Asp Leu Met Ile Pro Val Leu Glu Pro Glu Arg Val Ser Ser Val Asn
165 170 175
Glu Ile Ala Gly Cys Ala Ala Ser Asp Thr Ser Phe Pro Glu Thr Ser
180 185 190
Asp His Cys Ser Cys Thr Gln Gly Phe
195 200

<210> 35816
<211> 117
<212> PRT
<213> A.fumigatus

<400> 35816
Leu Leu Ile Gln Leu Ser Gln Phe Ala Gly Lys Ala Thr Ser Leu Glu
1 5 10 15
Pro Trp Phe Pro Pro His Leu Gln Arg Asp Ile Tyr Phe Ser Leu Leu
20 25 30
His Leu Asp Pro Pro Ala Ser Thr Ser Ser Lys Glu Lys Lys Ala Pro
35 40 45
Ala Val Pro Glu Thr Val Leu Lys Ala Ala Leu Leu Arg Arg Ala Thr
50 55 60
Glu Asp Ile Lys Arg Val Met Ala Leu Arg Asn Gln Lys Gln Ala Leu
65 70 75 80
Ala Met Leu Leu Gln Arg Gly Ser Val Gly Asp Asp Leu Trp Gln Arg
85 90 95
Phe Gln Arg Ala Glu Lys Glu Met Glu Asp Glu Val Arg Asp Val Val
100 105 110
Thr Glu Val Cys Phe
115

<210> 35817
<211> 213
<212> PRT
<213> A.fumigatus

<400> 35817
Arg Pro Arg Phe Ser Gly Ala Gln Gln Arg Ile Ser Asn Ala Leu Trp
1 5 10 15
Arg Ser Glu Thr Arg Ser Arg Arg Trp Leu Cys Phe Cys Asn Gly Ala
20 25 30
Val Ser Gly Thr Ile Cys Gly Ser Val Ser Ser Gly Arg Arg Arg Arg
35 40 45
Trp Arg Met Lys Ser Gly Met Trp Leu Leu Arg Phe Val Phe Glu Pro
50 55 60
Cys Phe Ile Leu Ser Leu Arg Gly Trp Glu Gly Ala Leu Leu Met Ser
65 70 75 80
Val Leu Phe Leu Gln Ala Asn Ala Tyr Val Pro Asn Trp Gly Gln Thr
85 90 95
Ile Phe Gln Ser Ala Asn Glu Met Leu Asn Asn Ala Leu Phe Arg Glu
100 105 110
Arg Leu Gln Ser Tyr Gln Asn Lys Leu Ala Glu Glu Arg Glu Trp Trp
115 120 125
Asp Lys Lys Lys Ala Ser Ile Gln Glu Gly Phe Met Lys Glu Leu Asp
130 135 140
Ala Glu Ser Ser Ala Ala Thr Lys Ser Glu Gln Ala Val Ser Thr Thr
145 150 155 160
Thr Thr Thr Ser Ser Thr Pro Gly Thr Lys Thr Pro Glu Ser Ser Ala
165 170 175
Ala Pro Ser Thr Ala Ala Pro Ser Asp Asp Glu Ala Val Leu Val Glu
180 185 190
Ala Ala Asp Thr Val Ala Gly Gly Ser Ser Gly Ala Gly Lys Lys Lys
195 200 205
Lys Lys Gly Lys Lys
210

<210> 35818
<211> 261
<212> PRT
<213> A.fumigatus

<400> 35818
Met Met Asp Ser Ile Lys Asp Thr Lys Ser Ser Thr Pro Trp Val Leu
1 5 10 15
Ser Ile Leu Asp Val Val Leu Ile Arg Val Gln Lys Gly Arg Asp Gly
20 25 30
Lys Pro Tyr Ile Arg Arg Ser Pro Leu Met Ala Leu Phe Glu Phe Thr
35 40 45
Glu Glu Asn Ser Gly Tyr Ala His Gly Pro Arg Thr Arg Leu Ser Gln
50 55 60
Ser Gln Gln Gly Leu Asn Lys Gln Asp Ser His Gly Ala Lys Gln Lys
65 70 75 80
Asp Thr Ser Pro Gly Glu Ser Asp Ala Ala Glu Glu Asp Gly Ala Ala
85 90 95
Ser Asp Ile Ser Ala Asp Pro Ala Ala Ala Gly Tyr Phe Thr Phe Met
100 105 110
Leu Met Tyr His Phe Phe Asn Ala Ala Ala Ala Glu Arg Leu Ala Gly
115 120 125
Thr Arg Ser Leu Leu Phe Pro Asn Glu Ile Leu Ser Leu Ile Met Asp
130 135 140
Phe Ser Asp Met Arg Thr Tyr Leu Ala Leu Ala Gln Ser Ser Ala Phe

145 150 155 160
Cys His Glu Leu Ser His His Lys Leu Arg Leu Asn Asp Glu Tyr Ala
165 170 175
Val Ile Gly Ser Gly Glu Asp Ser Glu Thr Phe Val Leu Glu Asp Leu
180 185 190
His Ser Gly Lys Lys Ile His Ser Lys Leu Ser Met Tyr Gln Lys Asn
195 200 205
Trp Leu Gly His Pro Ile Ala Asp Gly Leu Lys Leu Ser Pro Val Ile
210 215 220
Gly Val Thr Asn Thr Lys Arg Leu Ser Ile Met Asp Asp Val Thr Ile
225 230 235 240
Gln Leu Ser Asp Val Thr Pro Lys Asp Pro Val Trp Ser Glu Ala Glu
245 250 255
Glu Gly Ser Ser Gln
260

<210> 35819
<211> 289
<212> PRT
<213> A.fumigatus

<400> 35819
Pro His His Ser Val Gly Cys Gly Gly Leu Thr Met Leu Ile Phe Leu
1 5 10 15
Asn Phe Lys Gly Thr Gly Lys Met Phe Leu Ser Phe Lys Glu Asp Gly
20 25 30
Asn Arg Phe Ile Pro Met Arg Asn Ala Ser Ala Gln Ala Arg Ala Val
35 40 45
Ala Pro Ala Ser Gln Gln Thr Glu Thr Thr Val Asn Leu Thr Pro Ile
50 55 60
Gln Ser Gln Met Phe Lys Thr Met Thr Arg Ser Leu Thr Ile Pro His
65 70 75 80
Phe Leu Tyr Ala Asp Glu Leu Lys Ile Asn Asp Ile Thr Ala Leu Arg
85 90 95
Lys Lys Leu Ala Ser Asp Pro Lys Asp Pro Lys Lys Val Thr Phe Leu
100 105 110
Pro Phe Val Ile Lys Ala Val Ser Leu Ala Leu Asn Glu Tyr Pro Leu
115 120 125
Leu Asn Ala Lys Val Asp Leu Ser Ile Pro Glu Lys Pro Lys Leu Ile
130 135 140
Met Arg Pro Lys His Asn Ile Gly Val Ala Leu Asp Thr Pro Gln Gly
145 150 155 160
Leu Ile Val Pro Asn Ile Lys Asp Val Ala Ser Arg Thr Ile Met Glu
165 170 175
Ile Ala Ala Glu Ile Lys Arg Leu Ser Ala Leu Gly Lys Glu Gly Lys
180 185 190
Leu Thr Pro Ala Asp Leu Ser Gly Gly Thr Ile Thr Val Ser Asn Ile
195 200 205
Gly Asn Ile Gly Gly Thr Tyr Val Gly Pro Val Ile Val Pro Thr Glu
210 215 220
Val Ala Ile Leu Gly Val Gly Lys Ser Arg Thr Val Pro Val Phe Asp
225 230 235 240
Asp Ala Gly Gln Val Thr Lys Gly Glu Leu Val Asn Phe Ser Trp Ser
245 250 255
Ala Asp His Arg Val Val Asp Gly Ala Thr Met Ala Arg Met Ala Asn
260 265 270

Lys Val Arg Glu Phe Ile Glu Ser Pro Glu Leu Met Leu Leu Asn Leu
275 280 285
Lys

<210> 35820
<211> 370
<212> PRT
<213> A.fumigatus

<400> 35820
Glu Lys His His Asp Ser Gly Cys Cys Ala His Ser Leu Thr His Leu
1 5 10 15
Phe Ser Leu Asp Trp Leu Asn Ser Met Arg Glu Met Tyr Ser Arg Ser
20 25 30
Ala Gln Lys Phe Glu Asp Gln Ile Leu Thr Val Asp Val Lys Ile Glu
35 40 45
Gln Asp Asp Leu Thr Ile Ser Glu Arg His Ala Met Ser Tyr Leu Ala
50 55 60
Ile Asp Asp Arg Leu Ile Tyr Ala Pro Ile Gln Thr Ile Met Asp Arg
65 70 75 80
Phe Ser Asn Asp Leu Ile Ile Glu Trp Thr Tyr Thr Ile Asp Leu Asp
85 90 95
Arg Glu Met Phe Ala Val Asp Asp Ala Ala Cys Phe Lys Leu Phe Asn
100 105 110
Ile Pro Arg Gly Gly Arg Trp Ile Arg Tyr Leu Ala Glu Asp Ala Gln
115 120 125
Arg Arg Arg Lys Leu Ser Asp Asn Thr Pro Lys Asp Ile Ile Ala Asp
130 135 140
Ile Ser Trp Lys Pro Asn Ile Asn Pro Asn Leu Arg Val Leu Gly Glu
145 150 155 160
Ala Leu Asn Ile Glu Leu Leu Ser Leu Thr Asp Phe Ala Ala Glu Thr
165 170 175
Met Leu Arg Leu Asp Leu Asp Thr Thr Val Asp Lys Gln Met Met Pro
180 185 190
Val Arg Ile Asn Phe Leu Met Thr Thr Phe Leu Gln Met Cys Arg Val
195 200 205
Tyr Arg Lys Ile Leu Asp Arg Phe Val Leu Ala Trp Glu Pro Ser Cys
210 215 220
Phe Met Phe Arg Glu Met Ala Phe Ala Val Leu Ser Leu Ala Ala Gly
225 230 235 240
Glu Val Phe Phe Glu Phe Ser Glu Val Leu Asp Ala Lys Tyr Arg Glu
245 250 255
Asn Gly Tyr Tyr Leu Leu Pro Asp Ser Arg Thr Pro Lys Tyr His Thr
260 265 270
Arg Met Leu Pro Arg Phe Ile His Glu Ser His Leu Pro Gly Ile Glu
275 280 285
Pro Gly Ser Ala Pro Lys Ser Thr Ser Phe Trp Phe His Asp Val Leu
290 295 300
Val His Leu Asn Ser Arg Leu Asp Leu Asp Asp Val Glu Glu Ala Ser
305 310 315 320
Val Val Ala Val Val Asn Asp Gly Leu Asp Gln Gly Tyr Glu Glu Phe
325 330 335
Tyr Ala Met Gly Thr Leu Asp Ser Arg Arg Cys Ser Asp Pro Arg Ser
340 345 350
Glu Gly Thr Gly Trp Lys Ala Ile His Gln Lys Val Ser Ala His Gly

```
        355                 360                 365
Ser Val
    370

<210> 35821
<211> 114
<212> PRT
<213> A.fumigatus

<400> 35821
Thr Asn Arg Thr Cys Asp Gln Leu Phe Leu Gln Phe Asp Gly Pro Thr
1               5                  10                  15
Lys Ile Leu Leu Gln Thr Arg Gly Pro Arg Ile Asn Asp Ile Met Ser
            20                  25                  30
Ala Arg Glu Ile Asn Glu Ile Ala Asp Thr Pro Arg Gly Leu Thr Phe
        35                  40                  45
Asp Pro Thr Asn Pro Ala Lys Gln Pro Arg Val Asp Gly Glu Glu Phe
    50                  55                  60
Lys Asn Val Ala His Asp Ala Val His Ala Gly Pro Gly Pro Ser Arg
65                  70                  75                  80
Thr Ile Glu Glu Leu Glu Asn Glu Met Lys Gly Ile Ser Gln Ser Ile
                85                  90                  95
Ala Thr Leu Thr Arg Glu Gly Lys Val Ile Ile Glu Lys Ile Ala Glu
            100                 105                 110
Lys Lys


<210> 35822
<211> 61
<212> PRT
<213> A.fumigatus

<400> 35822
Thr Gln Gln Pro Gly Tyr Tyr Pro Asp Phe Val Thr Asp Leu Leu Asn
1               5                  10                  15
Asp Gly Phe Arg Arg Gln Met Leu Arg Ile Leu Pro Met Ser Val Cys
            20                  25                  30
Phe Thr Lys Leu Lys Asn Met Ala Leu Arg Val Asn Ile Ala Gln Val
        35                  40                  45
Ile Val Phe Met Ser Ile Leu Arg Leu Lys Tyr Thr Thr
    50                  55                  60

<210> 35823
<211> 875
<212> PRT
<213> A.fumigatus

<400> 35823
Asp Val Leu Ser Cys Ser His Tyr Thr Ala Leu Ile Thr Asn Arg Phe
1               5                  10                  15
Gln Ala Asp Ser Ile Ala Thr Arg Phe Pro Thr Thr Gly Tyr Leu Ile
            20                  25                  30
Ala Ile Ile Ser Val Leu Gly Phe Ala Ile Met Pro Arg Ala Lys Phe
        35                  40                  45
Ile Gln Met Met Leu Leu Asp Val Leu Ala Val Cys Val Ala Thr Ala
    50                  55                  60
```

```
Phe Ala Leu Leu Met Met Phe Cys Ser Val Lys Ala Arg Gln Asn Thr
65                  70                  75                  80
Gln Ser Ala Ala Asp Ala Ala Ser Ile Ser Asn Leu Asp Pro Thr Ala
                85                  90                  95
Asn Glu Tyr Asn Ser Ser Ala Ser Ala Val Ser Gly Val Leu Leu Phe
            100                 105                 110
Phe Gln Ile Tyr Leu Val His Ser Phe Arg Ala His Tyr Gln Gln Phe
        115                 120                 125
Gln Phe Pro Val Ile Ile Tyr Ser Ile Ile Ala Asn Ile Thr Ala Ser
    130                 135                 140
Tyr Ala Pro Arg Leu Pro Thr Met Ala Ala Gly Ile Ala Leu Val Arg
145                 150                 155                 160
Thr Leu Phe Glu Ala Cys Leu Ile Gly Leu Gly Leu Cys Thr Gly Val
                165                 170                 175
Ser Leu Phe Leu Phe Pro Val Thr Ser Arg His Ile Val Phe Lys Gln
            180                 185                 190
Met Ala Ser Tyr Ile Gly Gly Leu Arg Ala Gly Leu Lys Ala His Thr
        195                 200                 205
Lys Tyr Phe Glu Ser Leu Glu Arg Asp Asp Met Phe Gly Arg Ala Glu
    210                 215                 220
Thr Tyr Asp Glu Thr Val Glu Lys Phe Ser Lys Lys Gly Lys Val Tyr
225                 230                 235                 240
Ser Pro Glu Ala Glu Ala Ile Arg Thr Ala Val Gln Lys Ile Thr Asp
                245                 250                 255
Leu His Gly Lys Leu His Ala Asp Leu Thr Phe Ala Lys Arg Glu Phe
            260                 265                 270
Ala Ile Gly Lys Leu Gly Pro Asp Asp Leu Gln Ala Ile Phe Arg His
        275                 280                 285
Leu Arg Gln Val Met Ile Pro Val Val Gly Leu Ser Phe Ile Val Asp
    290                 295                 300
Ile Phe Gln Arg Leu Ser Asp Tyr Asn Lys Trp Asn Glu Pro Ile Asp
305                 310                 315                 320
Pro Leu Ala Pro Asp Met Ala Thr Asn Ile Arg Ser Arg Val Val His
                325                 330                 335
Glu Trp Asn Glu Ile Met Lys Ala Val His Asp Pro Phe Ala Ser Ile
            340                 345                 350
Ile Glu Thr Ile Asp Ser Gly Leu Glu His Ile Ser Leu Ser Leu Gln
        355                 360                 365
Leu Thr Lys Pro Pro Lys Thr Ser Leu Gly Lys Lys Asp Ala Pro Leu
    370                 375                 380
Asp Gly Ala Ser Asp Leu Glu Ala Ser Ala Glu Lys Pro Pro Ser Pro
385                 390                 395                 400
Gly Glu Ala Gly Phe Ala Ala Tyr Tyr Glu Arg Lys Leu Ser Asp Phe
                405                 410                 415
Lys Val Ala Lys Arg Leu Ala Leu Arg Thr Trp Ser Glu Glu Lys Gly
            420                 425                 430
Ile Thr Leu Pro Pro Asp Phe Phe Glu Arg Pro Ser Ser Asp Leu Pro
        435                 440                 445
Asp Leu Asp Glu Phe Leu Leu Asp Lys Ser Ser Val Gly Arg Asp Arg
    450                 455                 460
Ser Arg Arg Gln Leu Phe Leu Phe Leu Tyr Val Gly Ala Lys Ala Thr
465                 470                 475                 480
Ser Ser His Phe Arg Ala Asp Met Pro Asn Gln Met Glu Gln Leu Leu
                485                 490                 495
Tyr Ala Thr Gly His Thr Val Leu Asp Phe Ile His Phe Thr Asp Glu
            500                 505                 510
```

```
Lys Val Lys Ser Gly Lys Leu Thr Arg Ser His Leu Ile Ile Pro Gly
        515                 520                 525
Ala Lys Arg Leu Leu Lys Trp Leu Arg Ser Ile Leu Gln Ala Glu Asp
    530                 535                 540
Thr His Glu Asp Asp His Leu Gly Asp Ile His Thr Gln Ser His Ile
545                 550                 555                 560
Leu Gln Leu Gly Glu Ala Tyr Arg His Arg Lys Asp Pro Glu His Leu
                565                 570                 575
Pro Pro Glu Thr Ile Ile Gln Lys Ile Gly Asp Lys Ile Arg Val Val
            580                 585                 590
Pro Trp Leu Leu Arg Ser Ser Glu Ser Ala Tyr Gly Phe Arg Val Ala
        595                 600                 605
Cys Ala Thr Met Thr Ile Tyr Val Ile Ala Leu Leu His Gln Thr Gln
    610                 615                 620
Thr Phe Phe Ile His Gln Arg Leu Val Trp Ala Met Ile Met Ile Asn
625                 630                 635                 640
Ile Ser Met Ser Pro Thr Ala Gly Gln Ser Ile Phe Gly Phe Val Leu
                645                 650                 655
Arg Leu Val Gly Thr Val Ile Ala Met Ala Leu Thr Leu Leu Ala Trp
            660                 665                 670
Tyr Ile Pro Gly Gln Lys Thr Pro Gly Val Ile Val Phe Phe Trp Leu
        675                 680                 685
Phe Val Ala Cys Gly Phe Tyr Val Pro Ile Lys Leu Phe Arg Phe Arg
    690                 695                 700
Ile Val Gly Ile Ile Val Ile Ile Thr Thr Ser Met Ile Ile Gly Tyr
705                 710                 715                 720
Glu Leu Gln Val Arg Lys Val Gly Gln Gln Ala Ala Thr Ser Asn Gly
                725                 730                 735
Gln Ala Tyr Tyr Pro Ile Tyr Leu Leu Ala Pro Tyr Arg Leu Ala Ile
            740                 745                 750
Val Ala Ala Gly Ile Ala Val Ala Phe Phe Trp Thr Phe Phe Pro Phe
        755                 760                 765
Pro Ile Ser Glu His Gly Val Leu Arg Gln Ser Leu Gly Ala Ser Leu
    770                 775                 780
Tyr Leu Leu Ala Asn Tyr Tyr Ser Ile Ile His Glu Ser Val Ser Ala
785                 790                 795                 800
Arg Leu Arg Gly Asp Glu Gly Asp Leu Ala Leu Lys Thr Ser Ala Gly
                805                 810                 815
Arg Arg Leu Gln Lys Ala Arg Gly Lys Val Phe Ser Lys Gln Met Leu
            820                 825                 830
Met Leu Asn Gly Leu Arg Thr Ser Ser Glu Phe Leu Lys Trp Glu Val
        835                 840                 845
Pro Ile Gly Gly Arg Phe Pro Lys Lys Arg Tyr Gln Ala Ile Ile Ser
    850                 855                 860
Ser Val Glu Lys Tyr Ser Pro Ile Ser Leu Pro
865                 870                 875
```

<210> 35824
<211> 61
<212> PRT
<213> A.fumigatus

<400> 35824

```
Thr Leu Asp Pro Thr Met Ala Ser Arg Val Ser Ser Arg Gln Ser Thr
1               5                   10                  15
Ser Ser Ser Gln Tyr Ser Gln Asn Asp Glu Pro Asp Asn Lys Lys Gln
```

```
            20                  25                  30
His Glu Lys Trp Asn Leu Phe Arg Met Ile Glu Ser Gly Trp Ser Ser
        35                  40                  45
Leu Asp Leu Asp Arg Arg Thr Val Ile Leu Met Met Lys
    50                  55                  60
```

<210> 35825
<211> 147
<212> PRT
<213> A.fumigatus

<400> 35825

```
Lys Ser Ala Leu Ala Ala Lys Val Gln Ala Lys Tyr Gly Leu Lys Gly
1               5                   10                  15
Asn Asp Thr Asn Val Ala Ser Gln Lys Pro Thr Arg Pro Arg Arg Ile
            20                  25                  30
Ala Gly Tyr Gly Ser Pro Asp Ser Gly Asp Gly Gln Ile Pro Arg Glu
        35                  40                  45
Lys Gly Arg Ile Arg Thr Trp Leu Leu Gly Gly Gln His Arg Ala Ala
    50                  55                  60
Leu Arg Asn Lys Leu Ser Phe Gln Ala Gly Gly Leu Met Ser Ser Gly
65                  70                  75                  80
His Gly Val Gly Ser Phe Val Leu Val Asp Ala Val Thr Ala Asn Thr
                85                  90                  95
Leu Ser Gly Thr Leu Thr Ser Leu Tyr Ser Thr Asn Ser Thr Ala Phe
            100                 105                 110
Leu Leu Gln Asn Val Glu Phe Tyr Asn Ile Glu Lys Ala Ile Met Ala
        115                 120                 125
Glu Arg Arg Ala Asp Pro Ile Leu Ala Gly Gly Gly Gly Gly Glu Arg
    130                 135                 140
Arg Ala His
145
```

<210> 35826
<211> 191
<212> PRT
<213> A.fumigatus

<400> 35826

```
Ile Ile Ser Pro Ala Asp Ser His Phe Arg Val Gly Gly Ala Lys Gly
1               5                   10                  15
Ser His Leu Gln Ala Ser Glu Cys Pro Lys Lys Gln Phe Pro Leu Ile
            20                  25                  30
Lys Gln Ala Tyr Ile Ala Ala Ser Leu Leu Leu Arg Ile Thr Ser Ser
        35                  40                  45
Ala Ser Ala Tyr Leu Glu Asn Val Trp Ala Trp Thr Ala Asp His Asp
    50                  55                  60
Leu Asp Val Lys Ser Gln Asp Pro Ile Asp Val Phe Ser Ala Arg Gly
65                  70                  75                  80
Ile Leu Val Glu Ser His Gly Pro Thr Trp Met Tyr Gly Thr Ala Ser
                85                  90                  95
Glu His Asn Val Leu Tyr Gln Tyr Gln Leu Pro Gly Ala Gln Lys Ile
            100                 105                 110
Val Met Gly Met Ile Gln Thr Glu Thr Pro Tyr Phe Gln Pro Leu Pro
        115                 120                 125
Ala Ala Pro Glu Pro Phe Lys Pro Gly Gln Phe Pro Asn Asp Pro Val
```

```
    130                 135                 140
Phe Thr Asn Cys Gly Asn Ser Ile Ala Gly Cys Ala Met Ala Trp Ala
145                 150                 155                 160
Val Arg Ile Ile Asn Ser Ser Thr Val Tyr Ile Leu Gly Ser Gly Lys
                165                 170                 175
Thr Phe Arg Ala Phe Ser Ile Ala Leu Cys Val Asn Leu Trp Ile
            180                 185                 190

<210> 35827
<211> 129
<212> PRT
<213> A.fumigatus

<400> 35827
Pro Ser Val Val Gly Leu Tyr Ser Trp Leu Ala Phe Tyr Thr Gln Asp
1               5                   10                  15
Cys Leu Glu Thr Gly His Cys Gln Glu Gln Gly Phe Tyr Val Glu Gln
            20                  25                  30
Ser Thr Asn Thr Trp Val Tyr Asn Leu Val Thr Lys Gly Ile Thr Glu
        35                  40                  45
Ser Ile Ser Pro Ala Gly Glu Thr Pro Leu Tyr Ala Arg Asp Val Gln
    50                  55                  60
Asn Gly Tyr Thr Ser Ser Leu Leu Ala Trp Leu His Thr Gly Thr Gly
65                  70                  75                  80
Ala Ile Gly Lys Arg Lys Phe Pro Gly Phe Tyr Leu Trp Asp Gly Glu
                85                  90                  95
Met Asp Arg Asp Val Leu Ser Arg Val Ser Ser Thr Cys Gln Thr Ser
            100                 105                 110
Ser Lys Arg Trp Val Glu Cys His Asp Pro Ile Tyr Met Leu Arg Gly
        115                 120                 125
Leu


<210> 35828
<211> 138
<212> PRT
<213> A.fumigatus

<400> 35828
Pro Tyr Phe Leu Gln Gln Arg Asp Ile Gln Leu Phe Thr Arg Arg Arg
1               5                   10                  15
Pro Gln Tyr Ala Asp Ile Gly His Ser Gln Val Phe Asp Val Thr Ser
            20                  25                  30
His Gly Ala Lys Gly Asp Gly Val Thr Asp Asp Thr Ile Asn Leu Asn
        35                  40                  45
Ser Val Phe Thr Val Ala Val Asn Leu Ser Ser Ile Val Tyr Ile Pro
    50                  55                  60
His Gly Val Tyr Lys Val Thr Asp Thr Leu Lys Ile Pro Lys Gly Ser
65                  70                  75                  80
Arg Ile Ile Gly Gln Ala Trp Ser Gln Ile Met Ala Thr Gly Pro Lys
                85                  90                  95
Phe Gln Asp Ala Asp Asp Pro His Val Ala Val Gln Val Gly His Glu
            100                 105                 110
Gly Asp Ile Gly Ile Val Glu Ile Gln Asp Leu Leu Phe Thr Val Ser
        115                 120                 125
Gly Pro Thr Ala Gly Ala Val Leu Val Glu
```

130 135

<210> 35829
<211> 64
<212> PRT
<213> A.fumigatus

<400> 35829
Asn Ile His Glu Ser Ser Gln Gly Ser Ala Gly Leu Trp Gly Glu Phe
1 5 10 15
Ser Val Leu Asp Leu Phe Val Phe Leu Val Ile Lys Ser Phe Pro Leu
20 25 30
Gln Ile Pro Thr Ser Gly Leu Glu Ala Gln Arg Ala Pro Ile Cys Lys
35 40 45
Leu Leu Ser Ala Gln Arg Ser Asn Ser Leu Ser Ser Asn Lys Leu Ile
50 55 60

<210> 35830
<211> 62
<212> PRT
<213> A.fumigatus

<400> 35830
Asn Leu Arg Ala Asp Leu Ile Lys Gly Ser Trp Arg Arg Arg Ser Ser
1 5 10 15
Leu Gly Arg Ile Phe Cys Phe Ser Cys Cys Phe Lys Leu Ser Tyr Glu
20 25 30
Cys Glu Ser Leu Asp Ile Thr His Glu Tyr Pro Gly Leu Tyr Ala Ala
35 40 45
Leu Phe Ile Ser Leu Ser Asn Ala Ser Leu Arg Phe Phe Glu
50 55 60

<210> 35831
<211> 80
<212> PRT
<213> A.fumigatus

<400> 35831
Phe Lys Arg Ala Lys Met Lys Leu Ser Ala Leu Leu Ser Leu Pro Pro
1 5 10 15
Leu Ala Ser Ala Ala Thr Thr Leu Ile Pro Ser Thr Cys Phe Asp Ser
20 25 30
His Cys Ser Leu Glu Gln Tyr Phe Ala Tyr Leu Tyr Pro Trp Gly Ser
35 40 45
Asp His Asn Gly Ser Ala Arg Met Val Gly Asn Ser Thr Asn His Glu
50 55 60
Tyr Val Ser Val Asn Ser Gly Thr Thr Asp Ser Gly Cys Gln Thr Ser
65 70 75 80

<210> 35832
<211> 77
<212> PRT
<213> A.fumigatus

<400> 35832
Glu Leu His Leu Lys Pro Trp Tyr Gln Met Cys Ala Asp Gln Ser Pro

```
1               5                   10                  15
Leu Gln Thr Ser Ser Glu Val Lys Ala Leu Asp Val Lys Tyr Pro Ser
            20                  25                  30
Pro Arg Asp Phe Gln Lys Ile Lys Ala Glu Ile Arg Asp Val Asn Gly
        35                  40                  45
Lys Asp Val Ser Val Asn Val Tyr Leu Asp Gly Lys Leu Ile Thr Thr
    50                  55                  60
Gln Tyr Gly Arg Gly Tyr Ile Gly Lys Pro Met His Leu
65                  70                  75
```

<210> 35833
<211> 497
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (431),(438),(441),(458),(463),(473)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35833

```
Pro Arg Met Ile Tyr Phe Asp Val Thr Val Leu Val Cys Trp Ser Ile
1               5                   10                  15
Tyr Val Leu Ala Glu Ile Val Glu Ile Arg Val Thr Leu Cys Trp Arg
            20                  25                  30
Asn Asn Ser Met Thr Lys His Asn Ile Thr Gln Tyr Pro Ser Asp Leu
        35                  40                  45
Leu Phe Ser Thr Leu Pro Ser Leu Ala Ile Pro Lys Phe Glu Thr Pro
    50                  55                  60
Ile Gly Ala Lys Thr Ala Ile Ala Leu Pro Ser Lys Met Val Leu Asn
65                  70                  75                  80
Asp Thr Ser Pro Gln Ser Glu Ser Gly Thr Ser Ser Ala Ser Ser Gln
                85                  90                  95
Asn Gly Ser Glu Leu Tyr Ser Ser Gly Tyr Ile Pro Ile Pro Gly Tyr
            100                 105                 110
Pro Leu Val Leu Lys Thr Glu Cys Leu Ser Arg Pro Asp Leu Phe Thr
        115                 120                 125
Leu Tyr Phe Gly Phe Phe Gly Gln Ser Asn Trp Leu His Lys Asn Ser
    130                 135                 140
Ala His Val Arg Asp Arg Ile Glu Ser Cys Lys Val Met Ile Asn Arg
145                 150                 155                 160
Leu Pro Thr Gln Glu Glu Leu Asp Ala Phe Val Tyr His Gly Ser Lys
                165                 170                 175
Tyr Ile Tyr His Gln Arg Leu Gly Ala Pro Tyr Ser Gly Ala Ile Gly
            180                 185                 190
Thr Ala Tyr Leu Tyr Trp Arg Val Arg Asn Ser Gly Val Val Ala His
        195                 200                 205
Leu Ala Pro Gly Leu Lys Pro Gly Gln Lys Pro Ser Pro Ala Gln Val
    210                 215                 220
Leu Ala Ala Val Lys Leu Tyr Ser Thr Ile Glu Pro Ala Asn Phe Arg
225                 230                 235                 240
Gln Leu Met Val Trp Gly Ser Phe Arg Trp Leu Phe Trp Val Ala Ala
                245                 250                 255
Gly Ser Val Val Thr Gly Val Trp Gly Met Phe His Asp Leu Lys Glu
            260                 265                 270
Thr Met Gly Asp Pro Arg Leu Lys Gln Phe Phe Ala Glu Met Arg Asp
```

```
        275                 280                 285
Lys Asp Pro Glu Glu Val Arg Lys Arg Lys Ile Gln Arg Val Val Glu
    290                 295                 300
Arg Asn Lys Ala Ala Asn Glu Ala Ala Glu Arg Arg Ala Gln Gly Leu
305                 310                 315                 320
Pro Pro Val Lys Val Gly Met Asp Gln Gly Ala Ser Ala Gly Gly Gly
                325                 330                 335
Tyr Ala Glu Ser Gln Lys Tyr Gly Gln Gly Ala Gly Pro Tyr Gly Ser
            340                 345                 350
Leu Asp Ser Tyr Ser Ser Ser Ser Ala Arg Glu Ser Ala Pro Ser Ala
        355                 360                 365
Ser Trp Asp Lys Pro Ala Asn Leu Gly Arg Leu Tyr Gly Asp Arg Ser
    370                 375                 380
Ser Thr Glu Ala Met Arg Gly Val Thr Ser Val Asp Gln Asn Lys Gly
385                 390                 395                 400
Thr Asp Phe Phe Lys Ser Asp Asp Ala Ser Pro Val Ala Ala Glu Tyr
                405                 410                 415
Arg Leu Gly Gly Asp Ser Gln Gly Ser Ala Cys Asp Arg Ile Xaa Gln
            420                 425                 430
Gln Ala Gly Gln Asp Xaa Arg Leu Xaa Ser Ala Trp Thr Pro Ser Val
        435                 440                 445
Asn Glu Lys Gln Gln Arg Glu His Asp Xaa Gly Pro Cys Ser Xaa Trp
    450                 455                 460
Ser Gly Val Ser Ser Thr Pro Tyr Xaa Glu Met Arg His Leu Glu His
465                 470                 475                 480
Ala Gln Val Gln Tyr Asp Ala Cys Tyr Met Pro Ile Glu Thr Cys Arg
                485                 490                 495
Pro
```

<210> 35834
<211> 125
<212> PRT
<213> A.fumigatus

<400> 35834

```
Gln Ala Tyr Pro Thr Thr Pro Thr Glu Gln Thr Pro Val Gln Arg Lys
1               5                   10                  15
Lys Ser Lys Asn Pro Lys Thr His Thr Ala Gln His Pro Gly His Thr
            20                  25                  30
Phe Gly Phe Gln Arg Asn Pro Leu Pro His Trp His Pro Asp Pro Ser
        35                  40                  45
Gln Pro Leu Gln Ala Ala Ser Pro Ala Pro Ala Val Pro Pro Pro His
    50                  55                  60
Trp Pro Leu Tyr Phe Ser Pro Gln Pro Ser Gly Ser Ser Ala Cys Ala
65                  70                  75                  80
Pro Pro Leu Asp Pro Cys Arg Ala Ser Pro Gln Arg Thr Ala Leu Ala
                85                  90                  95
Leu Asp His Pro Leu Ser Pro Ser Asp His Gly Thr Ser Pro Thr His
            100                 105                 110
Pro Ser Pro Pro Asn Pro Pro Pro Pro Arg Arg Ala Thr
        115                 120                 125
```

<210> 35835
<211> 72
<212> PRT

<213> A.fumigatus

<400> 35835

```
Met Asp Lys Thr Gly Gln Lys Phe Phe Tyr Cys Tyr Leu Phe Val Leu
1               5                  10                  15
Pro Met Ala Thr Ile Ser Ile Ile Asn Tyr Met Gln Leu Cys Gln Val
            20                  25                  30
Thr Pro Ala His Ser Ser Asn Glu Arg Val Ser Ala Arg Ile Ser Ser
        35                  40                  45
Ala Leu Gln Ala Met Lys Arg Thr Asp Met Asn Arg Ala Thr Arg Leu
    50                  55                  60
His Asn Glu Leu His Asn Ser Ser
65                  70
```

<210> 35836
<211> 141
<212> PRT
<213> A.fumigatus

<400> 35836

```
Ser Ile Pro Thr Phe Thr Gly Gly Lys Pro Cys Ala Arg Arg Ser Ala
1               5                  10                  15
Ala Ser Leu Ala Ala Leu Phe Leu Ser Thr Thr Leu Trp Ile Phe Arg
            20                  25                  30
Leu Arg Thr Ser Ser Gly Ser Leu Ser Arg Ile Ser Ala Lys Asn Cys
        35                  40                  45
Phe Ser Leu Gly Ser Pro Ile Val Ser Phe Arg Ser Trp Asn Ile Pro
    50                  55                  60
His Thr Pro Val Thr Thr Glu Pro Ala Ala Thr Gln Lys Ser His Leu
65                  70                  75                  80
Asn Asp Pro Gln Thr Ile Asn Cys Leu Lys Phe Ala Gly Ser Ile Val
                85                  90                  95
Glu Tyr Ser Phe Thr Ala Ala Ser Thr Cys Ala Gly Asp Gly Phe Cys
            100                 105                 110
Pro Gly Phe Lys Pro Gly Ala Arg Cys Ala Thr Thr Pro Glu Leu Arg
        115                 120                 125
Thr Arg Gln Tyr Arg Tyr Ala Val Pro Met Ala Pro Glu
    130                 135                 140
```

<210> 35837
<211> 789
<212> PRT
<213> A.fumigatus

<400> 35837

```
Ser Asn Ala Pro Gln Pro Asn Ile Lys Leu His Val Ala Thr Val Ser
1               5                  10                  15
Gln Thr Ala Phe Ile Val Ile Asp Gln Ser Val Leu Leu Leu Ser Leu
            20                  25                  30
Gly Ser Tyr Gly Asp Ser Pro Thr Ser Gln Leu Leu Leu Asp Ser Gly
        35                  40                  45
Arg Leu Pro Ser Pro Phe Asn Asp His Ile Thr Phe Arg Ser Gly Ala
    50                  55                  60
Asp Tyr Lys Leu Leu Gly Ser Gly Cys Glu Asp Glu Thr Gly Glu Gly
65                  70                  75                  80
Ser Ser Ser Ala Cys Leu Val Met Val Arg Asn Phe Gly Val Ile Arg
```

```
                85                  90                  95
Ile Ala Val Arg Pro Arg Gln Ser Ala Gly Asn Glu Ile Glu Asp Ala
            100                 105                 110
Gln Ile Thr Ala Lys Thr Lys Ile Glu Gln Ala Val Phe Tyr Gly Ala
        115                 120                 125
Arg Pro Gly Asn Pro Leu Asp Leu Thr Asp Lys Gly Gly Phe Asp Phe
    130                 135                 140
Ser Pro Gln Glu Ile Glu Glu Ala Ala Leu Glu Ile Cys Gly Glu Leu
145                 150                 155                 160
Leu Arg Ser Thr Ser His Tyr Ile Pro Ala Thr Ser Val Thr Leu Glu
                165                 170                 175
Gln Asn Leu Lys Leu Arg Ala Lys Ala Leu Asp Asp Leu Ala Ser Leu
            180                 185                 190
Leu Leu Gln His Lys Lys Pro Leu His Arg Gln Thr Trp Tyr Glu Leu
        195                 200                 205
Leu Trp Gly Ala Glu Lys Leu Ala Ala Gln Arg Ala Leu Trp Lys Ser
    210                 215                 220
Glu Asp Lys Ala Arg Arg Ala Met Gly Gln Gly Asn Thr Phe Leu Ala
225                 230                 235                 240
His Val Ile Gly Ser Met Asn Glu Lys Phe Arg Thr Lys Ser Glu Asp
                245                 250                 255
Tyr Glu Asp Lys Asp Asn Val Arg Asp Trp Phe Leu Phe Asp Thr Phe
            260                 265                 270
Arg Met Glu His Ile Ile Pro Trp Ile Phe Lys Ala Leu Lys Leu Gln
        275                 280                 285
Lys Gly Ile Ser Thr Lys Gln Gly Arg Arg Val Leu Glu Glu Ile Val
    290                 295                 300
Gln Ala Ser Glu Leu Ser Leu Ala Val Leu Glu Thr Ala Phe Arg Phe
305                 310                 315                 320
Arg Asp Glu His Ala Arg Gln Tyr Gly Leu Glu Asp Glu His Ile Glu
                325                 330                 335
Asp Gly Val Leu Ser Ser Gly Tyr Asp Gly Leu Ser Glu Phe Trp Thr
            340                 345                 350
Ser Arg Asp Ile Val Phe Leu Glu Thr Gly His Leu Leu Asp Leu Glu
        355                 360                 365
Leu Asp Thr Cys Arg Ala Trp Thr Gln Gln Ala Thr Thr Ser Leu Asp
    370                 375                 380
Leu Arg Glu Gln Lys Leu Val Arg Gln Ile Ala Glu Asn Ser Ala Arg
385                 390                 395                 400
Gln Leu Arg Val Leu Ser Leu Met His Tyr Glu Arg Val Arg Trp Leu
                405                 410                 415
Ser Ser Gln Asp Asn Pro Lys Ser Val Asp Glu Gly Ile Glu Leu Glu
            420                 425                 430
Gln Thr Tyr Thr Lys Gln Arg Arg Trp Gln Leu Phe Lys Leu Ala Gly
        435                 440                 445
Ile Gly Gln Leu Glu Asp Ala Ile Ser Leu Ala Glu Lys Phe Arg Asp
    450                 455                 460
Met Ser Ala Leu Val Glu Leu Ile Ile Glu Leu Gln Asp Gln Thr Leu
465                 470                 475                 480
Ala Asp Ser Glu His Ala Glu Asn Val Thr Asn Tyr Glu Ser Glu Gln
                485                 490                 495
Leu Gly Arg Arg Ile Ser Thr Tyr Phe Glu Lys Phe Gly Glu Pro Trp
            500                 505                 510
Ala Asp Ala Phe Phe Thr Arg Gln Ile Ser Met Gly Gln Ser Glu Ile
        515                 520                 525
Leu Phe Thr Met Arg Arg Phe Gln Pro Phe Ile Asn Arg Phe Leu His
```

```
    530                 535                 540
Lys Asn Pro Thr Tyr Ala Arg Leu Cys Trp Ile Asn Asp Ala Ile Gly
545                 550                 555                 560
Glu Asp Asn Tyr Glu Ala Ala Ala Arg Ser Leu Glu Thr Leu Ala Leu
                565                 570                 575
Glu Arg Glu Ser Asp Leu Trp Cys His Arg Val Glu Leu Ser Leu Ser
            580                 585                 590
Lys Leu Ala Thr Leu Ala Ala Trp Glu Glu Ser Ser Ala Ala Ala Lys
        595                 600                 605
Pro Ile Phe Gly Asn Glu Ile Lys Arg Leu Glu Asp Leu Ala Glu Leu
    610                 615                 620
Asp Ala Val Gln Glu Val Val Tyr Ala Tyr Met Met Pro Ala Leu Gln
625                 630                 635                 640
Gly Ala Ile Asp Gln Lys Ala Glu Thr Glu Leu Ala Ile Asp Gln Phe
                645                 650                 655
Gly Arg Phe Val Asn Asp Thr Pro Ser Leu His Glu Val Leu Ser Ala
            660                 665                 670
Leu Leu Thr Lys Val Ile Ser Arg Gln Ile Leu Arg Val Asp Gln Leu
        675                 680                 685
Val Asp Leu Leu Thr Leu Ile Asp Gly Gly Gln Val Ser Glu Glu Thr
    690                 695                 700
Gln Asn Glu Phe Ile Gly Lys Glu Phe Tyr Leu Ala Leu Arg Val Ile
705                 710                 715                 720
Arg Leu Asn Ser Ser Thr Gln Glu Gly Pro Leu Tyr Cys Ile Pro Leu
                725                 730                 735
Gln Lys Leu Val Trp Arg Arg Cys Met Ile Arg Asp Asp Trp Gln Leu
            740                 745                 750
Glu Lys Asn Ala Asp Asn Thr Asp His Glu Pro Gly Asp His Met His
        755                 760                 765
Cys Val Ser Leu Leu Arg Thr Leu Thr Leu Cys Leu Arg Asp Ser Lys
    770                 775                 780
His Ile Ser Gln Val
785

<210> 35838
<211> 84
<212> PRT
<213> A.fumigatus

<400> 35838
Val Cys Ala Asn Lys Cys Gln Val Tyr Lys Tyr Met Ser Lys Ser Leu
1               5                   10                  15
Pro Leu Glu Trp Pro Ser Thr Leu Leu Gly Phe Leu Ser Ile Ile Phe
            20                  25                  30
Ile Thr Pro Ile Tyr Ile Phe Tyr Trp Asn Gly Pro Lys Ile Arg Glu
        35                  40                  45
Arg Ser Lys Phe Ala Gln Ile Leu Ala Ser Asp Arg Lys Lys Ala Gly
    50                  55                  60
Arg Arg Val Ser Gln Cys Gly Ser Gly Asp Ala Gly Pro Glu Glu Tyr
65                  70                  75                  80
Tyr Phe Asp Pro


<210> 35839
<211> 71
<212> PRT
```

<213> A.fumigatus

<400> 35839

```
Ala Pro Leu Arg Ile Ala Ser Leu Val Leu Thr Leu Arg Gln Tyr Ser
1               5                  10                  15
Ile Tyr Met Ala Thr Ile Asp Tyr Met Ile Ala Ser Tyr Gly Pro Tyr
            20                  25                  30
Ser Ala Ser Ala Thr Gly Gly Asn Ala Leu Ala Arg Asp Phe Leu Ala
        35                  40                  45
Gly Ile Ala Ala Met Tyr Ser Val Pro Ser Lys Thr Ser Thr Thr Asp
    50                  55                  60
Glu Asn Tyr Leu Gly Val Cys
65                  70
```

<210> 35840
<211> 64
<212> PRT
<213> A.fumigatus

<400> 35840

```
Lys Leu Asn Lys Ser Lys Ile Gly Arg Gln Tyr Pro Met Tyr Ala Leu
1               5                  10                  15
Ser Leu Ala Gly Ser Tyr Ile Ser Met Ser Leu Ala Thr Asn Ser Pro
            20                  25                  30
Val Gly Leu Pro Leu Leu Pro Thr Phe Leu Leu Trp Val Arg Ser Ser
        35                  40                  45
Trp Val Gly Lys Arg Ile His Ile Ser Leu His Ser Pro Asn Ala Val
    50                  55                  60
```

<210> 35841
<211> 191
<212> PRT
<213> A.fumigatus

<400> 35841

```
Ile Arg Leu Met Ala Leu His Ser Val Val Pro Tyr Ser Leu Ile Ser
1               5                  10                  15
Arg Asn Ser Ile Ile Ser Ile Tyr Thr Leu Lys Thr Ala Ser Ser Val
            20                  25                  30
Ser Gln Ser Thr Gly Leu Phe Pro Lys Phe Val Lys Met Ala Arg Thr
        35                  40                  45
Asn Ala Ala Ala Trp Leu Ser Glu Glu Lys Lys His Pro Phe Glu Ile
    50                  55                  60
Lys Glu Ser Pro Leu Gly Lys Pro Glu Ala Asn Glu Ile Leu Ile Arg
65                  70                  75                  80
Asn His Ala Leu Ala Ile Asn Pro Ile Asp Gly Leu Ile Gln Thr Lys
                85                  90                  95
Ala Phe Phe Pro Leu His Tyr Pro Ile Ile Leu Gly Gln Asp Val Ala
            100                 105                 110
Gly Glu Val Ile Ser Ile Gly Asp Lys Val Thr Arg Phe Lys Pro Gly
        115                 120                 125
Asp Arg Val Leu Gly His Ala Val Gly Leu Met Ala Gly Arg Asn Glu
    130                 135                 140
Ala Cys Gly Phe Gln Thr Tyr Thr Ile Leu Gln Asp Asn Leu Ala Cys
145                 150                 155                 160
Glu Ile Pro Glu Asn Ile Ser Tyr Glu Gln Ala Val Val Val Pro Leu
```

```
                165                 170                 175
Val Ser Pro Val Phe Thr Thr Arg Gly Glu Gly Ser Ala Leu Ser
            180                 185                 190

<210> 35842
<211> 66
<212> PRT
<213> A.fumigatus

<400> 35842
Cys Asn Arg His Ser Ala Tyr Asn Ser Gln Ala Ser Arg Ile Tyr Asn
1               5                   10                  15
Val Cys Glu Cys Glu Ser Ile Ala Ala Phe Arg Ile Phe Leu Ser Leu
            20                  25                  30
Cys Leu Asp Cys Phe Tyr Gln Gln Asp Val Met Glu Arg Glu Asn Asn
        35                  40                  45
Ser Gln Leu His Glu Ile Asn Gly Met Cys Pro Leu Tyr His His Ser
    50                  55                  60
Ser Ser
65

<210> 35843
<211> 153
<212> PRT
<213> A.fumigatus

<400> 35843
Asp Gln Arg Tyr Val Ser Pro Leu Ser Pro Gln Leu Val Leu Ile Ser
1               5                   10                  15
Thr Asp Val Gln Ser His His Cys Gln Ser His Glu Thr Ile Gln Gln
            20                  25                  30
Pro Ser His Asp Arg Gly Ala Ile Gln Tyr Ala Pro Lys Gln Tyr Ser
        35                  40                  45
Leu Thr Gly Ser Asn Arg Pro Pro Pro Tyr His Gly Gly Val Tyr Leu
    50                  55                  60
His Pro Asp Tyr Met His Tyr Asn Pro Asn Tyr Gly Gln Pro Gln Asn
65                  70                  75                  80
Ala Pro Val Trp Ser Leu Ser Gln Pro Leu Pro His Val Met Arg Ser
                85                  90                  95
Gly Met Lys Arg Gly Gly Asp Gln Asp Ala Lys Ala Thr Asp Lys Arg
            100                 105                 110
Pro Asn Ala His Gln Glu Glu Val Pro Ala Ala Asp Glu Pro Pro Thr
        115                 120                 125
Glu His Pro Ala His Asn Ala Asp Phe Asp Ala Glu Lys Asn Gln Pro
    130                 135                 140
Glu Ala Arg Val Ser Gln Pro Asp Glu
145                 150

<210> 35844
<211> 279
<212> PRT
<213> A.fumigatus

<400> 35844
Val Thr Asn Pro Arg Ile Pro Tyr Thr Thr Thr Ala Ser Gly Lys Thr
1               5                   10                  15
```

Val Lys Asp Trp Asp Thr Val Glu Ala Ile Asp Val Pro Phe Met Val
20 25 30
Ala Ala Leu Ser Tyr Ile Arg Gln His Gly Arg Leu Pro Pro Arg Leu
35 40 45
Lys Ser Lys Glu Asp Leu Asn Glu Ala Ser Asp Ser Gly Val Ser Asp
50 55 60
Glu Thr Ile Thr Gln Leu Gln Arg Gln Val Ser Asp Lys Leu Arg Gln
65 70 75 80
Phe Gly Pro Ala Leu Ala Gly Asp Gly Gly Glu Gly Lys Arg Thr Val
85 90 95
Val Phe Phe Glu Gly Phe Leu Leu Phe Ser Pro Pro Glu Ala Glu Val
100 105 110
Arg Glu His Val Leu Arg Pro Val His Glu Gln Leu Asp Val Arg Leu
115 120 125
Phe Leu Pro Ser Pro Tyr Glu Ser Val Lys Glu Arg Arg Glu Arg Arg
130 135 140
Ser Gly Tyr Val Thr Ile Gly Pro Ala Pro Val Pro Pro Leu Pro His
145 150 155 160
Arg Asp Ser Ala Ala Ser Lys Asp Ala Lys Gln Gln Val Asp Leu Glu
165 170 175
Ala Glu Asp Asn Ala Pro Pro Gln Asn Phe Trp Thr Asp Pro Pro Gly
180 185 190
Tyr Val Asp Asp Ile Val Trp Pro Arg Tyr Val Arg Asp His Ala Trp
195 200 205
Leu Leu Leu Pro Glu Ser Gly Leu Asp Asn Asp Arg Tyr Gln Ser Thr
210 215 220
Arg Asn Ser Asp Thr Asp Glu Leu Ile Arg Ile Val Gly Gln Gly Thr
225 230 235 240
Asn Val Arg Thr Asp Ala Gly Val Ala Val Ala Pro Gly Lys Gly Thr
245 250 255
Leu Pro Met Val Asp Val Leu Lys Trp Ala Ile Gln Glu Val Met Lys
260 265 270
Pro Leu Glu Met Ala Glu Gln
275

<210> 35845
<211> 68
<212> PRT
<213> A.fumigatus

<400> 35845
Met Arg His Ser Asn His Pro His His Pro Ala Gly Glu Lys Ser Pro
1 5 10 15
Val Ala Ala Pro Glu Arg Gln Asn Asn Tyr Ile His Ala Gly Pro Val
20 25 30
Thr His Tyr Asn Lys Tyr Asn Pro Tyr Lys Thr Thr Trp Gln Glu Ala
35 40 45
Thr Ile Val His Arg Lys Glu Ser Tyr Val Pro Met Gln Lys Pro Tyr
50 55 60
Ser Gly Val Glu
65

<210> 35846
<211> 81
<212> PRT
<213> A.fumigatus

<400> 35846
Leu Gly Ile Pro Thr Ala Asn Ile Pro Ala Glu Gly Leu Glu Glu Tyr
1 5 10 15
Pro Asp Leu Gln Val Gly Val Tyr Tyr Gly Val Val Ala Leu Asp Pro
20 25 30
Ala Lys Phe Gln Tyr Gln Glu Gly Gln Gly Ser Thr Ser Thr Ser Ser
35 40 45
Thr Gly Gly Ala Glu Ala Ala Val Leu Pro Ala Val Leu Ser Ile Gly
50 55 60
Tyr Asn Pro Phe Tyr Lys Asn Lys Thr Lys Ser Ile Val Arg Leu Pro
65 70 75 80
Arg

<210> 35847
<211> 664
<212> PRT
<213> A.fumigatus

<400> 35847
Ser Pro Thr Phe Gln His Val Asp Gln Leu Arg Gly Val Arg Ser Asn
1 5 10 15
Ser Leu Ser Ser Ser Val Asn Gln Gln Pro Pro Ser Thr Thr Val Ser
20 25 30
Gly Ala Thr Gln Ser Gln Asn Pro Phe Ala Gly Pro Phe Phe Asp Pro
35 40 45
Ser Asp Pro Ala Leu Phe Asn Phe Asp Leu Ser Ser Met Asn Phe Glu
50 55 60
Asn Arg Tyr Gly Ala Leu Glu Phe Gly Met Leu Gly His Met Ala Thr
65 70 75 80
Gly Ala Gly Asp Ser Pro Thr Asp Ser Ala Thr Gln Arg Gly Ser Ile
85 90 95
Gly Arg Ser Gly Ser Thr Gln Tyr Ser Thr Thr Pro Leu Thr Gly Ala
100 105 110
Pro Gly Phe Gly Glu Ser Pro Gly Asn Gln Gln Pro Phe Leu Phe Gly
115 120 125
Asn Asp Pro Leu Leu Asn Glu Trp Pro Asn Ser Gln Ala Pro Asn Gln
130 135 140
Gly His Leu Asn Val Ser Gly Val Tyr Pro Gln Gly Gly Met Met His
145 150 155 160
Met Ala Lys Ser Asp Ala Pro His Ala Phe Ala Ile Glu Ser Gly Pro
165 170 175
Ala Ser Phe Ser Ser Pro Ser Ala Thr Thr Ser Pro His Ile Asn Ser
180 185 190
Gly His Asp Glu Ser Ser Leu Ser Asn Ala Ala Val Asn Lys Ser Thr
195 200 205
Gly Leu Thr Ala Asn Gly Gln Arg Pro Ala Ile Thr Thr Pro Ser Leu
210 215 220
Lys His Gln Ser Leu Gln Phe Gly Val Lys Arg Arg Gln Arg Asn Pro
225 230 235 240
Ser Thr Val Tyr Glu Ser Val Lys Glu Pro Tyr Ala Tyr Thr Asn Arg
245 250 255
Phe His Asn Leu Thr Ala Phe Ile Gln Arg Arg Phe Ser Pro Gln Lys
260 265 270
Thr Leu Gln Ile Ala Lys Ala Leu Ala Ser Ile Arg Pro Ser Phe Ile

```
        275                 280                 285
Ala Thr Thr Lys Thr Leu Asn Arg Asp Asp Leu Ile Phe Met Glu Lys
    290                 295                 300
Cys Phe Gln Arg Thr Leu Trp Glu Tyr Glu Asp Phe Ile Asn Ala Cys
305                 310                 315                 320
Gly Thr Pro Thr Ile Val Cys Arg Arg Thr Gly Glu Ile Ala Ala Val
                325                 330                 335
Gly Lys Glu Phe Ser Ile Leu Thr Gly Trp Lys Lys Asp Val Leu Leu
            340                 345                 350
Gly Lys Glu Pro Asn Leu Asn Val Asn Thr Gly Gly Ser Ser Ala Pro
        355                 360                 365
Gly Ser Gly Asn Thr Ser Arg Gly Ser Phe Thr Pro Arg Ser Ser Thr
    370                 375                 380
Leu Glu Thr Ala Thr Pro Gly Arg Pro Gln Pro Val Phe Leu Ala Glu
385                 390                 395                 400
Leu Leu Asp Asp Asp Ser Val Val Glu Phe Tyr Glu Asp Phe Ala Arg
                405                 410                 415
Leu Ala Phe Gly Asp Ser Arg Gly Ser Val Met Thr Thr Cys Lys Leu
            420                 425                 430
Leu Lys Tyr Lys Thr Lys Glu Asp Met Glu Leu Ala Gln Ser Asp Asp
        435                 440                 445
Asn Gln Arg Trp Asn Asn His Leu Arg Lys Gly Gly Ile Ala Gly Glu
    450                 455                 460
Ala Gly Met Asn Gln Leu Gly Phe Lys Asp Gly Lys Val Glu Cys Ala
465                 470                 475                 480
Tyr Cys Trp Thr Val Lys Arg Asp Val Phe Asp Ile Pro Met Leu Ile
                485                 490                 495
Val Met Asn Val Ser Gly Gln Cys Ile Trp Thr Ser Arg His Met Leu
            500                 505                 510
Ile Ser Thr Thr Val Leu Thr Val His Met Thr Glu Ser His Thr Cys
        515                 520                 525
Trp Trp Phe Ala His Gly Cys Pro Trp Asn Ala Leu Asp Val Leu Leu
    530                 535                 540
Ile Ile Leu Cys Leu Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe
545                 550                 555                 560
Leu Ile Ser Tyr Pro Arg Met Asp Lys Ser Phe Pro Pro Gly Arg Leu
                565                 570                 575
Phe Met Ser Met Phe Ile Ile Leu Pro Leu Asn Arg Ala Phe Ala Leu
            580                 585                 590
Val His Asn Phe Leu Cys Gly Val Arg Leu Leu Leu Leu Ala Arg Leu
        595                 600                 605
Ser Tyr Lys Gly Cys Thr Cys Cys Asn Val Leu Leu Gly Gln Arg Glu
    610                 615                 620
Tyr Asn Cys Ser Ala Ser Pro Glu Pro Gln Leu Glu Thr Ser Leu Leu
625                 630                 635                 640
Pro Asp Asp Val Asp Gly Leu Asn Val Ala Phe Lys Tyr Met Phe Ile
                645                 650                 655
Phe Ser Cys Leu Arg Leu Ser Ser
            660
```

<210> 35848
<211> 82
<212> PRT
<213> A.fumigatus

<400> 35848

```
Asn Glu Gln Thr Glu Ile Leu Arg Pro Ser Thr Leu Phe Trp Phe Pro
1               5                  10                  15
Ile Val Ile Leu Val Ser Glu Lys Tyr Ser Thr Val Thr Trp His Ser
            20                  25                  30
Thr Glu Ser Ala Phe Ile His Ser Trp Asp Glu Val Ala Phe Pro Pro
        35                  40                  45
Leu Leu Pro Leu Thr His Leu Glu Ala Thr Thr Thr Tyr Gln Arg Cys
    50                  55                  60
Ser Gly Ala Leu Leu Gly Asn Ser Pro Pro Phe Arg Gln Ile Asn Leu
65                  70                  75                  80
Thr Asp
```

<210> 35849
<211> 140
<212> PRT
<213> A.fumigatus

<400> 35849

```
Ala Ala Arg Ser Cys Asp Ile Gly Gly Asp Gly Pro Arg Val Met Glu
1               5                  10                  15
Thr Phe Tyr Trp Ala Ala Ile Thr Tyr Tyr Ser Thr Met Val Tyr Phe
            20                  25                  30
His Leu Cys Phe Asp Arg Leu Leu Pro Asp Asn Leu Gln Thr Val Leu
        35                  40                  45
Met Pro Gln Glu Lys Ala Val Ser Leu Val Leu Glu Leu Ser Leu Lys
    50                  55                  60
Leu His Arg Ser Arg Pro His Leu Met Val Arg Ile Thr Trp Pro Leu
65                  70                  75                  80
Phe Met Ala Gly Val Ala Thr Ala Asp Arg Ile Tyr Gln Asp Trp Val
                85                  90                  95
Ser Ile Arg Leu Arg Glu Leu Gly Arg Tyr Gly Gln Asn Tyr Ser Arg
            100                 105                 110
Ile Ser Gln Arg Phe Asp Glu Ile Ile Arg Gly Ser Asp Pro Phe Ala
        115                 120                 125
Tyr Ser Gln Lys Gln Leu Pro Tyr Tyr Asn Ala Asp
    130                 135                 140
```

<210> 35850
<211> 167
<212> PRT
<213> A.fumigatus

<400> 35850

```
Thr Ile Ala Val Ile Ala Gly Leu Gln Asp Lys Thr Thr Gly Ser Phe
1               5                  10                  15
Met Gly Asp Glu Trp Gly Glu Leu Asp Thr Arg Phe Val Tyr Gly Ala
            20                  25                  30
Phe Asn Ala Leu Ser Leu Leu Gly Leu Met Asp Met Val Asp Val Ser
        35                  40                  45
Lys Ala Val Ala Tyr Ile Gln Lys Cys Glu Asn Leu Asp Gly Gly Tyr
    50                  55                  60
Gly Ile Cys Pro Gly Ala Glu Ser His Ala Gly Gln Val Phe Thr Cys
65                  70                  75                  80
Val Gly Ala Leu Ala Ile Ala Gly Arg Leu Asp Leu Val Asn Lys Asp
                85                  90                  95
```

```
Arg Leu Gly Ser Trp Leu Ser Glu Arg Gln Leu Asp Asn Gly Gly Leu
            100                 105                 110
Asn Gly Arg Pro Glu Lys Leu Pro Asp Ala Cys Tyr Ser Trp Trp Val
        115                 120                 125
Gly Ser Ser Leu Ala Met Ile Asp Arg Leu His Trp Ile Asp Gly His
    130                 135                 140
Lys Leu Ala Thr Tyr Ile Leu Arg Cys Gln Val Cys Ser Pro Arg Cys
145                 150                 155                 160
Leu Pro Glu Cys Arg Gln Asn
                165
```

<210> 35851
<211> 153
<212> PRT
<213> A.fumigatus

<400> 35851

```
Arg Arg Asp Glu Leu Glu Tyr Trp Leu Thr Glu His Leu Arg Leu Asn
1               5                   10                  15
Gly Val Tyr Trp Gly Leu Thr Ala Leu His Leu Leu Gly Phe Pro Glu
            20                  25                  30
Ala Leu Pro Arg Glu Glu Thr Ile Asn Phe Val Leu Ser Cys Gln Arg
        35                  40                  45
Glu Asn Gly Gly Phe Gly Ala Ala Pro Gly His Asp Ala His Met Leu
    50                  55                  60
Tyr Thr Val Ser Ala Val Gln Ile Leu Val Thr Leu Asp Ala Val Asp
65                  70                  75                  80
Glu Leu Glu Lys Arg Gly Leu Gly Gly Lys Gln Lys Val Ala Ser Cys
                85                  90                  95
Met Ile Leu Leu Pro Thr Leu Val Ile Thr Phe Arg Ser His Leu Ala
            100                 105                 110
His Thr Lys Gln Ser Gln Ser Ser Gln Gly Tyr Arg Thr Arg Arg Arg
        115                 120                 125
Ala Pro Ser Trp Ala Thr Asn Gly Val Asn Trp Thr Pro Val Ser Ser
    130                 135                 140
Met Val Pro Leu Met Pro Cys His Tyr
145                 150
```

<210> 35852
<211> 78
<212> PRT
<213> A.fumigatus

<400> 35852

```
Leu Thr Asp Cys Thr Gly Leu Met Ala Ile Asn Trp Leu His Ile Phe
1               5                   10                  15
Cys Ala Val Arg Cys Ala Arg Leu Ala Val Tyr Gln Ser Val Val Arg
            20                  25                  30
Thr Asp Ser Met Gln Asp Pro Glu Ala Gly Gly Phe Gly Asp Arg Pro
        35                  40                  45
Gly Asn Met Val Asp Val Phe His Thr Asn Phe Ala Ile Ala Gly Leu
    50                  55                  60
Ser Leu Leu Lys Phe Glu Gly Val Gln Glu Val Asp Pro Val
65                  70                  75
```

<210> 35853

<211> 246
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (183),(197)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35853

```
Leu Asn Arg Val Asp Arg Pro Gly Gln Asp Ser Leu Val Asp Arg Leu
1               5                  10                  15
Tyr Ser Val His Gly Arg Ile Pro Val Arg Leu Val Ser Thr Pro Glu
            20                  25                  30
Tyr Ala Met Asp Arg Lys Leu Met His Val Gly Tyr Asp Thr Gly Val
        35                  40                  45
Ile Ser Ala Val Leu Val Ser Leu Gly Thr Asp Leu Gly Lys Lys Leu
    50                  55                  60
Ser Ser Ser Glu Gln Glu Leu Ile Thr Ser Ile Thr Ser Gly Gly Ala
65                  70                  75                  80
Leu Ile Gly Ala Val Leu Ala Gly Leu Thr Ser Asp Lys Tyr Gly Arg
                85                  90                  95
Lys Leu Gly Ile Tyr Val Gly Cys Val Leu Phe Val Val Gly Thr Val
            100                 105                 110
Leu Gln Thr Ala Ala Tyr Ser Ile Ala Gln Met Thr Val Gly Arg Leu
        115                 120                 125
Val Val Gly Phe Gly Val Gly Asn Ala Ala Met Ile Ile Pro Leu Tyr
    130                 135                 140
Ile Gly Glu Met Ala Pro Ala Arg Phe Arg Gly Arg Leu Ile Val Phe
145                 150                 155                 160
Asp Asn Leu Cys Val Ala Phe Gly Gln Phe Val Ser Tyr Ala Leu Gly
                165                 170                 175
Ala Ala Phe Ala Asn Val Xaa His Gly Trp Arg Tyr Met Val Gly Ile
            180                 185                 190
Gly Ala Ile Pro Xaa Leu Met Leu Gly Ala Ala Met Arg Trp Cys Pro
        195                 200                 205
Glu Thr Pro Arg Gln Leu Ile Ser His Arg Pro Trp Arg Lys Met His
    210                 215                 220
Gly Lys Cys Arg Lys Gly Ser Ser Pro Gln Ala Thr Asp Pro Ala Asn
225                 230                 235                 240
Arg Cys Lys Asn Pro Gly
                245
```

<210> 35854
<211> 63
<212> PRT
<213> A.fumigatus

<400> 35854

```
Ile Arg Ser Ile Gly Ala Met Asp Ser Asp Ala Asp Ser Thr Lys Leu
1               5                  10                  15
Ser Leu Asp Gly Lys Ala Glu Ala Val His Gln Glu His Leu Gly Asp
            20                  25                  30
Glu Asn Pro Asp Asp Ser Ile Glu Leu Thr Asp Pro Gly Lys Thr Val
        35                  40                  45
Trp Leu Ile Ala Cys Thr Val Ser Met Gly Gly Phe Leu Phe Gly
```

50 55 60

<210> 35855
<211> 110
<212> PRT
<213> A.fumigatus

<400> 35855
Ser Trp Met Ile Leu Arg Lys Ser Ile His Asn Leu Leu Leu Asn Ser
1 5 10 15
Asp Leu Lys His Tyr Ile Ser Ser Pro Ser Thr Pro Asn Phe Val Asn
20 25 30
Glu Pro Ser Thr Leu Glu Ser Asp Gln Lys His Asp Ala Lys Gln Leu
35 40 45
Tyr Ala Thr Glu Ala Pro Gly Phe Pro Ala Leu Ile Pro Gln Thr Pro
50 55 60
Cys Phe Ser Ala Phe Ile Ser Gly His Arg Gln Ser Thr Ser Asp Thr
65 70 75 80
Gly Val Ala Cys Gly Asn Glu Phe Ser Ser Arg Lys Gln Lys Pro Ala
85 90 95
Phe Ser Leu Val Leu Leu Ala Val Ala Thr Leu Phe Ala Gly
100 105 110

<210> 35856
<211> 503
<212> PRT
<213> A.fumigatus

<400> 35856
Val Lys Pro Asp Ile Thr Arg Gln Lys Ala Asn Trp Leu Gly Leu Arg
1 5 10 15
Arg Tyr Pro Asn Phe His Pro Phe Ser Gly Met Ser Ala Ile Pro Phe
20 25 30
Met Val Leu Ala Ser Arg Gly Phe Arg Ser Met Glu Leu Leu Asn Leu
35 40 45
His Arg Lys His Pro Val Leu Arg Thr Gly Pro Asn Thr Leu Ser Tyr
50 55 60
Gly Asp Val Arg Ala Ile Lys Asp Ile Tyr Gly His Asn Thr Lys Cys
65 70 75 80
Ile Lys Asp Pro Ser Tyr Ile Val Thr Ala Gly Thr His Tyr His Leu
85 90 95
Ala Asp Val Val Asp Lys Pro Asp His Ala Arg Lys Arg Lys Val Leu
100 105 110
Ser Ser Ala Tyr Ala Leu Lys Asn Leu Glu Thr Trp Glu Tyr Lys Val
115 120 125
Ser Asp Lys Leu Glu Arg Leu Ile Ala His Phe Asp Pro Val Cys Thr
130 135 140
Lys Pro Pro Ser Ala Ala Val Ala Glu Gly Lys Ala Ala Pro Asp Pro
145 150 155 160
Ala Asp Leu Thr Val Asp Phe Arg Ala Trp Thr Asn Phe Phe Thr Leu
165 170 175
Glu Ala Ile Ala Asp Ile Arg Leu Ser Glu Lys Leu Gly Phe Leu Ile
180 185 190
Ala Ala Thr Thr Cys Ala Arg Pro His Arg Lys Ala Gly Thr Thr Tyr
195 200 205
Glu Val His Leu Arg Glu Ala Leu Tyr Pro Thr Ala Arg Lys Gln Ser

```
    210                 215                 220
Leu Ile Leu Trp Asn Tyr Glu Trp Tyr Pro Val Leu Asn Lys Leu Val
225                 230                 235                 240
Asn Ile Ile Pro Phe Phe Arg Arg Met Gln Arg Ser Ser Asp Asn Trp
                245                 250                 255
Glu Asn Ile Val Trp Arg Arg Ala Ser Gln Arg Leu Arg Arg Tyr Glu
            260                 265                 270
Ala Gly Glu Lys Leu Asp Asp Phe Phe Gln Ala Leu Met Glu Asp Lys
        275                 280                 285
Asn Gly His Pro Asn Asn Leu Glu Trp Gly Glu Ile Val Ala Glu Val
    290                 295                 300
Asn Ile Met Met Asn Ala Gly Ser Val Thr Thr Ala Ile Ala Ile Ala
305                 310                 315                 320
Asn Val Met Tyr Gln Leu Leu Lys Asn Pro Arg Cys Leu Ala Lys Leu
                325                 330                 335
Arg Glu Glu Val Asp Ala Val Leu Asp Glu Glu Asp Ile Ile Ala Pro
            340                 345                 350
Tyr Asp Lys Val Lys His Leu Pro Tyr Leu Arg Ala Cys Leu Asp Glu
        355                 360                 365
Ser Leu Arg Ile Phe Pro Pro Thr Ser His Gly Leu Pro Arg Gln Thr
    370                 375                 380
Pro Pro Glu Gly Met Glu Ile Leu Gly Gln Trp Val Pro Gly Asn Thr
385                 390                 395                 400
Ser Val Ser Ile Ser Ala Leu Val Ala His Arg Asp Glu Ser Val Phe
                405                 410                 415
Pro Gln Ala Asp Gln Tyr Ile Pro Glu Arg Trp Leu Gly Glu Glu Gly
            420                 425                 430
Lys Ala Leu Gln Pro Tyr Phe Val Ala Phe Ser Ala Gly Ala Arg Ser
        435                 440                 445
Cys Ile Gly Arg Asn Ile Ser Tyr Leu Glu Gln Thr Lys Ala Ile Ala
    450                 455                 460
Thr Leu Val His Arg Tyr Glu Phe Ala Leu Pro His Pro Gly Trp Glu
465                 470                 475                 480
Leu Lys Arg Leu Glu Thr Met Asn Leu Ile Leu Gly Asp Met Pro Val
                485                 490                 495
Lys Val Trp Arg Arg Gln Thr
            500
```

<210> 35857
<211> 208
<212> PRT
<213> A.fumigatus

<400> 35857

```
Ala Ala Thr Lys Asn Pro Leu Gly Arg Ser Pro Val Phe Tyr Val Ala
1               5                   10                  15
His Gly Lys His Asp Lys Ala Gln Ser Ala Leu Arg Arg Leu His Gly
            20                  25                  30
Ser Ser Asp Gln Tyr Leu His Ile Arg Tyr Gly Ala Ile Val His Ala
        35                  40                  45
Leu Asp Glu Glu Arg Lys Gln Gln Ser Glu Ser Ala Ser Trp Pro Glu
    50                  55                  60
Leu Phe Lys Gly Cys Asn Leu Lys Arg Thr Ile Thr Ile Gly Phe Ile
65                  70                  75                  80
Met Phe Ser Thr Ser Ala Ile Gly Val Pro Phe Leu Thr Gln Asn Ile
                85                  90                  95
```

```
Tyr Phe Leu Ile Thr Val Gly Leu Asn Val Thr Ser Val Phe Asp Ile
            100                 105                 110
Gly Ile Gly Gly Phe Phe Leu Gly Cys Leu Phe Val Met Leu Gly Trp
        115                 120                 125
Leu Ser Asn Glu Gly Ile Gly Arg Arg Arg Leu Trp Leu Trp Gly Leu
    130                 135                 140
Ile Gly Asn Phe Leu Cys Met Val Thr Ile Gly Ala Leu Gly Phe Ser
145                 150                 155                 160
Thr Thr Lys Ala Ser Gln Leu Ala Ile Ala Val Ile Met Ser Val Leu
                165                 170                 175
Pro Arg Ser Lys Leu Pro Arg Arg Ile Tyr Leu Asn Val Val Phe Leu
            180                 185                 190
Pro Thr Gly Thr Ser Ser Ser Arg Thr Val Ser Met Pro Arg Leu Val
        195                 200                 205
```

<210> 35858
<211> 152
<212> PRT
<213> A.fumigatus

<400> 35858

```
Gly Pro Ser Ala Ser Thr Ala Gly Arg Leu Phe Ser Arg Thr Ala Ala
1               5                   10                  15
Ala Tyr Arg Val Thr His Leu Ala Ile Leu Pro Phe Val Cys Ala Ser
            20                  25                  30
Asn Tyr Gly Tyr Asp Thr Val Ser Asn Gly Ser Ser Ile Ala Met Pro
        35                  40                  45
Ala Phe Ile Met Ser Phe Gly Ala Met Asn His Ala Thr Gly Ser Met
    50                  55                  60
Tyr Leu Pro Ser Ile Trp Thr Ser Leu Trp Thr Ser Met Thr Asn Leu
65                  70                  75                  80
Gly Gln Ala Leu Asp Ser Leu Ile Ala Gly Phe Leu Ala Glu Arg Ile
                85                  90                  95
Gly Arg Arg Trp Thr Ala Val Ser Leu Ala Ile Leu Ser Ile Val Gly
            100                 105                 110
Thr Phe Ile Leu Val Phe Ser Ser Thr Arg Gly Met Leu Leu Val Gly
        115                 120                 125
Lys Thr Met Asn Gly Ala Val Val Gly Gly Leu Met Ala Ile Gly Thr
    130                 135                 140
Thr Tyr Ala Ala Asp Val Arg His
145                 150
```

<210> 35859
<211> 136
<212> PRT
<213> A.fumigatus

<400> 35859

```
Thr Thr Pro Glu Asn Leu Ser Lys Cys Arg Leu Ser Ala Tyr Arg Asn
1               5                   10                  15
Val Leu Ile Ser Tyr Gly Val Tyr Ala Thr Val Gly Val Ala Trp Thr
            20                  25                  30
Ile Cys Pro Glu Ile Ser Ser His Arg Leu Arg Gln Tyr Ser Gln Ser
        35                  40                  45
Val Ala Phe Ile Val Gly Ala Val Gly Gly Trp Leu Phe Asn Phe Ile
    50                  55                  60
```

```
Thr Pro Tyr Met Tyr Asn Val Asp Ser Gly Asn Leu Gly Ala Lys Thr
65                  70                  75                  80
Gly Phe Val Tyr Ala Gly Leu Thr Val Val Val Ala Val Ile Ser Trp
                85                  90                  95
Phe Phe Val Pro Glu Thr Ala Gly Leu Ser Val Glu Asp Ile Asp Arg
            100                 105                 110
Ala Tyr Glu Met Gly Thr Ala Pro Arg His Phe Lys Ser Ala Lys Ala
        115                 120                 125
Thr Val Ser Ala Glu Ser Gly His
    130                 135
```

<210> 35860
<211> 261
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35860

```
Ile Xaa Tyr Gly Ile Thr Met Ala Pro Val Ala Leu Arg Asp Leu Ala
1               5                   10                  15
Glu Ser Pro Glu Leu Glu Gly Thr Glu Val Val Ser Met Lys Ala Arg
            20                  25                  30
Ser Ser Pro Pro Leu Thr Pro Pro Ser Pro Pro Cys Leu Val Thr Asp
        35                  40                  45
Tyr Ile Arg His Gln Val Glu Ser Asn Pro Asp Ala Pro Ala Val Gln
    50                  55                  60
Cys Glu Gln Glu Gln Pro Tyr Ser Tyr Ala Ala Leu Trp Gln Leu Val
65                  70                  75                  80
Glu His Ile Ala Ala Ala Gly Gln Phe Arg Ala Gly Arg Ile Met Pro
                85                  90                  95
Leu Cys Met Asp Pro Ser Val Glu Phe Val Ala Thr Val Leu Ala Ile
            100                 105                 110
Leu Arg Ala Gly Ser Ala Tyr Val Ile Leu Asp Pro Glu Gly Ser Ala
        115                 120                 125
Gln Arg Asn Arg Val Ile Ala Glu Asp Cys Gly Cys Glu Pro Val Ile
    130                 135                 140
Phe His Glu Lys Tyr Ala Pro Phe Phe Asp His Ser Val Thr Ile Glu
145                 150                 155                 160
Ser Ile Gln Leu Ile Gln Asn His Gly Gln Leu Asp Leu Pro Ser Ile
                165                 170                 175
Thr Pro Ser Asp Leu Ala Tyr Leu Ile Tyr Thr Ser Gly Ser Thr Gly
            180                 185                 190
Thr Pro Lys Glu Val Leu Leu Ser His Arg Ala Val Ser His Gly Ile
        195                 200                 205
Asp Gln Phe Gln Leu Asn Gly Arg Lys Arg Trp Leu Leu Phe Tyr Asn
    210                 215                 220
Pro Ile Phe Ser Ala Ala Gln Arg Thr Ile Pro Gly His Pro Val Gln
225                 230                 235                 240
Gly Arg Leu Ser Leu Pro His Gln Ala Arg Pro Thr Cys Asn Cys Ile
                245                 250                 255
Ala Arg Gly Val Glu
            260
```

<210> 35861
<211> 789
<212> PRT
<213> A.fumigatus

<400> 35861

```
Phe Ile Leu Leu Ala Gln Leu Val Pro Pro Arg Lys Ser Ser Ser Ala
1               5                  10                  15
Thr Val Leu Ser Leu Met Ala Ser Thr Asn Ser Asn Ser Thr Ala Ala
            20                  25                  30
Ser Asp Gly Cys Ser Ser Thr Thr Pro Phe Ser Pro Gln Arg Asn Gly
        35                  40                  45
Pro Ser Leu Ala Thr Leu Ser Lys Gly Ala Cys Leu Cys Leu Thr Arg
    50                  55                  60
Arg Asp Arg Leu Ala Thr Ala Leu Pro Glu Val Leu Asn Asn Leu Gln
65                  70                  75                  80
Ile Asp Ala Leu Gly Ile Thr Pro Ser Ala Leu Ala Leu Leu Ser Pro
                85                  90                  95
Gly Glu Thr Pro Ala Cys Leu Gln Gln Ile Thr Thr Val Gly Glu Pro
            100                 105                 110
Leu Ser Gln Ser Leu Val Asn Lys Trp Ala Asp Arg Val His Leu Arg
        115                 120                 125
Val Ser Tyr Gly Leu Ser Glu Cys Ala Gln Leu Asn Phe Ser Arg Gln
    130                 135                 140
Leu Gln Pro Gly Asp Asn Pro Arg Asn Pro Gly Leu Pro Ser Asp Thr
145                 150                 155                 160
Thr Thr Ala Ile Val Leu Glu Pro Gly Thr Met Thr Arg Leu Ser Val
                165                 170                 175
Asn Glu Pro Gly Glu Leu Cys Leu Tyr Gly Pro Gln Val Ala Asn Gly
            180                 185                 190
Tyr His Gln Arg Gln Lys Glu Thr Gln Ala Ala Phe Val Lys Ala Pro
        195                 200                 205
Lys Asp Thr His Gly Thr Met Met Phe Arg Thr Gly Asp Leu Ala Val
    210                 215                 220
Gln Arg Glu Asp Gly Thr Phe Glu Ile Leu Gly Arg Ile Asp His Gln
225                 230                 235                 240
Val Lys Ile His Gly Gln Arg Val Glu Pro Glu Glu Val Ala Ala Lys
                245                 250                 255
Leu Ala Thr Val Lys Gly Val Ala Ser Leu Ala Cys Val Gly Cys Tyr
            260                 265                 270
Ile Asn Glu Arg Met Ser Leu Val Ala Ala Ile Val Pro Ser Pro Glu
        275                 280                 285
Ala Asp Trp Gly Thr Leu Val Gln Tyr Leu Arg Asp His Ala Arg Gln
    290                 295                 300
Ser Phe Pro Pro Tyr Met Val Pro Ser Tyr Trp Met Ser Cys Thr Glu
305                 310                 315                 320
Phe Pro Thr Asn Gln Asn Gly Lys Val Asp Phe Arg Ala Ile Arg Arg
                325                 330                 335
Leu Ala Glu Ser Thr Glu Val Ser Lys Met Leu Gly His Ser Thr Ser
            340                 345                 350
Pro Lys Asp Gly Ala Thr Ala Gly Leu Ser Glu Thr Ala Ser Lys Ile
        355                 360                 365
Ala Gln Val Trp Ala Ala Val Leu Asn Leu Pro Ala Ser Ser Ile Ile
    370                 375                 380
Pro Ser Asp Ser Leu Val Ala Leu Gly Gly Thr Ser Ile Asp Ala Ile
```

```
385                 390                 395                 400
Arg Ala Ile Arg Glu Leu Lys Gly His Gly Ile His Val Glu Leu Ala
                405                 410                 415
Asp Met Leu Gln Ala His Thr Ile Glu Glu Ile Ala Asp Thr Val Gln
            420                 425                 430
Leu Asp Ser Ser Pro Thr His Val Ser Asn Glu Pro Ala Ala Pro Phe
        435                 440                 445
Asp Tyr Ile Ser Asp Ala Val Leu Lys Ala Asp Leu Leu Ala Asp Arg
    450                 455                 460
Arg Val Val Asp Ala Tyr Pro Val Thr Ala Leu Gln Glu Gly Ile Leu
465                 470                 475                 480
Ala Ser Thr Leu Gln Gly Ser Gln Asp Tyr Leu Tyr Gln Arg Val Phe
                485                 490                 495
Asp Val Arg His Leu Asp Leu Val Arg Leu Gln Leu Ala Phe Gln Val
            500                 505                 510
Val Phe Trp Arg Thr Glu Leu Leu Lys Ser Thr Phe Val Ala Ala Ala
        515                 520                 525
Lys Gly Phe Leu Gln Val Val Arg Asn Asp Phe Asn Leu Pro Trp Ser
    530                 535                 540
Glu Val Ser Leu Ser Leu Ser Glu Tyr Leu Glu Gln Asp Lys Asn Asn
545                 550                 555                 560
Gly Val Thr Leu Gly Glu Pro Phe Met Arg Val Ala Val Leu Asp Arg
                565                 570                 575
Ser Ile Leu Val Val Ser Val His His Ala Leu Phe Asp Phe Trp Ser
            580                 585                 590
His Arg Phe Leu Phe Asp Asp Val Ala Arg Val Tyr Tyr Gly Arg Arg
        595                 600                 605
Pro Glu Lys Arg Pro Glu Trp Lys Ser Phe Val Gly Leu Leu His Thr
    610                 615                 620
Arg Asp Thr Lys Ala Ser Gln Asp Phe Trp Arg Glu His Leu Gly Glu
625                 630                 635                 640
Ala Val Pro Thr Val Leu Asn Tyr Ala Pro Val Thr Lys Thr Ser Thr
                645                 650                 655
Ala Arg Arg Thr Val Ser Gln Glu Val Arg Ala Ala Ser Ser Ala Leu
            660                 665                 670
Arg Ala Pro Leu Gly Ala Ile Ile His Ala Ala Trp Ala Leu Val Leu
        675                 680                 685
Ser Ser His Ile Ala Ser Lys Ser Val Thr Met Ala Thr Ala Val Ser
    690                 695                 700
Gly Arg Glu Leu Pro Val Pro Gly Ile Glu Ala Leu Asn Gly Pro Thr
705                 710                 715                 720
Trp Ala Cys Val Pro Tyr Ala Ile Ala Ile Glu Ser Gly Thr Asn Thr
                725                 730                 735
Ser Ala Val Gly Cys Thr Ser Val Ile Thr Thr Ser Leu Gly Lys Val
            740                 745                 750
Ser Gln Pro Leu Ser Ser Ser Glu Leu Arg Lys Ser Pro Gly Pro Leu
        755                 760                 765
Ser Glu Leu Pro Trp Val Leu Phe Ser Phe Gln His Glu Val Leu Tyr
    770                 775                 780
Leu Cys Ser Leu Arg
785
```

<210> 35862
<211> 90
<212> PRT
<213> A.fumigatus

<400> 35862
Ser Lys Ala Thr Thr Leu Thr Arg His Gly Arg Lys Leu Thr Leu Lys
1 5 10 15
Ser Tyr Arg Leu Gly Ala Phe Gly Phe Leu Thr Ser Asn Glu Leu Arg
20 25 30
Arg Ala Gly Tyr Asn Ala Asn Asn Gly Leu Arg Asp Gln Lys Val Ala
35 40 45
Met Arg Trp Val Gln Lys His Ile Ala Asp Phe Gly Gly Asp Pro Asp
50 55 60
Asn Val Thr Leu Ala Gly Met Ser Ala Gly Gly Gly Met Ser Gly Ser
65 70 75 80
Ser Leu Ile Ser Thr Thr Leu Gln Ala Tyr
85 90

<210> 35863
<211> 154
<212> PRT
<213> A.fumigatus

<400> 35863
Phe Pro Leu His Tyr Arg His Thr Asp Thr Leu Leu Ala Cys Val Thr
1 5 10 15
Tyr His Leu Asp Ser Asp Glu Gln Leu Phe Lys Arg Ala Ile Val Met
20 25 30
Ser Gly Thr Cys Leu Leu Ile Gln Pro Leu Pro Tyr Glu Leu His Glu
35 40 45
Gln Asn Tyr Gln Gln Ala Ile Ala Ala Leu Gly Leu Thr Asn Ala Ser
50 55 60
Ser Glu Glu Arg Ile Arg Ala Leu Leu Glu Thr Pro Gly Asp Asp Leu
65 70 75 80
Val Ala Lys Ile Pro Pro Thr Val Leu Ala Val Pro Ala Ile Asp Gly
85 90 95
Thr Met Val Thr Ser Pro Val Thr Tyr Ala Gln Val Ala Asp Lys Asn
100 105 110
Ser Asp Phe Pro Arg Gly Lys Lys Trp Cys Glu Asp Leu Met Ile Gly
115 120 125
Asp Ala Gln Met Asp Val Ser Cys His Glu Thr Leu Ser Asn Arg Leu
130 135 140
Leu Thr Ala Thr Leu Ser Leu Phe Pro Gly
145 150

<210> 35864
<211> 77
<212> PRT
<213> A.fumigatus

<400> 35864
Gln Ile Arg His Asp Leu Ser Pro Leu Ile Pro Gln Ala Asp Ser Val
1 5 10 15
Gln Val Arg Ala Pro Arg Ala Pro Arg Gln Arg Glu Leu Asn His Arg
20 25 30
Leu Asp Leu Asn Pro Gln Ile Leu Val Lys Leu Leu Ser Leu Leu Lys
35 40 45
Phe Phe Ile Lys Cys Leu Phe Arg Met Ser Pro Trp Val Val Asp Asn
50 55 60

```
Ser Lys Val Leu Cys Pro Ser Thr Ser Leu Arg Asp Leu
65                  70                  75

<210> 35865
<211> 100
<212> PRT
<213> A.fumigatus

<400> 35865
Thr Asn Ala Arg Asn Pro Ser Pro Thr Ala Leu Ser Pro Leu Phe Gly
1               5                  10                  15
Cys Asp Phe Glu Leu Gly His Ile Gln His Ile Leu Pro Lys Lys Glu
            20                  25                  30
Leu Pro Gln Ser Asp Leu Lys Cys Leu Asn Leu Asn Ile Thr Val Pro
        35                  40                  45
Ala Gly Thr Thr Ala Ala Ser Lys Leu Pro Val Phe Leu Phe Ile His
    50                  55                  60
Gly Gly Gly Leu Val Leu Gly Ala Asn Ser Trp Pro Gln Phe Asp Tyr
65                  70                  75                  80
Ala Arg Phe Val Arg Leu Ser Val Glu Lys Asn Phe Pro Ile Val Ala
                85                  90                  95
Val Ser Met Lys
            100

<210> 35866
<211> 211
<212> PRT
<213> A.fumigatus

<400> 35866
Pro Arg Leu Cys Leu Ser Ser Gln Ala Ser Ile Met Ala Phe Leu Met
1               5                  10                  15
Ser His Thr Lys Lys Asp Cys Ala Ser Lys Phe Val Thr Ala Ile Glu
            20                  25                  30
Thr Ile Leu Ser Ser Lys Leu Asp Val Ala Gln Gln Ile Leu Asp Lys
        35                  40                  45
Tyr Asn Ile Thr Arg Glu Met Thr Asp Asp Glu Ala Phe Pro Ala Ile
    50                  55                  60
Leu Asn Tyr Val Asn Asp Ile Ala Phe Phe Ala Pro Val Leu Thr Phe
65                  70                  75                  80
Ala Lys Gly Trp Lys Asn Asn Val Tyr Val Tyr His Phe Asn Glu Gly
                85                  90                  95
Asn Pro Trp Asp Gly Pro Trp Lys Gly Arg Ala Ser His Ile Leu Asp
            100                 105                 110
Leu Ala Tyr Leu Phe Gln Asn Phe Arg Glu Phe Met Ala Pro Asp Gln
        115                 120                 125
Gln Gln Leu Ala Ile Thr Phe Ala Glu Asp Leu Phe Lys Phe Cys His
    130                 135                 140
Gly Val Lys Pro Trp Pro Ser Val Ala His Asp Asp Val Glu Ala Gly
145                 150                 155                 160
Phe Thr Ala Arg Val Tyr Gly Pro Ala Pro Asn Ala Ala Gln Val Asn
                165                 170                 175
Gly Pro Tyr Tyr Glu Gly Ser Leu Arg Arg Ser Val Leu Phe Asp His
            180                 185                 190
Thr Asp Gln Ala Ser Leu Asp Glu Phe Ala Gln Val Leu Ala Leu Phe
        195                 200                 205
```

Arg Thr Leu
210

<210> 35867
<211> 62
<212> PRT
<213> A.fumigatus

<400> 35867
Glu Phe Gln Ala Thr Ala Leu Leu Pro Ala Leu Arg Ala Ala Ile Ala
1 5 10 15
Leu Asn Cys Asp Ile Gln Pro Val Ser Arg Phe Asp Arg Lys His Tyr
20 25 30
Phe Tyr Gln Asp Gln Pro Ala Gly Tyr Gln Ile Thr Gln Tyr Tyr Gly
35 40 45
Ser Phe Leu Ser His Ser Val Asp Ala Asp Tyr Ser Leu Thr
50 55 60

<210> 35868
<211> 108
<212> PRT
<213> A.fumigatus

<400> 35868
Arg Leu Met Leu Ser Arg Ala Pro Ser Arg Ala Pro Ser Gly Ile Ala
1 5 10 15
Leu Tyr Gln Pro His Leu Ile Val Ala Leu Asp Arg Tyr Arg His Arg
20 25 30
Leu Gln Asn Pro Arg Glu Arg Ile Pro Leu Leu Lys Gln Leu Lys Gln
35 40 45
Asp Ala Lys Val Leu Lys Ala Gln Lys Ser Gln Lys Arg Ala Ser Glu
50 55 60
Glu Ala Ser Arg Thr Lys Trp Glu Leu Thr Val Gly Ile Glu Ile His
65 70 75 80
Ala Gln Leu Asn Thr Glu Thr Lys Leu Phe Ser Ser Ala Ser Asn Leu
85 90 95
Cys Cys Arg Pro Phe Leu Ala Gln Asn Leu Gln Phe
100 105

<210> 35869
<211> 114
<212> PRT
<213> A.fumigatus

<400> 35869
Leu Ser Phe Ser Leu Gly Arg Cys Arg Leu Gln Ser Asn Ile Asp Ile
1 5 10 15
Glu Pro Phe Ala Lys Asn Gly Tyr Val Asp Leu Phe Pro His Asp Gly
20 25 30
Ile Ala Pro Glu Asp Gly Asp His Val Arg Ile Gly Ile Lys Gln Ile
35 40 45
Gln Leu Glu Gln Asp Thr Ala Lys Ser Gln Glu Tyr Pro Pro Ser Thr
50 55 60
Gln Leu Leu Asp Phe Asn Arg Val Ser His Pro Leu Ile Glu Ile Ile
65 70 75 80
Ala Met Pro Gln Ile His Asn Pro Ala Thr Ala Ala Ala Cys Val Arg

```
                85                  90                  95
Lys Asp Ser Gly Arg Ser Thr Ile Leu Gln Arg Arg Asp Asn Trp Glu
            100                 105                 110
Trp Asn


<210> 35870
<211> 82
<212> PRT
<213> A.fumigatus

<400> 35870
Ser Lys Val Asn Leu Gln Arg Ser Val Gln Ile Ser Gln Asn Ser Lys
1               5                   10                  15
Leu Ser Ser Val Leu Leu Ser Gly Tyr Ser Ser Val Thr Cys His Met
            20                  25                  30
Ser Lys Cys Ser Thr Ser Ala Val Thr Gln Thr Leu His Leu Phe Ile
        35                  40                  45
Glu Gln Val Gly Gln His Gly Phe Lys Met Leu Asp Ser Phe Lys Ser
    50                  55                  60
Val Val Val Gln Gly Arg Met Ser Thr Ser Gln Ser His Gln Ile Leu
65                  70                  75                  80
Ile His


<210> 35871
<211> 75
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (8),(10)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35871
Thr Leu Ile Ser Gly Lys Lys Xaa Asn Xaa Lys Pro Trp Gln Val Leu
1               5                   10                  15
Pro Leu Asp Arg Pro Phe Ala Arg Gln Leu Ala Leu Arg Leu Cys Tyr
            20                  25                  30
Asn Gly Asp Ile Leu Gly Cys Asp Ala Leu Ala Asn Phe Gly Arg Ala
        35                  40                  45
Phe Gln Phe Ala Asn Arg Arg Glu Val Lys Thr His Ala Tyr Ile Thr
    50                  55                  60
Val Lys Gln Asn Ser Gly Gln Tyr Ser Glu Ser
65                  70                  75

<210> 35872
<211> 228
<212> PRT
<213> A.fumigatus

<400> 35872
Gly Ala Pro Pro His Phe Pro Gly Gly Trp Lys Gln Ile Arg Trp Ser
1               5                   10                  15
Phe Arg Gly Ile Ser Pro Ser Pro Lys Ile Gly Ser Pro Asn Glu Gln
```

```
            20                  25                  30
Ile Ile Phe Arg Gly Ser Gly Gly Glu Thr Ser Pro Asn Gly Tyr Ser
        35                  40                  45
Glu Tyr Glu Gln Gly Gln Thr Arg Tyr Leu Arg Trp Leu Arg Asn Asn
    50                  55                  60
Leu Cys His Arg Thr Arg Val Arg Leu Ser Met Tyr Leu Gln Ile Val
65                  70                  75                  80
Cys Arg His Ile Ser Thr Gly Asn Ile Met Glu Gly Met Ala Arg Ser
                85                  90                  95
Asp Asn Val Leu Asn Thr Gly Phe Cys Pro Met Pro Ala Arg Asp Asn
            100                 105                 110
Leu Asp Leu Phe Ser Arg Ala Leu Thr Phe Lys Pro His Ser Lys Glu
        115                 120                 125
Glu Val Ile Leu Pro Arg Lys Lys Ser Asp Lys Gly Leu Asn Gly Lys
    130                 135                 140
Thr Asp Glu Tyr Ala Pro Ala Phe Ser Glu Phe Asn Val Leu Ala Thr
145                 150                 155                 160
Cys Leu Gly Pro Gly Glu Thr Glu Thr His Lys Ala Ile Leu Gly Pro
                165                 170                 175
Ser Leu Met Ile Val Val Lys Gly Asn Gly His Met Asn Ala Pro Gly
            180                 185                 190
Asp Lys Arg Phe Asp Leu Lys Glu Gly Tyr Thr Tyr Phe Ile Gly Gln
        195                 200                 205
Gly Val Ala Leu Asp Phe Tyr Thr Glu Lys Gly Ile Ala Val Tyr Arg
    210                 215                 220
Pro Tyr Thr Glu
225

<210> 35873
<211> 80
<212> PRT
<213> A.fumigatus

<400> 35873
Thr Glu Pro Ser Ser Ala Pro Cys Gln Ile Thr Asp His Pro Tyr Arg
1               5                   10                  15
Ser Arg Arg Pro Phe Gln Asp Ala Gly Lys Ile Ser Pro Phe Ala Arg
            20                  25                  30
His Ser Lys Ser Val Ile Arg Lys Gly Ala Lys Leu Ser Pro Ala Leu
        35                  40                  45
Leu Ala Ser Thr Ser Ala Leu Arg Pro Ala Ser Phe Ile Ala Asp Cys
    50                  55                  60
Ala Ile Ser Thr Ser Arg Glu Arg Ile Val Ser Leu Leu Ser Ser Gln
65                  70                  75                  80

<210> 35874
<211> 91
<212> PRT
<213> A.fumigatus

<400> 35874
Leu Val Ser Arg Glu Met Thr Ile Leu Ala Val Val Leu Gln Ala Lys
1               5                   10                  15
Glu Ala Met Leu Val Arg Tyr Gln Ser His Thr Arg Asn Thr Glu Lys
            20                  25                  30
Asn Leu Asp Arg Leu Pro Ser Leu Ser Ile Asn Ala Val Gly Ser Phe
```

```
        35                  40                  45
Phe Tyr Asp Asp Arg Lys Glu Glu Asn Ile Lys Pro Cys His Ile Asp
    50                  55                  60
Lys Leu Gly Ser Asp His Gly Pro Leu Phe Gln Asn His Glu Phe Lys
65                  70                  75                  80
Ala Met Leu Gly Val Asn Asn Ala Gly Leu Gln
                85                  90
```

<210> 35875
<211> 104
<212> PRT
<213> A.fumigatus

<400> 35875

```
Val Ala Ser Val His Arg Ser Arg Ala Gln Gly Asn Ala Leu Ser Ala
1               5                   10                  15
Cys Pro Ile Asn Asp Ser Asn Ile Gly Met Phe Pro Arg Ser Pro Ser
            20                  25                  30
Asp Gln Gly Arg Gly Phe Tyr His Thr Ala Lys Val Glu Trp Asn Leu
        35                  40                  45
Arg Gly Leu Gly Ile Ala Leu Asn Asn Gly Gln Ser Leu Arg Lys Gln
    50                  55                  60
Phe Ala Trp Ile Asp Ile Ile Ser Cys Asn Val Ile Glu Arg Asp Asp
65                  70                  75                  80
Cys Ser Val Arg Arg Glu Ser Leu Ser Glu Ser Gln Glu Leu Ala Arg
                85                  90                  95
Leu Gly Ser Leu Phe His Val Asn
            100
```

<210> 35876
<211> 897
<212> PRT
<213> A.fumigatus

<400> 35876

```
Arg Phe Val Met Ser Ser Phe Leu Pro Ala Ser Glu Lys Asp Asp Arg
1               5                   10                  15
Arg Phe Tyr Leu Gln Asn Val Trp Gly Gln Glu Met Leu Ser Gly Ala
            20                  25                  30
Leu Cys Ala Ala Ala Glu Arg Cys Val Ala Pro Thr Glu Ser Glu Ser
        35                  40                  45
Lys Ile Ile Asp Thr Cys Glu Lys Ala Val His Tyr Tyr Leu Ser Lys
    50                  55                  60
Leu Lys Ala Ala Gly Leu Leu Asp Gln Trp Ala Asp Lys Asn Pro Gly
65                  70                  75                  80
Leu Arg Ser Leu Met Asn Glu Ile Glu Ala Arg Val Thr Ser Ile Pro
                85                  90                  95
Glu Gln Ser Asp Leu Val Ser Met Leu Gly Glu Val Gly Glu His Ile
            100                 105                 110
Asp Leu Val Leu Val Arg Thr Ile Gly Glu Ser Leu Leu Asn Ser Pro
        115                 120                 125
Ser Glu Gly Leu Gly Pro Ile Thr Pro Ser Pro Met Gly Ala Leu Ile
    130                 135                 140
Ser Arg Trp His His Glu Gly Leu Gly Phe Ala Gln Leu Gln Arg His
145                 150                 155                 160
Phe Val Ser Ala Ala Lys Gln Ile Ser His Gln His Ala Asn Leu Arg
```

```
                165                 170                 175
Ile Leu Gln Val Gly Pro Ser Ser Pro Gly Leu Val Arg Ser Val Cys
            180                 185                 190
Gln Glu Leu Gly Arg Ser Leu Glu Arg Tyr Thr Leu Val Asp Asp Ser
        195                 200                 205
Glu Gln Thr Ile Glu Glu Met Lys Ser Ala Leu Ala Ala Asp Gln Leu
    210                 215                 220
Arg Val Asp Phe Thr Thr Ala Ser Val Glu Asn Gly Ile Asp Ala Val
225                 230                 235                 240
Asn His Leu Thr Ser Ala Gly Gly Phe Asp Leu Val Ile Val His Lys
                245                 250                 255
Ala Phe Thr Lys Gln Val Thr Ala Leu Lys Thr Val Arg Asn Leu Leu
            260                 265                 270
Arg Pro Gly Gly Phe Met Leu Met Met Ala Ala Thr Gly Ala Gln Leu
        275                 280                 285
Arg Phe Pro Phe Met Leu Met Ser Thr Leu Pro Ser Leu Asp Asp Glu
    290                 295                 300
Arg Leu Ala Gln Thr Lys Phe Ile Asn Ala Thr Arg Ala Glu Thr His
305                 310                 315                 320
Asp Leu Leu Arg Gln Ile Gly Phe Ser Gly Val Asp Ser Ile Ala Leu
                325                 330                 335
Asp Asn Val Pro Asp Lys His Thr Phe Ser Val Val Val Ser Gln Ala
            340                 345                 350
Leu Asp Asp His Ile Ala Phe Leu Arg Ser Pro Leu Thr Ser Pro Ser
        355                 360                 365
Pro Val Pro Leu Ser Gly Asn Leu Leu Val Val Gly Gly Phe Ser Ala
    370                 375                 380
Asp Ile Ala Lys Leu Ala Thr Ala Ile Gln Ser Leu Val Ser Thr Val
385                 390                 395                 400
Trp His Gly Asp Ile Ile Asn Val Arg Thr Leu Ala Glu Leu Asp Asp
                405                 410                 415
Glu Ala Ser Thr Val Glu Ala Val Leu Ser Leu Thr Asp Leu Asp Arg
            420                 425                 430
Pro Val Leu Glu Asp Val Arg Ala Pro Thr Phe Arg Gly Leu Gln Arg
        435                 440                 445
Leu Phe Ser Glu Ala Lys Thr Val Leu Trp Ile Thr His Arg Ala Lys
    450                 455                 460
Ala Asp Asn Pro Tyr His Asn Ala Thr Ile Gly Leu Gly Arg Ser Phe
465                 470                 475                 480
Gln Ser Glu Asn Pro Gln Lys Val Leu Gln Phe Leu Asp Val Asp Thr
                485                 490                 495
Leu Asp Gly Val Glu Ser Ala Ile Ala Glu Thr Phe Leu Lys Leu Ile
            500                 505                 510
Gly Gly Val Asn Met Arg Asn Ser Asn Pro Ala Asp Pro Thr Arg Leu
        515                 520                 525
Trp Thr Ile Glu Pro Glu Val Ser Leu Glu Asn Gly Lys Tyr Leu Val
    530                 535                 540
Pro Arg Leu Phe Pro Asp Thr Glu Arg Asn Asp Arg Leu Asn Ala Leu
545                 550                 555                 560
Arg Arg Lys Val Gln Thr Gln Val Ser Val Glu Thr Gln Pro Ile Ser
                565                 570                 575
Leu Ser Arg Ser Ala Gln Ser Asp Gln Val Ala Tyr Thr Ala Glu Ala
            580                 585                 590
Val His Phe His Arg Asp Leu Ala Asp Gly Ala Thr Asp Pro Val Thr
        595                 600                 605
Ile Gln Val Glu Leu Cys Ser Thr Glu Pro Val Ile Pro Asn Ile Asp
```

```
    610                 615                 620
Asn Glu Asp Leu Phe Cys Phe Val Gly Arg Thr Ser Glu Gly Ala Arg
625                 630                 635                 640
Leu Val Gly Leu Ser Thr Ser Asn Ser Ser Val Val Lys Val Pro Arg
                645                 650                 655
Glu Trp Thr Ile Pro Val Asp Lys His Thr Ser His Asp Gln Gly Ala
            660                 665                 670
Phe Val Leu Glu Leu Arg Asn Glu Ile Gln Ser Leu Val Ile Ala Lys
        675                 680                 685
Ser Ile Pro Pro Gly Ser Thr Thr Leu Ile Tyr Glu Pro Asp Pro His
    690                 695                 700
Leu Ala Ala Ser Leu Gln Arg Pro Gly Arg Pro Ala Thr Ser Ser Val
705                 710                 715                 720
Ser Phe Arg Ala Arg Ser Thr Trp Ser Ile Pro Gly Ser His Ile Leu
                725                 730                 735
Ile Asp Pro His Ala Ser Arg Lys Asp Ile Gln Ala Lys Val Pro Pro
            740                 745                 750
Lys Thr Arg Met Leu Ile His Met Glu Gln Gly Pro Glu Thr Cys Glu
        755                 760                 765
Phe Leu Ala Leu Arg Gln Ala Leu Pro Pro Tyr Ala Thr Val Val Ala
    770                 775                 780
Phe Asn Asp Ile Ala Ala Asp Asp Val Asn Pro Arg Glu Leu Leu Ala
785                 790                 795                 800
Glu Ala Leu Ser Ile Ile Gln Gly Asp Ser Gln Ser Thr Lys Val Pro
                805                 810                 815
Phe Asp Leu Ser Ser Val Val Lys Ala Ser Ala Leu Val Ala Gly Gly
            820                 825                 830
Thr Arg Glu His Ala Asn Val Ala Val Val Asp Trp Thr Gly Ala Gln
        835                 840                 845
Ser Ile Thr Leu Ser Pro Arg Pro Val Asp Thr Arg Asn Leu Phe Ser
    850                 855                 860
Pro Asn Lys Thr Tyr Leu Leu Val Gly Leu Thr Gly His Ile Gly Gln
865                 870                 875                 880
Ser Ile Cys Arg Trp Met Val Gln Gly Gly Ala Arg His Ile Val Val
                885                 890                 895
Thr
```

<210> 35877
<211> 131
<212> PRT
<213> A.fumigatus

<400> 35877

```
Ile Leu Gly Ile Ile Ser Gly Ser Leu His Thr Thr Ala Val Lys Tyr
1               5                   10                  15
Gly Tyr Gly Leu Pro Asp Ala Thr Val Pro Glu Pro Val Ala Thr Thr
            20                  25                  30
Gly Arg Lys Phe Tyr Ile Ile Gly Leu Ala Ser Leu Ile Leu Cys Ser
        35                  40                  45
Ala Val Gly Arg Ala Ala Phe Val Leu Tyr Leu Leu Ala Ile Leu Gly
    50                  55                  60
Gly Gln Lys Gly Arg Arg Ile Ile Leu Thr Ala Leu Ala Ile Leu Glu
65                  70                  75                  80
Met Val Phe Asn Ser Val Ser Val Ile Leu Ile Phe Ala Thr Cys Thr
                85                  90                  95
```

```
Pro Val Ser Met Val Trp Asp Tyr Ala Ala Glu Gly Thr Cys Thr Ala
            100                 105                 110
Thr Ser Ile Gln Val Asn Phe Gly Tyr Phe Gln Ser Ser Thr Ser Thr
        115                 120                 125
Ser His Asn
    130
```

<210> 35878
<211> 322
<212> PRT
<213> A.fumigatus

<400> 35878

```
Thr His Gly His Leu Gln Pro Arg Thr Arg Ala Lys Asp Leu Ser Glu
1               5                  10                  15
Ala Gln Val Arg Gln Val Ala His Asp Leu Asp Ser Ala Leu Asp Val
            20                  25                  30
Leu Phe Asp Asp Asn Arg Gly Arg Leu Gly Glu Lys Leu Val Asn Leu
        35                  40                  45
Leu Glu Gly Leu Val Leu Gly Leu Gly His Glu Glu Asp Leu Val Glu
    50                  55                  60
Pro Thr Gln Asp Gly Asp Thr Ser Val Glu Thr Glu Arg Glu Thr Asp
65                  70                  75                  80
Thr Ser His Arg Ile His His Arg Gly Lys Val Val Gly Ala Asp Glu
                85                  90                  95
Gly Ala Gln Glu Glu Val Gly Val Arg Ser Gly His Ala Val Thr Pro
            100                 105                 110
Glu Ile Ser Gly Glu Asp Leu Gly Gly Asn Asp Pro Gly Gln Ala Gly
        115                 120                 125
Ile Gly Ala Glu Glu Pro His Val Lys Asp Asp Thr Gly Gln Ile Glu
    130                 135                 140
Thr Phe Ser Arg Gly Arg Ile Gly Leu Val Val Asp Gly Val Ala Cys
145                 150                 155                 160
Ser His Glu His Gln Thr Asp Glu Glu Thr Arg Lys His Asn Val Gly
                165                 170                 175
Pro Val Ala Ser Thr Glu Pro Leu His Val Gln His Cys Gly Asn Ser
            180                 185                 190
Thr Asp Gln Gln Gly Ser Thr Ser Asn Glu Arg His Ile Asp Thr Gly
        195                 200                 205
Thr Val Ile Glu Ala Asp Leu Arg His Gln Asn Thr His Val Val His
    210                 215                 220
Asn Cys Val His Thr Arg Lys Leu Thr Glu Glu Tyr His Asp Val Gly
225                 230                 235                 240
Val Asp His Gly Ala Ala Ser Pro Ala Ile Pro Glu Lys Val Gln Pro
                245                 250                 255
Ser Pro Leu Leu Arg Val Gly Leu Phe Phe Val Leu Arg Gly Asp Ser
            260                 265                 270
Leu Thr His Ala Gln Lys Phe Leu Leu Gly Leu Val Arg Val Glu Ala
        275                 280                 285
Ala Asn Ala Leu Pro His Thr Ile Arg Leu Asp Arg Ser Ser Leu Val
    290                 295                 300
His Gln Val Thr Gly Ala Leu Arg His Glu Glu His Thr Asp Gln Lys
305                 310                 315                 320
Asp Gly
```

<210> 35879
<211> 281
<212> PRT
<213> A.fumigatus

<400> 35879
Ile Ser Pro Gly Phe Leu Leu Pro Phe Pro Arg Leu Lys Cys Ser Ser
1 5 10 15
Leu Arg Arg Pro Phe Tyr Arg Arg Leu Thr Ser Ser Tyr Leu Glu Asp
20 25 30
Cys Leu Cys Arg Glu Arg Gln Val Leu Pro Phe Pro Leu Ser Thr Leu
35 40 45
Gly Lys Thr Ser Ile Gly Glu Gly Leu Leu Tyr Thr Tyr Leu Pro Leu
50 55 60
Ala Thr His Leu Leu Ser Asn His Ser Pro Ser Pro Val Met Ala Val
65 70 75 80
Lys Asp Val Glu Val Pro Leu Asp Asp His Lys Glu Val Ala Glu Glu
85 90 95
Met Asp Asp Ile Gln Asn Asp Leu Lys Ser Glu Ala Phe Asn Glu Ala
100 105 110
Ala Met Asp Ala Glu Leu Gln Gln Leu Glu Ala Gln Leu Gly Ser Val
115 120 125
Lys Gln Ser Arg Leu Glu Leu Thr Phe Ala Asn Pro Ala Tyr Phe Thr
130 135 140
Tyr Val Leu Val Ala Phe Ala Ser Met Gly Gly Leu Phe Ser Val Leu
145 150 155 160
Asp Gln Ser Leu Ile Ser Gly Ala Asn Leu Thr Met Pro Lys Ala Leu
165 170 175
His Leu Ser Ala Ser Gln Ala Ser Leu Val Asn Ala Gly Met Pro Leu
180 185 190
Gly Ala Val Gly Gly Ala Leu Ile Leu Gly Pro Cys Asn Glu Phe Leu
195 200 205
Gly Arg Arg Met Ala Ile Ile Val Ser Cys Ile Leu Tyr Thr Ile Gly
210 215 220
Ala Gly Leu Glu Ala Gly Ala Ile Asn Phe Gly Met Met Phe Gly Gly
225 230 235 240
Arg Phe Val Leu Gly Met Gly Val Gly Leu Glu Gly Gly Thr Val Pro
245 250 255
Val Tyr Val Ala Glu Ser Gly Met Leu Pro Arg Phe Ala Ser Ile Phe
260 265 270
Gly Glu Ala Arg Leu Leu Thr Asp Ile
275 280

<210> 35880
<211> 368
<212> PRT
<213> A.fumigatus

<400> 35880
Tyr Leu Val Pro Gly Lys Ile Arg Gly Asn Leu Val Ser Leu Tyr Gln
1 5 10 15
Leu Asn Ile Ala Phe Gly Glu Val Leu Gly Tyr Ala Val Ala Ala Met
20 25 30
Phe Phe Gly Val Ala Gly Asp Trp Arg Tyr Ile Leu Gly Ser Ser Leu
35 40 45
Val Phe Ser Thr Ile Leu Leu Val Gly Met Leu Phe Met Pro Glu Ser

```
    50                  55                  60
Pro Arg Tyr Leu Met His Lys Gly Arg Pro Val Glu Ala Tyr Gly Val
65                  70                  75                  80
Trp Lys Arg Ile Arg Gly Phe Asp Ser Tyr Glu Ser Lys Glu Glu Phe
                85                  90                  95
Leu Gly Met Arg Gln Ala Val Ala Ala Glu Asn Glu Glu Gln Ala Asn
            100                 105                 110
Thr Lys Lys Trp Ala Trp Leu Asp Phe Phe Arg Asn Gly Arg Ala Arg
        115                 120                 125
Arg Ala Met Ile Tyr Ala Asn Ile Met Val Phe Leu Gly Gln Phe Thr
    130                 135                 140
Gly Val Asn Ala Val Met Tyr Tyr Met Gly Val Leu Met Thr Lys Ile
145                 150                 155                 160
Gly Phe Asp Asp Arg Thr Ser Val Tyr Met Ser Leu Val Gly Gly Gly
                165                 170                 175
Ser Leu Leu Ile Gly Thr Ile Pro Ala Val Leu Tyr Met Glu Arg Phe
            180                 185                 190
Gly Arg Arg Tyr Trp Ala Asn Val Met Leu Pro Gly Phe Phe Ile Gly
        195                 200                 205
Leu Val Leu Val Gly Ala Gly Tyr Thr Ile Asp Tyr Lys Thr Tyr Pro
    210                 215                 220
Ala Thr Ala Glu Gly Leu Tyr Leu Thr Gly Ile Ile Leu Tyr Met Gly
225                 230                 235                 240
Phe Phe Gly Ser Tyr Ala Cys Leu Thr Trp Val Ile Pro Ala Glu Val
                245                 250                 255
Phe Pro Thr Tyr Leu Arg Ser Tyr Gly Met Thr Thr Ala Asp Ala Asn
            260                 265                 270
Leu Phe Leu Cys Ser Phe Ile Gly Thr Tyr Asn Phe Thr Ala Met Met
        275                 280                 285
Asn Ser Met Thr Arg Ile Gly Leu Thr Leu Arg Phe Tyr Gly Gly Ile
    290                 295                 300
Ala Val Leu Gly Trp Phe Tyr Gln Val Leu Phe Met Pro Glu Thr Lys
305                 310                 315                 320
Asn Lys Ser Leu Glu Glu Ile Asp Glu Leu Phe Ser Lys Pro Thr Ser
                325                 330                 335
Val Ile Val Lys Gln Asn Ile Lys Ser Thr Val Glu Ile Met Arg Asp
            340                 345                 350
Leu Ser His Leu Arg Phe Arg Lys Val Phe Ser Pro Ser Pro Arg Leu
        355                 360                 365

<210> 35881
<211> 82
<212> PRT
<213> A.fumigatus

<400> 35881
Asp Arg Phe Lys Ile Phe Lys Tyr Leu Trp Tyr Ile Ala Ser Ile Leu
1               5                   10                  15
Gln Tyr Lys Ile Ser Cys Leu Tyr Thr Leu Pro Thr Ile Ile Arg Asn
            20                  25                  30
Asn Ser Asp Leu Asn Leu Leu Pro Asn Pro Ser Arg Pro Leu Leu Thr
        35                  40                  45
Thr Pro Thr Arg Leu His Pro Ile Glu Thr Ile Ser Thr Thr Glu Tyr
    50                  55                  60
Thr Ile Asn Thr Cys Pro Ile Ile Gly Pro Ile Pro Gly Arg Gln His
65                  70                  75                  80
```

Pro Thr

<210> 35882
<211> 287
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (277)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35882

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Leu Leu Leu Ser Gly Met Leu Gly Cys Ile Val Glu Ser Cys His Thr
1               5                  10                  15
Trp Ala Cys Ile Leu Val Trp Gly Thr Ser Gly Leu Leu Ala Ser Ala
            20                  25                  30
Ala Val Cys Thr His Leu Ser Val Arg Thr Ser Tyr Lys Glu Ser Leu
        35                  40                  45
Pro Cys His Glu Lys Glu Pro Lys Ser Val Val Trp Ser Ser Gln Leu
    50                  55                  60
Leu Phe Leu Pro Val Ser Arg Arg Phe Ile Ile Met Val Leu Arg Lys
65                  70                  75                  80
Leu Ser Ser Pro Ser Leu Glu Ala Leu Cys Ser Lys Glu Gln Ile Glu
                85                  90                  95
Leu Leu Asp Ser Ile Asp His Leu Arg Leu Gln Gly Ile Asn His Tyr
            100                 105                 110
Ile Ser Leu Pro Gln Ile Ile Val Cys Gly Asp Gln Ser Ser Gly Lys
        115                 120                 125
Ser Ser Val Leu Glu Ala Ile Ser Gly Val Ser Phe Pro Ile Arg Ser
    130                 135                 140
Ser Leu Cys Thr Arg Phe Pro Thr Glu Leu Val Leu Arg Lys Ser Ser
145                 150                 155                 160
Gln Val Gly Val Cys Val Ser Ile Val Pro His Arg Ser Arg Ser Glu
                165                 170                 175
Ser Glu Arg Glu Ala Leu Ala Gln Phe His Glu Glu Leu Asp Ser Phe
            180                 185                 190
Glu Gly Leu Pro Gln Leu Ile Glu Asn Ala Lys Ser Ala Met Gly Ile
        195                 200                 205
Tyr Thr Tyr Ala Lys Ser Phe Ser Asn Asp Leu Leu Arg Val Glu Val
    210                 215                 220
Ser Gly Pro Asp Arg Arg His Leu Thr Ile Val Asp Leu Pro Gly Leu
225                 230                 235                 240
Ile His Ser Glu Thr Lys Gln Gln Ser Ala Ala Asp Val Glu Leu Val
                245                 250                 255
His Asp Val Val Lys Ser Tyr Met Glu Glu Pro Arg Ser Ile Ile Leu
            260                 265                 270
Ala Val Val Ser Xaa Thr Arg Pro Gly Leu Glu Gly Asn Ala Ile
        275                 280                 285
```

<210> 35883
<211> 130
<212> PRT
<213> A.fumigatus

<400> 35883
Val Glu Phe Cys Pro Ser Glu Met Pro Phe Met Ser Ser Gln Lys Met
1 5 10 15
Cys Leu Glu Ala Asn Val Tyr Leu Val His His Val Phe Leu Pro Pro
20 25 30
Lys Leu Pro Gln Glu Asp Asp Tyr Asp Pro Glu Tyr Glu Leu Val Leu
35 40 45
Leu Glu Lys Cys Ile Glu Ala Leu Glu Gln Phe Lys Gly Tyr Val Ser
50 55 60
Gly Pro Glu Ala Asp Ser Ile Ala Ala Ala Ala Leu Met Ile Thr Arg
65 70 75 80
Leu Ala Arg Ile Phe Gly Pro His Gly Asp Val Asp Glu Lys Lys Phe
85 90 95
Arg Asn Ala Leu Ala Gln Leu Tyr Thr Glu Gly Lys Cys Ala Asp Ser
100 105 110
Asn Gly Tyr Val Leu Tyr Ile Asp Arg Val Gln Val Glu Phe Cys Gln
115 120 125
Tyr Met
130

<210> 35884
<211> 231
<212> PRT
<213> A.fumigatus

<400> 35884
Gly Gly Val Ser Val Arg Arg Asp Gly Ala Tyr Leu Asp Trp Gly Trp
1 5 10 15
Lys Gly His Asn Lys Gly Ala Met Gly Met Val Leu Ala Arg Val Thr
20 25 30
Met Cys Pro Gly Ser Ala Phe Met Ile Leu Thr Leu Gly Gly Leu Ala
35 40 45
Thr Pro Tyr Ser Phe Gly Arg Asp Tyr Pro Arg Ser Met Arg Lys Gln
50 55 60
Met Gly Ala Arg Leu Arg Ser Phe Thr Pro Arg Glu Leu Asp Gln Leu
65 70 75 80
Glu Asn Leu Ala Pro Leu Asn Ala Phe Tyr Gly Met Asn His Tyr Ser
85 90 95
Thr Lys Phe Ala Arg Ala Leu Ala Asp Pro Pro Ala Asp Asp Asp Cys
100 105 110
Thr Gly Asn Val Ala Glu Leu Pro Thr Asn Ser Gln Arg Arg Ala Ile
115 120 125
Gly Pro Val Ser Gly Met Ser Trp Leu Arg Val Ala Pro Gly Gly Phe
130 135 140
Arg Lys Leu Leu Asn Trp Val Trp Asn Arg Tyr Lys Arg Pro Ile Ile
145 150 155 160
Val Thr Glu Asn Gly Cys Pro Cys Pro Gly Glu Asn Gln Met Ser Leu
165 170 175
Glu Glu Ala Val Asn Asp Glu Phe Arg Ile Thr Tyr Phe Gly Leu Tyr
180 185 190
Leu Asp Ala Ile Ser Arg Ala Ile Tyr Glu Asp Gly Val Pro Val Glu
195 200 205
Gly Tyr Tyr Val Trp Ser Leu Met Asp Asn Phe Gly Lys Phe Leu Pro
210 215 220
Pro Pro Thr Asp Ser Ile Val
225 230

<210> 35885
<211> 353
<212> PRT
<213> A.fumigatus

<400> 35885
Ser Asp Thr Leu Thr Trp Tyr Ser Ile Asn Ala Ser Val Ile Ala Asn
1 5 10 15
Lys Gly Phe Val Ala Arg Phe Ala Thr Glu Lys Ser Gln Asn Gly Ser
20 25 30
Pro Ala Leu Ala Ser Ser Ile Leu Ser Ala Trp Ser Ser Ile Met Ser
35 40 45
Cys Gly Gln Ile Val Gly Met Ala Ser Val Pro Phe Leu Ser Ser Arg
50 55 60
Tyr Gly Arg Lys Ile Thr Met Tyr Thr Tyr Trp Leu Ile Leu Val Gly
65 70 75 80
Ser Val Ile Ala Glu Cys Thr Thr Arg Ser Trp Gln Gly Trp Leu Val
85 90 95
Ala Lys Leu Leu Ala Gly Ile Gly Val Gly Cys Val Gln Ser Thr Val
100 105 110
Pro Ala Tyr Ile Ser Glu Val Ala Pro Thr Arg Ile Arg Gly Ala Leu
115 120 125
Leu Met Ala Tyr Ser Phe Trp Trp Thr Leu Gly Ser Phe Phe Ala Gln
130 135 140
Val Ala Leu Gln His Leu Ser Arg Ser Asp Arg Thr Asp Tyr Leu Thr
145 150 155 160
Pro Val Tyr Thr Gln Trp Ala Gln Leu Gly Val Met Leu Leu Ile Tyr
165 170 175
Leu Leu Val Pro Glu Thr Pro Ala Trp Cys Val Ser Ala Gly Lys Leu
180 185 190
Asp Arg Ala Lys Lys Glu Leu Leu Lys Leu His Arg Gly Val Lys Asp
195 200 205
Tyr Asp Ala Asp His Gln Leu Gln Val Leu Val Leu Ala Ile Glu His
210 215 220
Glu Arg Ala Val Ala Ile Glu Gln Arg Arg Glu Lys Trp Tyr Ala Ile
225 230 235 240
Phe Arg Gly Thr Asp Gly Leu Arg Thr Ile Ile Ser Leu Trp Thr Asn
245 250 255
Leu Ser Gln Gln Phe Ile Gly Leu Thr Leu Phe Gly Ser Phe Gly Thr
260 265 270
Tyr Phe Phe Gln Gln Ala Gly Ile Asp Asp Pro Phe Arg Val Lys Val
275 280 285
Ile Thr Ser Ser Ile Gln Ile Gly Thr Val Leu Val Leu Val Ala Val
290 295 300
Val Asp Phe Val Gly Arg Arg Tyr Leu Ala Cys Gly Gly Thr Thr Leu
305 310 315 320
Ser Trp Leu Ser Cys Val Ala Ile Gly Ile Ile Gly Val Thr Pro Arg
325 330 335
Val Lys Ala Ser Thr Tyr Ile Phe Val Met Phe Ala Cys Phe Trp Ser
340 345 350
Lys

<210> 35886
<211> 96

<212> PRT
<213> A.fumigatus

<400> 35886
Pro Thr Val Ser Asp Val Gly Leu Ala Ala Asn Gly Ala Thr Gly Trp
1 5 10 15
Gly Tyr Ile Gly Glu Ile Ser Ser Gln Arg Leu Arg Pro Tyr Thr Ala
20 25 30
Gly Phe Gly Ala Ala Thr Thr Cys Val Val Gly Val Leu Met Asn Val
35 40 45
Leu Val Pro Tyr Met Thr Asn Ala Asn Glu Trp Asn Trp Gly Leu Lys
50 55 60
Thr Gly Trp Phe Tyr Ala Gly Val Gly Phe Pro Phe Ala Leu Gly Met
65 70 75 80
Trp Phe Leu Ile Pro Glu Thr Ala Gly Tyr Val Ser Tyr Leu Gly Tyr
85 90 95

<210> 35887
<211> 193
<212> PRT
<213> A.fumigatus

<400> 35887
Gly Leu Arg Leu Leu Trp Arg Tyr Arg Leu Gly Glu Arg Ser Thr Pro
1 5 10 15
Gly Gly Arg Ala Ala Asn Val Gly Ser Pro Ser Ala Leu Trp Leu Glu
20 25 30
Arg Ser Pro Ser Leu Thr Arg Asn Leu Phe Ala Ser Ser Arg Thr Lys
35 40 45
Phe Val Pro Cys Asp Ala Gly His Trp Asp Asp Gln Val Arg Leu Phe
50 55 60
Glu Asn Ala Val Ser Leu Ser Pro Asn Gly Arg Ile Ala Tyr Val Val
65 70 75 80
Ala Asn Ala Gly Ile His Arg Pro Asp Glu Val Phe Glu Gln Pro His
85 90 95
Pro Asp Gln Glu Pro Ala Lys Pro Asp Leu Thr Ile Val Asp Ile Asn
100 105 110
Ile Lys Gly Pro Leu Tyr Thr Ala Lys Leu Ala Ala His Tyr Phe Ile
115 120 125
Arg Gln Asn Gly Ser Thr Pro Thr Leu Gly Gln Glu Asp Thr Cys Leu
130 135 140
Ile Leu Ile Gly Ser Gly Ala Ala Phe Leu Asp Cys Pro Arg Ala Pro
145 150 155 160
Gln Tyr Ser Ala Ser Lys Trp Ala Met Arg Gly Ile Met His Ser Leu
165 170 175
Arg Arg Thr Thr Tyr Tyr Tyr Gly Ser Arg Val Asn Val Ile Ser Pro
180 185 190
Trp

<210> 35888
<211> 418
<212> PRT
<213> A.fumigatus

<400> 35888

```
Cys Pro Phe Leu Thr Gln Leu Pro Glu Ser Gln Gly Ser Arg His Asp
1               5                  10                  15
Asp Asn Val Pro His Gly Ala Ser Val Ala Arg Ala Tyr Leu His Arg
            20                  25                  30
Arg Val Pro Met Met Tyr Asn Asp Gly Val Gln Pro Pro Ala Cys Leu
        35                  40                  45
Phe Ile Pro Pro Val Glu Pro Cys Leu Asp Pro Glu Thr Lys Ser Phe
    50                  55                  60
Ser Pro Gly Pro Gln Pro Ser Leu Leu Val Phe Ile Glu Gln Val Thr
65                  70                  75                  80
Arg Arg Lys Thr Met Lys Val Pro Thr Ala Leu Ser Leu Ala Ala Leu
                85                  90                  95
Leu Cys Ala Gly Ser Ala Thr Ala Gln Asn Leu Ser Tyr Gly Ala Asp
            100                 105                 110
Asn Phe Tyr Arg Ser Asp Ser Val Thr Leu Arg Pro Ile Thr Phe Lys
        115                 120                 125
Asn Gln Phe Gln Met Thr Val Ala Gly Asn Leu Phe Val Pro Arg Ser
    130                 135                 140
Gln Asn Leu Thr Gly Ser Gly Asp Val Pro Ala Ile Ile Val Gly His
145                 150                 155                 160
Pro Met Gly Ala Val Lys Glu Gln Ser Ala Asn Leu Tyr Ala Thr Lys
                165                 170                 175
Leu Ala Glu Gln Gly Phe Val Thr Leu Ser Leu Asp Leu Gln Phe Trp
            180                 185                 190
Gly Gly Ser Ser Gly Glu Pro Arg Asn Gly Val Ser Pro Asp Leu Phe
        195                 200                 205
Ala Glu Val Phe Ser Ala Ala Val Asp Tyr Leu Gly Thr Gln Asn Val
    210                 215                 220
Val Ala Val Asp Arg Gln Arg Ile Gly Ala Val Gly Ile Cys Ala Ser
225                 230                 235                 240
Gly Gly Phe Val Ile Ser Ala Ala Lys Ile Asp Pro Arg Ile Arg Ala
                245                 250                 255
Ile Ala Thr Val Ser Met Tyr Asp Met Gly Ala Val Ser Arg Asn Gly
            260                 265                 270
Leu Arg His Ser Gln Ser Leu Ala Glu Arg Gln Ala Ile Ile Ser Asn
        275                 280                 285
Ala Ala Gln Gln Arg Trp Val Glu Leu Glu Asp Pro Ser Gln Thr Gln
    290                 295                 300
Tyr Thr Gly Gly Thr Pro Asn Glu Leu Thr Pro Ser Thr Asp Ala Val
305                 310                 315                 320
Ser Arg Glu Leu Tyr Asp Phe Tyr Arg Thr Ser Arg Gly Glu Val Thr
                325                 330                 335
Pro Pro Gly Ser Thr Pro Glu Leu Thr Thr His Pro Thr Leu Thr Ser
            340                 345                 350
Ser Leu Lys Phe Met Asn Phe Tyr Pro Phe His Asp Ile Asp Ser Ile
        355                 360                 365
Ala Pro Arg Pro Leu Leu Phe Ile Ser Gly Asp Gln Ala His Ser Arg
    370                 375                 380
Glu Phe Ser Glu Asp Ala Tyr Ala Arg Ala Val Gln Pro Lys Glu Met
385                 390                 395                 400
Leu Trp Ile Pro Ala Ala Val Phe Thr Thr Trp Thr Ala Ser Thr Ala
                405                 410                 415
Leu Thr
```

<210> 35889

<211> 78
<212> PRT
<213> A.fumigatus

<400> 35889
Asn Asn His Leu His Phe Gln Ala Cys Gly Leu Ser Glu Ile Pro Thr
1 5 10 15
Gly His Tyr Glu Leu Leu Ile Ala Tyr Lys Asn Ala Gly Gly Thr Ile
20 25 30
Arg Asp Thr Ile Gln Glu Ile Val Gln Gln Trp Ala Gly Thr Ser Lys
35 40 45
Ile Glu Val Tyr Tyr Thr Thr Val Cys Leu Ser Ile Val Ile Thr Gln
50 55 60
Arg Val Gly Leu Trp Cys Phe Phe Asn Tyr Gln Ser Asn Ser
65 70 75

<210> 35890
<211> 84
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1),(4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35890
Xaa Lys Phe Xaa Arg Asp Thr His Ala Met Asp Thr Thr Ala Ala His
1 5 10 15
Trp Leu Ala Pro Val Gln Asn Asp Asp Gln Ser Glu Thr Thr Pro Ser
20 25 30
Glu Ala Asn Tyr Gly Met Lys Ile Met Glu Phe Glu Lys Ile Val Asn
35 40 45
Ser Pro Gly Glu Gly Asp Glu Val Gly Pro Asn Trp Glu Arg Pro Pro
50 55 60
Thr Ile Thr Ser Gly Phe Trp Phe Thr Lys Ile Cys Leu Cys Arg Gln
65 70 75 80
Lys Asn His Leu

<210> 35891
<211> 195
<212> PRT
<213> A.fumigatus

<400> 35891
Ile Glu Phe Thr Val Asp Pro Ser Ser Pro Val Val Lys Thr Pro Pro
1 5 10 15
His Tyr Phe Ala Arg Ile Ala Asp Ser Gly Asn Met Trp Cys Glu Ser
20 25 30
Cys Arg Arg Gln Pro Ser Ser Glu Ile Ser Tyr Lys Tyr Val Asn Val
35 40 45
Asp Val Leu Ile Arg Ser Thr Arg Met Leu Val Val Leu Cys Thr Lys
50 55 60
Thr Ser Ile Ala Arg Lys Met Thr Ala Lys Leu Val Leu Pro Leu Leu
65 70 75 80

```
Ser Val Phe Ala Leu Tyr Ala Ile Phe Tyr Phe Ala Glu Ile Asn Gly
                85                  90                  95
Leu Asn His Leu Ala Gln Gly Ala Ile Thr Ala Lys Thr Leu Pro Gly
            100                 105                 110
Thr Asn Glu Pro Leu Arg Thr Ile Tyr Thr Gly Ile Glu Pro Val Asp
        115                 120                 125
Asn Val Leu Ala Ala Leu Thr Thr Phe Phe Trp Pro Ala Thr Asp Gly
    130                 135                 140
Ser Asn Pro Thr Leu Thr Leu His Ser Ile Ala Phe Ser Gly Thr Phe
145                 150                 155                 160
Gly Ala Ala Trp Thr Leu Val Thr Leu Glu Ser Trp Arg Arg Gly Asn
                165                 170                 175
Ala Trp Thr Val Ala Ala Leu Ser Val Asn Leu Ser Arg Ile Tyr Asn
            180                 185                 190
Thr Arg Ser
        195

<210> 35892
<211> 261
<212> PRT
<213> A.fumigatus

<400> 35892
Gln Glu Gly Ser Pro Thr Met Phe Gly Leu Leu Ala Gln Val Leu Thr
1               5                   10                  15
Phe Ala Phe Ala Thr Pro Leu Tyr Cys Ala Phe Gln Leu Arg Asn Ser
            20                  25                  30
Val Thr Ala Arg Lys Pro Asn Ala Glu Asn Ile Arg Ile Pro Arg Ala
        35                  40                  45
Val Leu Asn Ala Ile Pro Leu Val Phe Ile Leu Gly Phe Met Val Pro
    50                  55                  60
Thr Leu Leu Met Ile Leu Pro Val Ser Glu His Val Thr Val Asp Met
65                  70                  75                  80
Lys Gln Ile Phe Ile Ala Ser Trp His Pro Trp Pro Ala Tyr Val Ala
                85                  90                  95
Ile Ala Leu Thr Ile Ile Asn Phe Val Phe Gly Pro Asp Val Ser Asn
            100                 105                 110
Asp Gly Ser Val Glu Arg Glu Arg Ala Asn Leu Arg Ser Leu Arg Phe
        115                 120                 125
Val Tyr Ala Phe Ala Phe Ala Asn Ala Ala Leu Thr His Leu Ile Ser
    130                 135                 140
Trp Ile Met Ser Leu Ala Thr Val Leu Thr Pro Val Ile Phe Glu Lys
145                 150                 155                 160
Arg Leu Leu Ala Val Leu His Pro Phe Lys Val Phe Gln Ile Ala Leu
                165                 170                 175
Pro Trp Ser Lys Pro Val Leu Gln Val Ser Asp Ile Gly Glu Gly Val
            180                 185                 190
His Val Phe Leu Arg Trp Asp Tyr Leu Ile Gly Ser Ala Gly Val Leu
        195                 200                 205
Phe Trp Ala Leu Ser Leu Tyr Asn Ala Ala His Arg Val Val Tyr Gly
    210                 215                 220
Lys Val Arg Trp Leu Asp Leu Leu Lys Lys Ala Val Leu Leu Val Thr
225                 230                 235                 240
Leu Val Gly Pro Val Gly Ala Ala Val Glu Leu Met Trp Glu Arg Asp
                245                 250                 255
Glu Leu Ile Ile Pro
```

260

<210> 35893
<211> 382
<212> PRT
<213> A.fumigatus

<400> 35893

```
Lys Met Arg Asn Leu Lys Asn Val Arg Leu Ala Glu Val His Leu Gln
1               5                  10                  15
Asn Glu Leu Pro Leu Thr Ala Thr Ala Trp Asp Thr Ala Ser Asp Ala
            20                  25                  30
Val Ile Cys Thr Phe Gly Pro Thr Glu Ala Asn Pro Ile Ile Glu Leu
        35                  40                  45
Arg Arg Lys His Gln Asp Ser Tyr Phe Thr Asp Pro Val Gly Ala Glu
    50                  55                  60
Val Phe Glu Cys Ile Ala Ser Trp Asp Ala Pro Cys Pro Leu Pro Asp
65                  70                  75                  80
Leu Arg Cys Asp Arg Val Leu Ser Leu His Tyr Phe Ala Asp Asn Leu
                85                  90                  95
Thr Ala Cys Leu Val Leu Glu Gly Gly Asp Ile Val Val Val Arg Glu
            100                 105                 110
Asp Pro Leu Pro Gly Glu Glu Lys Ile Glu Ile Val Gly Ser Val Asp
        115                 120                 125
Val Gly Ile Ser Ala Ala Ala Trp Ser Pro Asp Glu Glu Leu Leu Ala
    130                 135                 140
Leu Thr Thr Arg Ala Asn Thr Phe Leu Tyr Met Thr Arg Glu Phe Glu
145                 150                 155                 160
Asn Val Ala Glu Ile Thr Phe Thr Pro Glu Asp Leu Lys Val Ser Gln
                165                 170                 175
His Val Ser Val Gly Trp Gly Lys Arg Glu Thr Gln Phe Gln Gly Lys
            180                 185                 190
Arg Ala Lys Ala Leu Arg Asp Pro Thr Ile Pro Glu Lys Val Asp Glu
        195                 200                 205
Gly Arg Leu Ser Ser Asn Asp Asp Gly Arg Thr Thr Ile Ser Trp Arg
    210                 215                 220
Gly Asp Gly Ala Tyr Val Ala Val Asn Ser Ile Glu Ala Gly Phe Arg
225                 230                 235                 240
Arg Val Ile Arg Val Tyr Ser Arg Glu Gly Ala Leu Asp Ser Val Ser
                245                 250                 255
Glu Pro Val Asp Gly Leu Glu Gly Ala Leu Ser Trp Arg Pro Tyr Gly
            260                 265                 270
Asn Leu Ile Ala Gly Ile Gln Arg Leu Glu Asp Lys Val Glu Val Val
        275                 280                 285
Phe Phe Glu Arg Asn Gly Leu Arg His Gly Glu Phe Ser Leu Arg Leu
    290                 295                 300
Asn Glu Glu Glu Arg Ala Ser Trp Ala Ser Asp Ile His Leu Ser Trp
305                 310                 315                 320
Asn Val Asp Ser Thr Val Leu Ala Val Leu Phe Arg Asp Arg Ile Gln
                325                 330                 335
Phe Trp Thr Met Gly Asn Tyr His Tyr Tyr Leu Lys Glu Glu Val Pro
            340                 345                 350
Val Val Val Asp Pro Asp Tyr Pro His Pro Phe Ala Phe Lys Trp His
        355                 360                 365
Gln Glu Lys Ala Leu Arg Ser Val Ala Cys Gly Ser Gly Thr
    370                 375                 380
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<210> 35894
<211> 199
<212> PRT
<213> A.fumigatus

<400> 35894
Phe Ala Lys Glu Thr Leu Lys Leu Thr Pro Leu Lys Leu Ser Gly Val
1 5 10 15
Pro Pro Pro Met Ala His Asn Asp Val Pro Val Asp Ser Asn Val Val
20 25 30
Asp Val Ala Phe Ser Lys Ser Gly Thr Arg Ile Ala Val Leu Met Lys
35 40 45
Asp Cys Phe Ser Ile Tyr Met Trp Ser Leu Lys Thr Arg Pro Val Pro
50 55 60
Ser Pro Ile Leu Glu Ser Ser His Pro Leu Pro Asp Asn Leu Asp Asn
65 70 75 80
Arg Pro Arg Gln Ile Ala Phe Leu Asn Glu Asn Glu Val Tyr Ile Leu
85 90 95
Arg Asn Ser Gly Pro Asn Ser Thr Cys Ile Gln Lys Thr Thr Leu Glu
100 105 110
Thr Arg Ser Thr Thr Thr Val Tyr Gln Thr Thr Asp Ser Gly Gln Ile
115 120 125
Leu Thr Ile Phe Pro Ala Val Gly His Glu Ala Leu Trp Phe Ser His
130 135 140
Val Pro Gln Pro Gly Arg Pro Ile Ala Tyr Cys Ile Leu Lys Ala Ser
145 150 155 160
Pro Glu Glu Asp Val Gln Val Asp Ser Trp Asp Gln Ser Pro Ala Val
165 170 175
Asp Thr His Trp Ala Arg Ala Val His Leu Ser Asp Asp Glu Val Leu
180 185 190
Phe Ser Leu Leu Thr Ile Asp
195

<210> 35895
<211> 115
<212> PRT
<213> A.fumigatus

<400> 35895
Arg Pro Leu Leu Lys Lys Thr Ser Lys Leu Thr Pro Gly Thr Arg Val
1 5 10 15
Leu Leu Ser Thr Leu Thr Gly Leu Gly Leu Ser Thr Cys Gln Met Met
20 25 30
Arg Tyr Tyr Phe Leu Cys Leu Gln Leu Thr Glu Pro Trp Leu Thr Ala
35 40 45
Leu Lys Arg Ile Leu Ile Ser Leu Ser Arg Thr Gly Ala Leu Tyr Ala
50 55 60
Asn Asn Gln Leu Leu Ala Lys Asn Cys Thr Ser Phe Leu Val Thr Gln
65 70 75 80
Ala His Ile Leu Phe Thr Thr Ser Gln His Leu Leu Lys Phe Val His
85 90 95
Leu Thr Lys Ala Glu Gly Leu Leu Ser Ile Thr Ile Ser Ser Pro Ile
100 105 110
Pro Ser Gly
115

<210> 35896
<211> 119
<212> PRT
<213> A.fumigatus

<400> 35896
Phe Gln Ala Ala Glu Met Glu Val Pro Ala Asp Thr Pro Glu Thr Asp
1 5 10 15
Glu Arg Cys Arg Ser Ile Glu Arg Gly Ser Lys Leu Val Ser Val Met
20 25 30
Pro Ser Lys Phe Ala Val Thr Leu Gln Ala Pro Arg Gly Asn Ile Glu
35 40 45
Thr Ile Tyr Pro Arg Ala Leu Val Leu Ala Gly Ile Arg Asn Tyr Ile
50 55 60
Asp Arg Lys Asp Tyr Arg Ser Ala Phe Leu Ala Cys Arg Ser Gln Met
65 70 75 80
Val Asp Met Asn Ile Leu His Asp Tyr Ala Pro Glu Gln Phe Leu Glu
85 90 95
Asn Val Ala Leu Phe Leu Asp Gln Val Lys Arg Val Asp Phe Ile Asp
100 105 110
Glu Phe Leu Ser Arg Leu Arg
115

<210> 35897
<211> 90
<212> PRT
<213> A.fumigatus

<400> 35897
Pro Val Leu Ser Glu Asp Asp Val Ser Gln Thr Leu Tyr Lys Asp Thr
1 5 10 15
Leu Lys Thr Pro Arg Glu Val Gln Thr Thr Thr Gln Pro Glu Gly Thr
20 25 30
Ala Ser Phe Lys Pro Thr Thr Lys Thr Ser Lys Val Asn Arg Ile Cys
35 40 45
Asp Ala Phe Leu Ala Thr Leu Glu Lys Arg Met Asp Thr Asn Leu His
50 55 60
Asn Leu Val Thr Ala His Val Cys Lys Ser Ala Pro Asp Leu Glu Ala
65 70 75 80
Gly Leu Gln Leu Val Ala Arg Leu Arg Val
85 90

<210> 35898
<211> 63
<212> PRT
<213> A.fumigatus

<400> 35898
Arg Gly Gly His Thr Asn Asn Pro Ile Met Arg His Lys Gly Pro Glu
1 5 10 15
Leu Thr Ala Lys Cys Met Ala Leu Asn Pro Val Asp His Val Ser Ser
20 25 30
Val Ala Gly Thr Tyr Ser Asp Gly Ala Ser Ser Ile Asn Val Leu Asp
35 40 45
Ala Leu Ile Leu Leu Gln Ile Phe Lys Thr Ser Leu Arg Ser Val

50 55 60

<210> 35899
<211> 76
<212> PRT
<213> A.fumigatus

<400> 35899
Ser Asn Ser Leu Arg Ile Leu Ile Thr His Ser Ser Leu Val Glu Thr
1 5 10 15
Pro Thr Trp Asn Ile Val Asp Leu Val Thr Leu Thr Glu Ser Pro Asn
20 25 30
Ile Leu Ser Ala Ser Arg Ile Arg Asn Ile Glu Phe Ser Lys Ala Gln
35 40 45
Val Asp Val Ile Trp Phe Asp Ser Thr Gly Asn Arg Arg Ile His Thr
50 55 60
Trp Val Ile Lys Pro Ser Lys Phe Asn Pro Arg Gln
65 70 75

<210> 35900
<211> 67
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (17),(27),(28),(37),(46),(48),(53),(61),(62)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35900
Leu Gly Gln Ser Phe Glu Ser Gln Asn Ser Ile Arg Pro Leu Gly Pro
1 5 10 15
Xaa Arg Lys His Met Glu Arg Trp Val Lys Xaa Xaa Ser Leu Met Ala
20 25 30
Phe Glu Gly Ile Xaa Ser Ser Ser Arg Gly Arg Leu Thr Xaa His Xaa
35 40 45
Glu Ile Ser His Xaa Asn Glu Gln Gln His Glu Val Xaa Xaa Leu Leu
50 55 60
Ser Gln Asn
65

<210> 35901
<211> 134
<212> PRT
<213> A.fumigatus

<400> 35901
His Cys Phe Gln Ser Arg Ala Leu Leu Leu Leu Arg Leu Thr Gln Gln
1 5 10 15
Gly Ala Leu Gly Leu Asp Lys Leu Ser Lys Ile Leu Ser Lys Leu Leu
20 25 30
Arg Trp Val Ala Leu Tyr Arg Ser Glu Arg Gly Phe Lys Tyr Leu Glu
35 40 45
Gln Asn Glu Ser Ile Gln Tyr Ile Asp Thr Ala Arg Ser Val Ala Val
50 55 60
Gly Ala Gly His Gly Gly Tyr Met Val Asn Trp Ile Gln Gly His Ala

```
65                  70                  75                  80
Leu Gly Arg Lys Phe Arg Ala Leu Val Thr His Asp Gly Ile Val Ser
                85                  90                  95
Met Thr Ser Pro Leu Ala Asn Asn Arg Gln His Ser Val Glu Glu Ile
            100                 105                 110
Gly Gly Pro Ile Trp Glu Thr Pro Asp Glu Trp Met Lys Leu Asp Pro
        115                 120                 125
Ala Gln Leu Thr Val Ser
    130
```

<210> 35902
<211> 62
<212> PRT
<213> A.fumigatus

<400> 35902

```
Glu Leu Asn Tyr Lys Lys Val Ile Ala Asp Glu Leu Ala Ala Leu Asn
1               5                   10                  15
Val Leu Gln Leu Lys Ser Val Tyr Ser Ala Leu Leu Val Phe Leu Glu
            20                  25                  30
Glu Arg Glu Pro Ile Leu Asn Pro Glu Asp Asn Leu Leu Trp Tyr Cys
        35                  40                  45
Thr Val Ile Asn Trp Met Lys Lys Tyr Ser Asp Gln Lys Ser
    50                  55                  60
```

<210> 35903
<211> 822
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (822)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35903

```
Leu Ser Leu Ser Leu Ile Glu Asn Pro Ala Asn Arg Pro Ala Ser Lys
1               5                   10                  15
Gly Gly Gly Gly Glu Ser Pro Asn Pro Gly Pro Ser Asn Ser Thr Ala
            20                  25                  30
Gln Leu Ala Leu Ser Arg Ser Ser Leu Arg Glu Pro Leu Phe Val Val
        35                  40                  45
Pro Ala Gly Phe His Pro Asn Ala Thr Phe Val Gly Met Thr Arg Glu
    50                  55                  60
Leu Asp Ile Leu His Ala Arg Leu Tyr Arg Ala Lys Lys Arg Ala Glu
65                  70                  75                  80
Arg Leu Ala Ala Val Leu Ile Cys Gly Gly Pro Gly Ala Gly Lys Ser
                85                  90                  95
His Leu Ala Arg Gln Tyr Val Trp Thr Gln Arg Asp Cys Tyr Pro Gly
            100                 105                 110
Gly Ile Phe Trp Val Asp Ala Lys Ser Arg Glu Ser Thr Ser Lys Cys
        115                 120                 125
Phe Trp Asp Ile Ala Gln Ala Ala Ser Leu Thr Asp Glu Leu Glu Phe
    130                 135                 140
Glu Cys Pro Asp Phe Lys Ala Pro Gln Lys Tyr Val Glu Met Val Arg
145                 150                 155                 160
```

```
Asn Trp Phe Gln Ala Arg Glu Glu Trp Leu Leu Val Phe Asp Gly Leu
                165                 170                 175
Ser Phe Asn His Glu Asp Asp Leu Asn His Phe Arg Gln Phe Leu Pro
            180                 185                 190
Phe Asn Lys Gln Cys Ser Ile Met Tyr Thr Ser Val Asp Arg Thr Leu
        195                 200                 205
Arg Lys Lys Gln Arg Leu Tyr Glu Pro Tyr Cys Leu Gln Val Pro Pro
    210                 215                 220
Leu Ser Val Glu Asp Ala Cys Lys Leu Leu Phe Lys Asp Leu Gly Ile
225                 230                 235                 240
Lys Arg Pro Thr Lys Glu Gln Val Arg Lys Ala Thr Glu Leu Val Met
                245                 250                 255
His Tyr Glu Cys Leu Pro Leu Ala Ile His Ala Ile Ser His Arg Leu
            260                 265                 270
Ser Ala Thr Ser Lys Pro Ile Glu Arg Tyr His Ile Asn Ser His Leu
        275                 280                 285
Thr Asp Glu Lys Leu Ala Glu Pro Phe Leu Ser Ile Met His Asp Leu
    290                 295                 300
Tyr Arg Met Gly His Phe Glu Ala Leu Asn Leu Ile Asn Leu Leu Ser
305                 310                 315                 320
Phe Phe Gly His His Val Pro Leu Gly Leu Ile Asn Leu Gly Lys Ser
                325                 330                 335
Val Leu Glu Thr Trp Asn Val Asp Ile Leu Thr Ser Ser Arg Pro Gly
            340                 345                 350
Glu Arg Gly Asp Ile Asp Thr Thr Leu Gly Ile Leu Ile Arg Tyr Gly
        355                 360                 365
Leu Ile Glu Arg Thr Ser Asp Ala Tyr Val Leu Lys Asp Leu Ser Pro
    370                 375                 380
Gln Ser Glu Lys Glu Leu Ile Leu Asp Ala Arg Ala Val Val Pro Glu
385                 390                 395                 400
Leu Ser Glu Ser Gln Thr Glu Ser Ser Ser Gln Glu Ala Ser Phe Ser
                405                 410                 415
Ile Tyr Gln Lys Ala Gly Ser Ile Asp Val Ile Lys Ile His Ser Val
            420                 425                 430
Val Gln Glu Phe Cys Arg Asp Glu Leu Lys Ile Met Asp Glu Glu Gln
        435                 440                 445
Arg Lys Gln Ser Ser Arg Leu Glu Ala Arg Arg Gly Ser Ala Ala Gly
    450                 455                 460
Ser Gly Pro Ala Ser Gly Thr Gly Ser Gly Val Val Lys Ala Glu Ala
465                 470                 475                 480
Gly Phe Tyr Glu Ser Trp Leu Val Val Ala Ile Arg Leu Leu Cys Lys
                485                 490                 495
Ser Tyr Glu Asn Ala Lys Lys Arg Met Glu Leu Val Asp Asp Tyr Gly
            500                 505                 510
Leu Val Lys Asp Tyr Arg Glu Tyr Glu Thr His Ala Ser Arg Leu Ile
        515                 520                 525
Glu Asn Phe Pro Lys Arg Ala Ala Lys Gly Lys Ile Val Gln Glu Ala
    530                 535                 540
Arg Asn Glu Leu Lys Gln Leu Met Arg Ser Ile Ser Ser Glu Ile Glu
545                 550                 555                 560
Arg Leu Ser Pro His Ser Ser Gln Asp Ser Ile Arg Lys His Arg Ser
                565                 570                 575
Val Phe Asp Arg Ser Ser Ser Ser Ser Ser Ser Ser Val Pro Asp Ser Asp
            580                 585                 590
Glu Ser Pro Ser Arg Gln Leu Thr Trp Asp Leu Gly Asp Glu Ser Ala
        595                 600                 605
```

```
Lys Val Glu Ser Pro Lys Glu Leu Pro Ala Thr Ala His Gly Phe Asn
    610                 615                 620
Leu Ser Pro Phe Leu Pro His Ile Phe Arg Glu Ser Ser Ser Glu Gln
625                 630                 635                 640
Glu Ala Glu Arg Ala Asn Lys Glu Lys Met Glu Ala Ser Ser Leu Ser
                645                 650                 655
Gln Thr Ser Gln Ala Thr Glu Lys Pro Ser Ile Ala Ser Ser Pro Pro
            660                 665                 670
Arg Asp Asp His Gly Trp Gln Val Val Glu Lys Pro Gln Lys Ile Ser
        675                 680                 685
Lys Pro Gly Lys Glu Arg Gln Leu Lys Gln Arg Pro Lys Phe Pro Thr
    690                 695                 700
His Ile His Gly Ser Lys Pro Ala Ala Pro Val Leu Lys Val Phe Pro
705                 710                 715                 720
Val Glu Gly Arg Ser Ala Ser Ser Ser Ser Met Glu Lys Gly Arg Ser
                725                 730                 735
Ser Ser Ser Val Ser Ala Thr Glu Ala Leu Thr Ser Val Gln Ser Ala
            740                 745                 750
Ser Pro Arg Arg Ser Glu Glu Asp Leu Pro Ala Gly Gln Thr Asn Arg
        755                 760                 765
Thr Trp Ala Ala Val Val Ala Lys Ala Asn Arg Val Ala Glu Ala Arg
    770                 775                 780
Arg Thr Pro Ser Ser Ser Pro Lys Gln Arg Pro Ser Ser Ser Pro Glu
785                 790                 795                 800
Glu Thr Asp Arg Pro Gly Leu Pro Val Pro Lys Leu Leu Glu Ser Lys
                805                 810                 815
Ser Ser Gly Glu Thr Xaa
            820
```

<210> 35904
<211> 512
<212> PRT
<213> A.fumigatus

<400> 35904

```
Lys Leu Arg Pro Phe Tyr Pro Pro Leu Glu Pro Leu Gln Ser Val Asn
1                   5                   10                  15
Leu Arg Ala Ala Leu Ser Arg Val Leu Ser Asp Leu Lys Lys Asn Gly
            20                  25                  30
Asp Leu Gly Arg Glu Thr Ile Phe Arg Lys Ser Met Leu Asp Asp Cys
        35                  40                  45
Lys Gly Glu Lys Val Asp Glu Leu Leu Ala Val Phe Ser Thr Ala Val
    50                  55                  60
Leu Arg Lys Val Leu Ala Ser Ser Met Asp Gly Leu Pro Asn Pro Ala
65                  70                  75                  80
Val Arg Leu Ser Met Ala Lys Gly Val Thr Pro Asp Glu Tyr Gln Leu
                85                  90                  95
Met Leu Pro Leu Ile Leu Ala His Arg Val Ser Leu Ala Thr Met Asp
            100                 105                 110
Gly Arg Arg Ser Arg Ile Met Asp Val His Lys Lys Phe Ser Gln Leu
        115                 120                 125
Leu Asp Ser Lys Lys Ala Gln Leu Asp Gly Arg Ser Lys Glu Gly Pro
    130                 135                 140
Pro Ala Leu Ser Lys Asp Val Ala Asn Leu Asp Ala Leu Ala Arg Glu
145                 150                 155                 160
Leu Lys Glu Asn Trp Met Gly Ser Glu Glu Trp Ala Asp Thr Leu Leu
```

```
                165                 170                 175
Gln Gly Gly Ala Arg Ser Ser Ser Asp Ala Phe Leu Glu Leu Pro Phe
            180                 185                 190
Gly Ala Ala Trp Ser Lys Ala Asn Glu Thr Thr Val Glu Asp Leu Thr
        195                 200                 205
Val Ser Thr Thr Pro Asp Leu Leu Val Asp Leu Glu Ser Arg Ile Ala
    210                 215                 220
Arg Gln Arg Asn Arg Leu Gln Lys Trp Arg Glu Val Ala His Ser Met
225                 230                 235                 240
Arg Glu Lys Asp Gly Ala Gly Gly Gln Met Ser Glu Asn Thr Ala Asp
                245                 250                 255
Lys Ala Pro Leu Ala Phe Lys Asp His Gln Thr Leu Thr Val Ala Ser
            260                 265                 270
Ile Ser Lys Ala Val Arg Gln Pro Leu Ser Arg Ala Ala Pro Arg Gln
        275                 280                 285
Asp Asp Gln Ala Leu Leu Gln Ser Met Asn Glu Ala Leu Ser Arg Ile
    290                 295                 300
Asp Gly Lys Pro Arg Ser Ser Gly Arg Thr Ala Pro Pro Leu Arg Val
305                 310                 315                 320
Pro Ala Met Glu Pro Thr Thr Thr Ile Pro Ser Asp Ala Glu Ser Ala
                325                 330                 335
Lys Pro Ser Ile Ser Gln Tyr Ser Arg Pro Ser Tyr Cys Lys Glu Leu
            340                 345                 350
Asn Glu Asn Glu Ala Val Pro Ser Pro Asp Asn Gln Ser Ala Gly Thr
        355                 360                 365
Ser Ser Pro Ala Val Gln Ile Thr Pro Asp Pro Asp Ser Glu Pro Lys
    370                 375                 380
Leu Asp Pro Arg Leu Asn Thr Phe Thr Leu Val Glu Arg Thr Arg Lys
385                 390                 395                 400
Ser Met Ser Leu Leu Pro Pro Pro Ser Ser Arg Pro Pro Gln Gln Pro
                405                 410                 415
Arg Arg Ser Arg Lys Ser Arg Val Ser Leu Pro Val Asn Gln Phe Glu
            420                 425                 430
Thr Pro Glu Lys Leu Pro Gln Thr Arg Ala Ser Thr Pro Arg Asp Glu
        435                 440                 445
Leu Phe Glu Glu Glu Ala Asp Tyr Asn Ser Val Phe Lys Ser Arg Pro
    450                 455                 460
Arg Val Ala Leu Ser Pro Ile Ala Ser Pro Ala Val His Val Ala Pro
465                 470                 475                 480
Val Glu Val Ser Asp Pro Asp Ala Tyr Val Asp Ser Val Gly Asp Leu
                485                 490                 495
Glu Asp Met Asp Leu Asn Ala Ser Pro Ser Ala Arg Gly Arg Arg Ile
            500                 505                 510
```

<210> 35905
<211> 214
<212> PRT
<213> A.fumigatus

<400> 35905

```
Leu Leu Val Val Leu Ser Thr Leu Pro His Pro Pro Glu Glu Asn Ser
1               5                   10                  15
Ala Ser Pro Ile Pro Phe Phe His Leu Leu Glu Arg Leu Lys Thr Thr
            20                  25                  30
Lys Arg Glu Gly Trp Arg Arg Phe Gly Ile Ser Thr Gly Glu Ser Ile
        35                  40                  45
```

```
Ser Asp His Met Tyr Arg Met Ser Ile Met Thr Met Leu Ala Pro Pro
    50                  55                  60
Thr Leu Ala Ser Arg Leu Asn Leu Pro His Cys Met Lys Met Ala Leu
65                  70                  75                  80
Ile His Asp Met Ala Glu Ser Ile Val Gly Asp Ile Thr Pro Val Asp
                85                  90                  95
Lys Val Asn Lys Ala Glu Lys Ala Arg Arg Glu Ala Glu Val Met Asp
            100                 105                 110
Tyr Ile Ala Lys Asn Leu Leu Gly Gly Val Pro Gly Gly Met Leu Thr
        115                 120                 125
Gly Glu Glu Ile Leu Lys Val Phe Asn Glu Tyr Glu Ala Asn Glu Thr
    130                 135                 140
Leu Glu Ala Gln Phe Val His Asp Val Asp Lys Met Glu Leu Leu Leu
145                 150                 155                 160
Gln Met Leu Glu Tyr Glu Arg Thr His Lys Val Asp Leu Ser Glu Phe
                165                 170                 175
Cys His Val Ala Gly Arg Ile Gln Leu Asp Glu Val Arg Glu Trp Ala
            180                 185                 190
Ala Thr Val Leu Lys Glu Arg Glu Ala Phe Trp Lys Gly Met Ala Ala
        195                 200                 205
Asn Thr Asn Gly Thr Ala
    210
```

<210> 35906
<211> 121
<212> PRT
<213> A.fumigatus

<400> 35906

```
Leu Leu Ser His Gln His Gly Ile Ile Ser Lys Glu Glu Val Arg Tyr
1               5                   10                  15
Gly Leu Ile Val His Ser Thr Ser Pro Leu Ser His Tyr Ser His His
            20                  25                  30
Lys Gly Val Leu Gly Ala Thr Gly Ser Val Gly Gln Arg Phe Ile Leu
        35                  40                  45
Leu Leu Ala Asp His Pro Phe Leu Glu Leu His Ala Ile Gly Ala Ser
    50                  55                  60
Asn Arg Ser Ala Gly Lys Lys Tyr Lys Asp Ala Val Arg Trp Lys Gln
65                  70                  75                  80
Thr Thr Ala Met Ser Glu Arg Leu Ser Asn Leu Val Leu Arg Asp Cys
                85                  90                  95
Arg Ala Asp Gln Phe Ser Asp Cys Asp Leu Val Phe Ser Gly Leu Asn
            100                 105                 110
Ser Asp Val Ala Gly Glu Ile Gly Thr
        115                 120
```

<210> 35907
<211> 356
<212> PRT
<213> A.fumigatus

<400> 35907

```
Ala Ile Ala Glu Leu Arg Thr Thr Leu Gly Asp Asp Ala Ile Ser Thr
1               5                   10                  15
Asp Glu Asp Asp Leu Lys Gln His Gly Tyr Ser Glu Trp Ser Ser Val
            20                  25                  30
```

```
Asn Ala Asp Arg Leu Pro Val Ala Ile Ala Tyr Pro Thr Cys Thr Glu
        35                  40                  45
Asp Val Val Lys Ile Ala Lys Val Cys His Lys Tyr Arg Met Pro Met
    50                  55                  60
Val Pro Tyr Ser Gly Gly Ser Ser Leu Glu Ala Asn Phe Ser Ala Pro
65                  70                  75                  80
Tyr Gly Gly Leu Thr Ile Asp Phe Ala Met Met Asn Lys Ile Ile Glu
                85                  90                  95
Ile His Glu Asp Asp Met Asp Ile Val Val Gln Pro Ser Ile Gln Trp
            100                 105                 110
Met Glu Leu Asn Glu Lys Ile Lys His Thr Gly Leu Phe Phe Pro Val
        115                 120                 125
Asp Pro Gly Pro Ser Ala Met Ile Gly Gly Met Ile Gly Thr Asn Cys
    130                 135                 140
Ser Gly Thr Asn Ala Val Arg Tyr Gly Thr Met Lys Asp Trp Val Ile
145                 150                 155                 160
Asn Leu Thr Val Val Leu Ala Asp Gly Arg Val Met Lys Thr Arg Arg
                165                 170                 175
Arg Pro Arg Lys Thr Ser Ala Gly Tyr Asn Leu Thr Gly Met Phe Val
            180                 185                 190
Gly Ser Glu Gly Thr Leu Gly Ile Val Thr Glu Ala Thr Leu Lys Leu
        195                 200                 205
Ala Pro Ile Pro Glu Gln Thr Arg Val Gly Val Val Ala Phe Pro Thr
    210                 215                 220
Ile Arg Asp Ala Ala Ser Thr Ala Met Gln Leu Ile Arg Lys Gly Ile
225                 230                 235                 240
Pro Val Gln Cys Met Glu Ile Leu Asp Asp Val Gln Met Asp Val Ile
                245                 250                 255
Asn Arg Ala Gly Gly Thr Gly Arg Thr Trp Lys Thr Leu Pro Thr Leu
            260                 265                 270
Phe Phe Lys Phe Ser Gly Thr Lys Ala Gly Val Ser Asp Ser Ile Asn
        275                 280                 285
Leu Thr Arg Glu Leu Ala Lys Ser Asn Asn Ala Ala Ser Phe Glu Phe
    290                 295                 300
Ala Arg Asp Asp Arg Asp Ala His Asp Leu Trp Ser Ala Arg Lys Gln
305                 310                 315                 320
Ser Leu Trp Ser Met Met Ser Leu Pro Lys Glu Arg Ser Glu Val Trp
                325                 330                 335
Ser Thr Asp Val Ala Val Pro Ile Phe Arg Leu Pro Asp Ile Ile Gly
            340                 345                 350
Trp Thr Ser Arg
        355
```

<210> 35908
<211> 291
<212> PRT
<213> A.fumigatus

<400> 35908

```
Leu Val Arg Leu Val Arg Asp Thr Ile Ile Ser Arg Leu Asn Cys Gly
1               5                   10                  15
Gly Ala Ala Leu Thr Phe Ala Glu Met Glu Phe Ile Lys Ala Glu Ile
            20                  25                  30
Pro Val Phe Ser Asn Ala Lys Asn Tyr Arg Lys His Pro Leu Val Pro
        35                  40                  45
Leu Val Val Pro Thr Val Asn Pro Gln His Leu Asp Leu Ile Pro His
```

```
    50                  55                  60
Gln Arg Lys Glu Phe Gly Leu Lys Lys Gly Phe Leu Val Cys Asn Ser
65                  70                  75                  80
Asn Cys Ala Val Ile Gly Val Val Ile Pro Phe Ala Ala Leu Gln Ala
                85                  90                  95
Lys Phe Gly Pro Val Glu Glu Val Glu Val Phe Thr Glu Gln Ala Val
            100                 105                 110
Ser Gly Ala Gly Tyr Pro Gly Val Pro Ser Met Asp Ile Met Asp Asn
        115                 120                 125
Val Ile Pro Tyr Ile Ser Gly Glu Glu Asp Lys Leu Glu Asn Glu Ala
    130                 135                 140
Gln Lys Ile Leu Gly Ser Leu Asn Ala Asp Ala Thr Ala Phe Asp Glu
145                 150                 155                 160
Gln Lys Gly Leu Thr Val Gly Ala Thr Cys Thr Arg Val Gly Val Thr
                165                 170                 175
Asp Gly His Met Ala Phe Val Ser Leu Arg Phe Lys Asn Arg Pro Gly
            180                 185                 190
Pro Ser Ala Glu Glu Val Lys Gln Ala Met Arg Glu Tyr Gln Ser Glu
        195                 200                 205
Ala Gln Lys Leu Gly Cys Pro Ser Ala Pro Arg Glu Ala Ile Lys Val
    210                 215                 220
Phe Asp Glu Pro Asp Arg Pro Gln Pro Arg Leu Asp Arg Asp Ile Ser
225                 230                 235                 240
Lys Gly Tyr Thr Val Ser Val Gly Arg Val Arg Glu Ala Ala Pro Gly
                245                 250                 255
Ser Tyr Phe Asp Leu Arg Phe Ala Ala Leu Ser His Asn Thr Val Ile
            260                 265                 270
Gly Ala Ala Gly Ser Ser Ile Leu Asn Ala Glu Val Ala Val Ile Lys
        275                 280                 285
Gly Tyr Ile
    290

<210> 35909
<211> 94
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (75)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35909
Ile Gly Ile Phe Lys Gly Arg Ser Ser Thr Thr Trp Val Gly Ser Pro
1               5                   10                  15
Ser Ile Leu Gly His Ile Gly Asp Gly Asn Phe His Ser Ser Ile Met
            20                  25                  30
Tyr Asp Arg Arg Asp Ala Asp Gln Met Glu Arg Val Glu Lys Leu Phe
        35                  40                  45
His Asp Met Val Asp Arg Ala Leu Glu Met Glu Gly Ser Cys Thr Val
    50                  55                  60
Ser Ile Thr Lys Arg Leu Ser Val Ser Thr Xaa Lys Leu Thr Trp Thr
65                  70                  75                  80
Asp Arg Ala Asn Thr Ala Trp Gly Trp Ala Arg Lys His Leu
                85                  90
```

<210> 35910
<211> 67
<212> PRT
<213> A.fumigatus

<400> 35910
Ser Ala Leu Gln Ser Arg Arg Thr Arg Leu Leu Ser Leu Ser Asp Ile
1 5 10 15
Ala Val Val Cys Phe His Leu Thr Ala Ser Leu Tyr Phe Leu Pro Ala
20 25 30
Glu Arg Phe Asp Ala Pro Met Ala Cys Ser Ser Arg Lys Gly Trp Ser
35 40 45
Ala Arg Arg Arg Ile Asn Arg Trp Pro Thr Glu Pro Val Ala Pro Arg
50 55 60
Thr Pro Leu
65

<210> 35911
<211> 204
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35911
Gln Thr Pro Xaa Cys Ala Thr Asp Ser Asn Ile Glu Leu Ala Trp Arg
1 5 10 15
Pro Ala Pro Tyr Glu Pro Glu Arg Cys Trp Asp Val Tyr Ala Ala Leu
20 25 30
Lys Thr Ser Thr Glu Arg Glu Leu Trp Arg Phe Ala Gln Glu Asn Asn
35 40 45
Pro Ala Phe Val Val Asn Ala Val Leu Pro Asp Phe Ile Val Gly Pro
50 55 60
Ile Ile His Ala Arg Gln Asn Gly Ser Thr Gly Arg Trp Val Lys Glu
65 70 75 80
Phe Phe Asp Asp Pro Val His Tyr Ser Lys Pro Leu Gln Thr Phe Ile
85 90 95
Pro Arg His Phe Val Asp Val Thr Asp Val Ala Leu Leu His Leu Ala
100 105 110
Gly Leu Thr His Glu Asp Val Gln Ser Glu Arg Leu Leu Ala Phe Ala
115 120 125
Gly Pro Phe Asn Phe Asn Ser Trp Leu His Val Phe Arg Gln Ile Asp
130 135 140
Pro Ala Lys Pro Trp Pro Ala Asp Asp Pro Asn Gln Val His Asp Arg
145 150 155 160
Ser Thr Val Asp Thr Arg Arg Ser Lys Glu Leu Leu Lys Arg Tyr Ser
165 170 175
Arg Leu Asp Phe Thr Ser Phe Phe Asp Ser Val Arg Asp Asn Cys Leu
180 185 190
Asn Ser Asp Pro Glu Trp Lys Arg Ser Asn Phe Pro
195 200

<210> 35912

<211> 202
<212> PRT
<213> A.fumigatus

<400> 35912
Gly Trp Ala Thr Phe Gly Ile Trp Val Tyr Tyr Ala Ala Val Phe Val
1 5 10 15
Met Glu Leu Asn His Val Ser Pro Val Leu Leu Ala Ala Trp Tyr Ser
20 25 30
Pro Val Ile Pro Ser Gly Leu Gly Ala Ala Leu Ala Val Gly Lys Leu
35 40 45
Leu Gly Arg Val Ser Ala Ala Trp Val Met Val Ile Gly Met Val Ala
50 55 60
Tyr Leu Ile Gly Ser Ile Leu Ile Ala Thr Met Pro Thr His Gln Ile
65 70 75 80
Tyr Trp Gly Asn Phe Phe Trp Ser Val Leu Ile Ile Cys Val Gly Met
85 90 95
Asp Ser Ser Phe Pro Ala Ala Thr Ile Ile Phe Ser Asp Ala Val Pro
100 105 110
Pro Lys Tyr Gln Gly Ile Gly Ala Ser Val Val Met Thr Ile Val Asn
115 120 125
Tyr Ser Ile Ser Leu Gly Leu Gly Phe Ala Gly Thr Val Glu Arg Glu
130 135 140
Ile Ser His Gly Gly His Thr Asp Asp Asp Arg Lys Lys Gly Tyr Arg
145 150 155 160
Gly Ala Phe Tyr Phe Glu Val Gly Leu Ala Gly Leu Gly Leu Ile Leu
165 170 175
Ser Leu Ala Phe Leu Val Lys Asp His Phe Arg Lys Lys Ala Lys Gln
180 185 190
Ala Ala Ala Ala Tyr Glu Asp Arg Ser Ala
195 200

<210> 35913
<211> 149
<212> PRT
<213> A.fumigatus

<400> 35913
Ala Asp Ser Lys Thr Leu Ser Pro Val Asp Arg Val Thr Tyr Phe Gln
1 5 10 15
Glu Thr Val Ala Lys Glu Ser Lys Pro Phe Ser Glu Asp Asp Met Lys
20 25 30
Asp Leu Val Val Arg Tyr Val Tyr Val Ile Thr Phe Pro Ala Gln Ser
35 40 45
His Ala Asp Thr Cys Leu Ala Arg Tyr Ile Asn Arg Ser Val Pro Glu
50 55 60
Ile Glu Gln Leu Gln Ser Glu Arg Arg Lys Gly Arg Pro Pro Ser Lys
65 70 75 80
Arg Glu Glu Ala Leu Leu Gln Arg Thr Glu Val Glu Asn Lys Glu Phe
85 90 95
Lys Thr Gly Phe Trp Met Pro Asp Leu Ser Gln Glu Ala Val Ile Lys
100 105 110
Gly Leu Ala Ser Trp Asn Gly Asp Trp Ser Ser Leu Ser Met Met Lys
115 120 125
Phe Ile Arg Ile Thr Lys Asp Gly Gly Lys Gln Pro Ser Ala Phe Pro
130 135 140

Pro Lys Gly Leu Ser
145

<210> 35914
<211> 71
<212> PRT
<213> A.fumigatus

<400> 35914
Met Thr Glu Ile Leu Ile Asp Tyr Ala Gly Leu His Gly Leu Leu Lys
1 5 10 15
Ser Ile Gln Lys Pro Cys His Val Lys Lys Phe Lys Gly Gln Thr Leu
20 25 30
Gly Val Asp Ala Tyr Gly Trp Leu His Arg Gly Thr Val Ala Cys Ala
35 40 45
Val Asp Leu Val Leu Asp Arg Pro Thr Thr Lys Tyr Val Ile Ser Gln
50 55 60
Gly Val Ser Arg Trp His Asp
65 70

<210> 35915
<211> 608
<212> PRT
<213> A.fumigatus

<400> 35915
Phe Leu Ser Arg His Val Glu Phe Val Leu Asn Arg Val Arg Met Leu
1 5 10 15
Leu Tyr Phe Gly Val Thr Pro Tyr Leu Val Phe Asp Gly Asp Asn Leu
20 25 30
Pro Ser Lys Ser Ser Thr Glu Ser Glu Arg Leu Gln Lys Arg Glu Ala
35 40 45
Ser Lys Ala Leu Gly Leu Glu Leu Gln Arg Lys Gly Arg Met Ala Glu
50 55 60
Ala Tyr Gln Glu Leu Gln Lys Ala Val Asp Val Thr Pro Tyr Met Ala
65 70 75 80
Arg Gln Leu Ile Glu Glu Leu Lys Lys Met Glu Val Gln Tyr Val Val
85 90 95
Ala Pro Tyr Glu Ala Asp Ala Gln Leu Val Tyr Leu Glu Arg Gln Gly
100 105 110
Ile Ile Asn Gly Ile Ile Ser Glu Asp Ser Asp Leu Leu Val Phe Gly
115 120 125
Ala Lys Arg Leu Leu Ser Lys Leu Asp Gln His Gly Asp Cys Ile Glu
130 135 140
Ile Asp Arg Ala Asp Phe Ala Ala Cys Arg Glu Val Asn Leu Ile Gly
145 150 155 160
Trp Thr Asp Ala Asp Phe Arg Arg Met Cys Ile Leu Ser Gly Cys Asp
165 170 175
Tyr Leu Pro Asn Ile Pro Arg Met Gly Leu Lys Thr Ala Tyr Arg Ser
180 185 190
Ile Arg Lys Tyr Lys Asn Val Glu Lys Ala Leu Arg Met Leu Gln Phe
195 200 205
Asp Gly Gln Phe His Val Pro Ala Gly Tyr Leu Glu Asn Phe Lys Gln
210 215 220
Ala Glu Leu Thr Phe Leu Tyr Gln Arg Val Phe Cys Pro Lys Ala Gly
225 230 235 240

```
Lys Leu Val Pro Leu Thr Gln Pro Glu Lys Asp Val Asn Leu Glu Glu
                245                 250                 255
Leu Pro Phe Ile Gly Arg Asp Val Asp Ala Glu Ile Ala Leu Gly Val
            260                 265                 270
Ala Leu Gly Asp Leu Asp Pro Thr Thr Lys Glu Gln Ile Val Leu Lys
        275                 280                 285
Pro Pro Ala Pro Gly Lys Met Ala Ser Gly Ile Thr Arg Arg Gln Thr
    290                 295                 300
Leu Gly Ser Ala Ala Glu Leu Lys Pro Lys Lys Pro Ile Ser Ala Phe
305                 310                 315                 320
Phe Thr Pro Lys Arg Met Pro Leu Ala Glu Leu Asp Pro Asn Ser Leu
                325                 330                 335
Thr Pro Ser Pro Ser Gln Gln Arg Leu Leu Glu Arg His Ala Asn Ser
            340                 345                 350
Ser Trp Glu Ser Ser Pro Ala Pro Ser Arg Pro Asp Val Thr Arg Ser
        355                 360                 365
Ala Ser Ala Leu Gly Ser Ser Asn Arg Leu Ser Ser Pro Leu Val Arg
    370                 375                 380
Ser Val Glu Arg Thr Ser Phe Leu Ala Arg Ala Ala Lys Ala Ser Thr
385                 390                 395                 400
Phe Gln Pro Ala Lys Arg Gln Arg Leu Cys Ala Asp Thr Glu Glu Glu
                405                 410                 415
Asn Leu Pro Glu Arg Ala Asp Cys Arg Ser Arg Phe Phe Ala Pro Cys
            420                 425                 430
Thr Asn Ser Ser Ser Pro Ser Gly Ser Lys Ala Ala Arg Thr Lys Arg
        435                 440                 445
Lys Ser Thr Leu Glu Val Phe Ser Asp Glu Val Ala Glu Gln Ile Met
    450                 455                 460
Thr Tyr Leu Pro Asp Pro Ala His Arg Ser Ser Asp Ser Lys Glu Gly
465                 470                 475                 480
Val Asp Ser Pro Arg Ser Ser Met Ser Asp Glu Asn Asp Gly Lys Pro
                485                 490                 495
Val Leu Ser Lys Tyr Ile Phe Lys Pro Gln Ser Lys Glu Ser Thr Ser
            500                 505                 510
Gly Ala Ser Arg Asn Pro Thr Leu Ser Thr Leu Ser Gly Pro Phe Pro
        515                 520                 525
Arg Arg Arg Leu Thr Pro Leu Gln Arg Leu Gly Gln Thr Ala Leu Ala
    530                 535                 540
Arg Pro Arg Ser Val Asn Ala Leu Pro Gln Thr Lys Ala Phe Val His
545                 550                 555                 560
Pro Ser Leu Val Glu Arg Ser Ala Thr Thr Ser Thr Gln Gly Ser Glu
                565                 570                 575
Asp Leu Ile Val Pro Asn Thr Asp Asp Glu Asp Asp Gly Asp Asp Thr
            580                 585                 590
Asn Lys Thr Gln Asp Pro Val Asn Leu Glu Gln Phe Leu Tyr Ala Arg
        595                 600                 605
```

<210> 35916
<211> 71
<212> PRT
<213> A.fumigatus

<400> 35916

```
Arg Ile Glu Ser Leu Arg Asp Tyr Phe Ser Gln Phe Gly Glu Val Gln
1               5                   10                  15
Glu Cys Thr Val Met Arg Asp Ser Ala Thr Gly Arg Ser Arg Gly Phe
```

```
            20                  25                  30
Gly Phe Leu Thr Phe Lys Asp Pro Lys Thr Val Asn Thr Val Met Val
        35                  40                  45
Lys Glu His Tyr Leu Asp Gly Lys Ile Val Arg Arg Ile Phe Cys Leu
    50                  55                  60
Phe Cys Arg Met His Gln Lys
65                  70
```

<210> 35917
<211> 436
<212> PRT
<213> A.fumigatus

<400> 35917

```
Gln Ile Asp Pro Lys Arg Ala Ile Pro Arg Asp Glu Gln Glu Lys Thr
1               5                   10                  15
Ser Lys Ile Phe Val Gly Gly Val Ser Gln Glu Ala Thr Glu Gln Glu
            20                  25                  30
Phe Lys Glu Phe Phe Thr Gln Phe Gly Arg Val Ile Asp Ala Thr Leu
        35                  40                  45
Met Ile Asp Lys Asp Thr Gly Arg Pro Arg Gly Phe Gly Phe Val Thr
    50                  55                  60
Phe Asp Ser Glu Ala Ala Val Glu Ala Ala Leu Ser Arg Pro Leu Ala
65                  70                  75                  80
Ile Cys Gly Lys Pro Ile Glu Val Lys Lys Ala Gln Pro Arg Gly Asn
                85                  90                  95
Leu Arg Asp Glu Glu Asp Arg Arg Asn Arg Arg Gly Arg Asp Phe Arg
            100                 105                 110
Asp Gly Gly His Gly Gly Val Asp Gly Ser Gln Gln Gln Gln Gly Met
        115                 120                 125
Gln Gly Gln Ala Gly Met Pro Ala Gly Leu Thr Pro Gln Met Met Ala
    130                 135                 140
Gln Tyr Trp Gln Arg Met Gln Gln Tyr Phe Ala Leu Met Gln Gln Gln
145                 150                 155                 160
Met Ala Val Ala Ala Ala Gln Gly Gln Gly Met Gly Ala Met Gly Met
                165                 170                 175
Gly Ala Met Asn Pro Ala Met Met Gln Gln Met Gln Gln Met Gln Lys
            180                 185                 190
Met Gln Gln Met Gln Met Ala Asn Asn Gln Gln Gln Gln Pro Gln Gln
        195                 200                 205
Gln Gly Ser Leu Ser Pro Pro Ser Gln Ser Pro Thr Pro Gln Met Gln
    210                 215                 220
Asn Met Met Asn Pro Ala Met Met Gln Gln Met Gln Asn Gln Val Gln
225                 230                 235                 240
Gly Asn Asn Met Gly Ala Met Gln Gly Gln Met Gly Asn Asn Ala Gly
                245                 250                 255
Asn Met Asn Met Gly Ala Asn Tyr Pro Gly Ala Arg Gly Gly Pro Gly
            260                 265                 270
Tyr Asn Ala Gln Glu Gln Leu Ala Phe Glu Gln Gln Lys Tyr Glu Gln
        275                 280                 285
Gln Gln Gln Gln Arg Arg Ala Met Glu Ser Arg Ala Phe Ser Pro Tyr
    290                 295                 300
Gln Gln Gly Gly Pro Thr Ser Trp Glu Gly Met Tyr Asp Glu Val Pro
305                 310                 315                 320
Gln Pro Asn Ile Pro Thr Gly Pro Gln Gly Met Asn Arg Ala Gly Ser
                325                 330                 335
```

```
Ile Gly Arg Gly Thr Tyr Ser Phe Asp Leu Val Thr Gly Ile Thr Pro
            340                 345                 350
Ile Asn Gly His Leu Tyr Pro Leu His Thr Ala Asn Val Lys Leu Gln
        355                 360                 365
Glu Gln His His Ser Arg Leu Pro Ala Pro Arg Leu Pro Thr Pro Gln
    370                 375                 380
Leu Ala Leu Lys Met Leu Glu Ser Pro Val Arg Thr Ile Val Ala Ala
385                 390                 395                 400
Val Ala Glu Ala Ile Val Val Ser Ile Leu Thr Leu Val Asp Arg Ile
                405                 410                 415
Gly Ala Arg Ser Leu Ser Ile Leu Thr Cys Leu Phe Ala Phe Phe Leu
            420                 425                 430
Val Ser Ser Leu
        435
```

<210> 35918
<211> 440
<212> PRT
<213> A.fumigatus

<400> 35918

```
Arg Ser Ala Phe Pro Ser Ser Pro Gly Gly Glu Asp Gly Asp Val Met
1               5                   10                  15
Gly Trp Phe His Ser Met Ala Thr Asn Gly Met Leu Ser Val Ser Tyr
            20                  25                  30
Pro Pro Ile Tyr Arg Ser Phe Thr Lys Asn Phe Ala Phe Ser Thr Gly
        35                  40                  45
Leu Ile Pro Trp Gly Asp Met Gln Thr Ala Ile Asp Asn Phe Arg Ala
    50                  55                  60
Ala Thr Gly Gly Asn Leu Thr Glu Asn Ser Tyr Glu Phe Leu Arg Asn
65                  70                  75                  80
Ala Thr Leu Thr Tyr Ser Asp Gly Thr Ser Ala Asn Thr Thr Ser Lys
                85                  90                  95
Val Lys Arg Gly Leu Ser Leu Ile Val Gly Ala Val Asp Leu Val Thr
            100                 105                 110
Arg Asp Leu Ser Gly Ser Phe Ser Ser Asp Thr Thr Ser Ser Asn Ser
        115                 120                 125
Thr Asp Gly Asp Glu Ser Ala Phe His Lys Ala Val Ser Gly Ile Glu
    130                 135                 140
Ala Tyr Ala Glu Gln Leu Thr Ile Pro Gln Ala Asn Thr Phe Met Thr
145                 150                 155                 160
Val Leu Leu Ile Phe Ala Ile Val Val Ala Ser Ile Ala Val Gly Ile
                165                 170                 175
Leu Leu Leu Lys Val Ile Leu Glu Ile Trp Ala Leu Tyr Gly Ser Phe
            180                 185                 190
Pro Asp Lys Leu Lys Asp Phe Arg Lys Asp Tyr Trp Gly Leu Leu Ala
        195                 200                 205
Arg Thr Ile Thr Asn Leu Ile Leu Ile Leu Tyr Gly Met Trp Val Leu
    210                 215                 220
Tyr Cys Ile Tyr Gln Leu Thr Thr Gly Asp Ser Trp Ala Ala Lys Val
225                 230                 235                 240
Leu Ala Ala Val Thr Leu Ala Val Phe Thr Gly Val Leu Met Phe Phe
                245                 250                 255
Gly Leu Arg Ile Met His Leu Ala Arg Lys Tyr Lys Lys Thr Glu Gly
            260                 265                 270
Asp Thr Ser Ala Leu Tyr Glu Asp Arg Glu Thr Trp Arg Lys Tyr Ser
```

```
        275                 280                 285
Leu Phe Tyr Asp Ser Tyr Lys Lys Asp Tyr Trp Trp Leu Phe Ile Pro
    290                 295                 300
Ala Ile Val Tyr Met Phe Val Lys Gly Cys Val Ile Ala Gly Ala Asn
305                 310                 315                 320
Gly His Gly Leu Val Gln Ser Ala Gly Gln Leu Ile Val Glu Ala Leu
                325                 330                 335
Met Leu Gly Leu Leu Leu Trp Asn Arg Pro Tyr Val Ala Lys Ser Ser
            340                 345                 350
Gln Trp Ile Asn Ile Thr Ile Gln Val Val Arg Val Leu Ser Val Val
        355                 360                 365
Cys Val Leu Val Phe Val Glu Glu Leu Gly Leu Ser Gln Thr Thr Lys
    370                 375                 380
Thr Val Thr Gly Ile Val Leu Ile Ala Val Gln Ser Thr Leu Thr Gly
385                 390                 395                 400
Ile Leu Ala Ile Leu Ile Ala Val Asn Ala Ile Ile Leu Cys Val Arg
                405                 410                 415
Glu Asn Pro His Ala Lys Arg Gln Arg Glu Ala Gly Lys Ser Ile Val
            420                 425                 430
Arg Asn Ser Phe Thr Leu Val Gly
        435                 440
```

<210> 35919
<211> 208
<212> PRT
<213> A.fumigatus

<400> 35919

```
Gly Gly Asp Ser Lys Ile Pro Pro Pro Ser Ala Phe Cys Gly Phe Thr
1               5                  10                  15
Asn Ile Asn His Trp Thr Leu Ser Ala Pro Leu His Thr Ala Ala Ser
            20                  25                  30
Ser Thr Ala Ala Asn Arg Ser Ile Val Gln Leu Asn Pro Glu Arg Leu
        35                  40                  45
Ser Pro Val Tyr Thr Val Phe Tyr Arg Ser Pro Lys Tyr Leu Phe Ser
    50                  55                  60
Ile Phe Gly Arg Gly Pro Leu Phe Ser Val Ala Leu Thr Ile Ile Asp
65                  70                  75                  80
Arg Leu Phe Glu Gly Thr Leu Pro Glu Ser Val Thr Ile Ile Thr Met
                85                  90                  95
Ser Ala Arg Pro Leu Ser Gln Ala Leu Arg Ala Arg Cys Leu Phe Arg
            100                 105                 110
Gly Pro Gln Asn Thr Lys Gly Phe Ser Thr Arg Asn Thr Leu Arg Ala
        115                 120                 125
Ala Asp His Gly Asn His Tyr Asp Pro Pro Thr Gly Trp Leu Phe Gly
    130                 135                 140
Val Lys Pro Gly Gln Lys Tyr Val Lys Glu Gly Trp Glu Asn Ile Trp
145                 150                 155                 160
Tyr Tyr Gly Phe Ile Gly Ser Leu Leu Ala Ala Gly Val Ala Tyr Ile
                165                 170                 175
Phe Lys Pro Asp Thr Ser Tyr Ala Ser Ser Pro Leu Ser Ala Ile His
            180                 185                 190
Gly Arg Pro Phe Pro Ser Glu Arg Leu Tyr His Ile Tyr Leu Ile Ile
        195                 200                 205
```

<210> 35920

<211> 101
<212> PRT
<213> A.fumigatus

<400> 35920
Ser Pro Asn Ala Glu Gln Ala Leu Phe Leu Pro Glu Ala Ala Asp Tyr
1 5 10 15
Ile Ala Ser Ser Pro Ala Glu Ser Ile Ser Leu Val Arg Ser Val Gln
20 25 30
Asp Ser Val Phe Val Gln Gly Leu Gln Arg Glu Ala Arg Gln Ala Asn
35 40 45
Leu His Ile Asn Val Gly Ile His Glu Pro Ala Pro Asn Gly Lys Val
50 55 60
Lys Asn Thr Leu Ile Trp Ile Asp Asp Asn Gly Ile Ile Thr Gln Arg
65 70 75 80
Tyr Gln Lys Ile His Leu Phe Asp Val Asp Ile Lys Asp Gly Pro Val
85 90 95
Leu Lys Glu Ser Ala
100

<210> 35921
<211> 127
<212> PRT
<213> A.fumigatus

<400> 35921
Ala His Asn Leu Thr Tyr Tyr Leu Gln Leu Arg Phe Pro Glu Ile Ser
1 5 10 15
Leu Ala Leu Lys Arg Gln Asn Ala Gln Ile Ile Thr Tyr Pro Ser Ala
20 25 30
Phe Thr Val Pro Thr Gly Gln Ala His Trp Glu Ala Leu Leu Arg Ala
35 40 45
Arg Ala Ile Glu Thr Gln Ala Tyr Val Ile Ala Ala Ala Gln Ser Gly
50 55 60
Pro His Asn Glu Lys Arg Arg Ser Tyr Gly His Ser Met Ile Val Asn
65 70 75 80
Pro Trp Gly Glu Ile Val Ala Lys Leu Gly Asp Glu Tyr Arg Glu Pro
85 90 95
Gly Ile Ala Thr Ala Glu Ile Asp Leu Asn Leu Leu Glu Lys Val Arg
100 105 110
Arg Glu Met Pro Leu Leu Arg Arg Thr Asp Ile Tyr Pro Glu Val
115 120 125

<210> 35922
<211> 185
<212> PRT
<213> A.fumigatus

<400> 35922
Glu Leu Leu His Leu Ile Ser Val Met Met Thr Trp Met Arg Val Phe
1 5 10 15
Ser Pro Trp Pro Lys Pro Ser Glu Asp Pro Phe Leu Glu Leu Thr Arg
20 25 30
Pro Asn Asn Tyr Thr Asn Pro Met Asn Ala Gln Ala Pro Val Glu Ser
35 40 45
Thr Met Glu Gln Arg Arg Arg Gln Leu Gly Thr Leu Gly Asp Ser Asn

```
    50                  55                  60
His Asn Ala Arg Val Ser Asp Ser Gly Asn Arg Glu Leu Ser Phe Asp
65                  70                  75                  80
Lys Ala Leu Asn Ser Asp Glu Phe Asp Asp Asp Phe Asp Asp Ile Glu
                85                  90                  95
Asp Leu Leu Ala Glu Cys Asp Gly Thr Ala Gly Leu Ile Pro Pro Gly
            100                 105                 110
Pro Thr Ala Ser Glu Lys Leu Leu Ala Asn Glu Gln Pro Cys Ile Lys
        115                 120                 125
Gln Asn Thr Lys Arg Pro Ser Glu Thr Glu Gly Phe Asn Gly Thr Ser
    130                 135                 140
Lys Glu Asn Leu Glu Thr Ser Ser Gly Asp Glu Phe Asp Asp Asp Asp
145                 150                 155                 160
Phe Asp Val Glu Ala Ile Glu His Phe Met Gln Pro Gly Arg Asn Gly
                165                 170                 175
Ser Val Lys Arg Trp Ser Phe Thr Pro
            180                 185

<210> 35923
<211> 69
<212> PRT
<213> A.fumigatus

<400> 35923
Glu Tyr Trp Pro His Gly Ser Asp Ala Leu Lys Tyr Glu Ile Asn Asn
1               5                   10                  15
Ala Glu Lys Tyr Ile Pro Val Ser Leu Cys Ser Phe Glu Ser Lys Ala
            20                  25                  30
Asp Asp Lys Gln Ser Leu Leu Val Arg Cys Leu Cys Cys Asn Asn Thr
        35                  40                  45
Cys Tyr Leu Ala Gly Val Glu Leu Thr Asn Cys Phe Met Ser Arg Ser
    50                  55                  60
Ser Thr Pro Lys Gln
65

<210> 35924
<211> 181
<212> PRT
<213> A.fumigatus

<400> 35924
Gly Ala Ile Cys Leu Asp Thr Leu Ser Ser Ala Trp Ser Pro Val Leu
1               5                   10                  15
Thr Ile Lys Ser Ala Leu Leu Ser Leu Gln Ser Leu Leu Ser Thr Pro
            20                  25                  30
Glu Pro Lys Asp Pro Gln Asp Ala Glu Val Ala Thr Met Leu Leu Arg
        35                  40                  45
Arg Pro Lys Glu Phe Glu Arg Val Ala Arg Glu Trp Ala Val Ile His
    50                  55                  60
Ala Gly Ala Pro Arg Lys His Ala Gly Glu Gly Ser Gly Gly Ala Thr
65                  70                  75                  80
Asp Glu Thr Leu Arg Gln Glu Glu Leu Arg Ala Lys Ala Glu Gln Glu
                85                  90                  95
Arg Glu Asp Leu Ser Lys Tyr Val Thr Thr Gln Val Pro Cys Phe Val
            100                 105                 110
Thr Ser Arg Glu Ser His Leu Met His Val Asn Arg Tyr Asp Gly Tyr
```

```
        115                 120                 125
Asn Lys Asp Leu Ile Asp Arg Phe Cys Ser Met Gly Phe Asp Val Asp
    130                 135                 140
Arg Val Val Ala Ala Phe Lys Phe Tyr Gly Ile Asp Arg Met Asn Gly
145                 150                 155                 160
Glu Asp Tyr Glu Leu Asp Glu Ala Tyr Met Gly Asp Ile Thr Ala Arg
                165                 170                 175
Leu Leu Gly Glu Pro
            180
```

<210> 35925
<211> 169
<212> PRT
<213> A.fumigatus

<400> 35925

```
Arg Lys Ser Ile Ser Leu Gly Ile Lys Lys Ile Tyr His Leu Ile Ile
1               5                   10                  15
Ala Ala Ile Gln Phe Phe Leu Leu Leu Ala Phe Phe Pro Ile Ala His
            20                  25                  30
Val Arg Gly Ala Glu Arg Ser Ser Ser Ile Lys Ser Arg Met Phe Glu
        35                  40                  45
Asp Asp Ile Tyr Arg Thr Ser Ser Gln Tyr Lys Leu Trp Ser Phe Thr
    50                  55                  60
Glu Ala Ser Leu Arg Ser Leu Arg Glu Asn Thr Asn Ala Val Ala Ser
65                  70                  75                  80
Gln Arg Val Arg Ala Ala Leu Arg Arg Ala Arg Glu Ala Arg Gln Ser
                85                  90                  95
Ala Asn Pro Ser Ala Ala Gly Thr Ala Thr Ala Gly Thr Thr Ala Asp
            100                 105                 110
Gly Lys Gly Ala Asp Glu Asn Asp Ile Asp Cys Leu Thr Pro Glu Glu
        115                 120                 125
Glu Thr Glu Leu Val Arg Phe Tyr Cys Glu Lys Ala Val Glu Leu Ala
    130                 135                 140
Asp Thr Tyr Lys Pro Pro Leu Pro Thr Thr Val Arg Val Arg Ile Ser
145                 150                 155                 160
Ser Asp Val Glu Ala His Asp Arg Glu
                165
```

<210> 35926
<211> 323
<212> PRT
<213> A.fumigatus

<400> 35926

```
Gln Ala Thr Ala Ile Gln Tyr Ile Arg Arg Phe Tyr Leu Ser Asn Ser
1               5                   10                  15
Pro Met Thr Tyr Ser Pro Lys Thr Ile Met Pro Cys Ala Leu Phe Leu
            20                  25                  30
Ala Thr Lys Thr Asp Asn Phe Tyr Met Ser Leu Arg Gln Phe Ala Glu
        35                  40                  45
Lys Val Pro Gly Asp Thr Thr Ala Glu Asp Ile Ile Ala Pro Glu Phe
    50                  55                  60
Leu Ile Met Gln Ser Leu Arg Phe Thr Phe Asp Val Arg His Pro Phe
65                  70                  75                  80
Arg Gly Leu Glu Gly Gly Val Met Glu Leu Gln Ala Met Ala Glu Gly
```

```
                85                  90                  95
Leu Gly Gln Pro Ala Pro His Leu Pro His Gln Thr Ser Glu Asp Leu
            100                 105                 110
Arg Arg Gly Leu Leu Ala Val Pro Pro Pro Pro Asn Ala Pro Gln Ser
        115                 120                 125
Ser Ser Ile Thr Asp Arg Ile Ala Arg Ala His Thr Thr Thr Arg Glu
    130                 135                 140
Leu Leu Lys Thr Ala Ala Gln Met Thr Asp Ala Tyr Phe Leu Tyr Thr
145                 150                 155                 160
Pro Ser Gln Ile Trp Leu Ala Ala Phe Met Leu Ala Asp Arg Pro Leu
                165                 170                 175
Ala Glu Tyr Tyr Leu Asp Thr Lys Leu Gly Gly Pro Thr Ala Glu Ser
            180                 185                 190
Ala Asn Ala Gln Ala Gly Asn Pro Leu Tyr Glu Leu Arg Val Lys Leu
        195                 200                 205
Leu Arg Thr Leu Asn Gln Cys Ala Ala Leu Leu Gln Ser Tyr Lys Pro
    210                 215                 220
Leu Asn Ser Asp Pro Glu Gln Met Lys Asn Leu Lys Arg Ile Gly Lys
225                 230                 235                 240
Lys Phe Tyr Tyr Cys Gln Asn Pro Glu Lys Ile Ser Leu Ala Gly Gln
                245                 250                 255
Lys Arg Ile Pro Ala Ala Ala Ala Ala Ala Ala Ala Ser Ala Gly Glu
            260                 265                 270
Gly Ala Thr Ser Glu Ser Glu Val Glu Arg Gln Ala Lys Lys Arg Lys
        275                 280                 285
Leu Glu Arg Glu Gln Arg Asp Arg Glu Ala Arg Asp Ile Phe Gly Gly
    290                 295                 300
Glu Leu Val Ala Gln Arg Val Lys Glu Gly Gln Val Gly Gln Gln Gln
305                 310                 315                 320
His Pro Ser
```

<210> 35927
<211> 63
<212> PRT
<213> A.fumigatus

<400> 35927

```
Lys Gln Ser Lys Ile Gly Leu Ala Ser Ile Phe Pro Lys Ala Val Lys
1               5                   10                  15
Pro His Ala Pro Ala Ala Leu Phe Thr Gln Ser Ser Lys Trp His Arg
            20                  25                  30
Asp Leu Leu Ser Glu Ile Lys Asn Ser Thr Thr Pro Asn Tyr Asn Tyr
        35                  40                  45
Thr Phe Ala Lys Thr His Arg Arg Val Leu Met Ala Ser Thr Cys
    50                  55                  60
```

<210> 35928
<211> 84
<212> PRT
<213> A.fumigatus

<400> 35928

```
His Tyr Phe Gln Ala Gly Pro His Met His Arg His Ser Glu Met Cys
1               5                   10                  15
Ser Lys Ala Asp Ser Ser Ser Ser Ile Cys Ile Ser Ala Lys Ala Leu
```

```
            20                  25                  30
Phe Tyr Leu Glu Ala Leu Leu Tyr Arg His Ser Ile Met Leu Asp Glu
        35                  40                  45
Ser Ala Met Ser Ser Tyr Asp Ala Pro His Asp Ser Leu Lys Gln Ala
    50                  55                  60
Arg Lys Ile Val Tyr Ile Val Lys Tyr Ile His Thr Tyr Ile His Thr
65                  70                  75                  80
Tyr Ile Tyr Ile
```

<210> 35929
<211> 163
<212> PRT
<213> A.fumigatus

<400> 35929

```
Asp Ser Thr Phe Ser Arg Lys Ile Ala Ser Phe Lys Ala Val Thr Ser
1               5                   10                  15
Pro Leu Leu Thr Val His Ala Gly Arg Leu Val Arg Leu Ile Pro Asp
            20                  25                  30
Ser Pro Pro Asn Ser Glu Arg Ala Ala Ile Lys Thr Leu Phe Asn His
        35                  40                  45
Arg Leu Pro Ser Asp Ala Val Ala Ala His Gly Ala Trp Gln Ser Ile
    50                  55                  60
Val Asp Gly Thr Ser Glu Leu Trp Lys Thr Ile Thr Pro Ala Lys Lys
65                  70                  75                  80
Glu Leu Ile Arg Ser Phe Phe Asn Val Leu Asn Leu Glu Ile Leu Lys
                85                  90                  95
Arg Ala Arg Pro Pro Ser Ser Thr Phe Asp Phe Thr Ser Ala Ser Val
            100                 105                 110
Gly Asn Leu Phe Leu Thr Gly Ala Arg Leu Phe Ser Gly Ser Phe Glu
        115                 120                 125
Ser Ala Ile Tyr Leu Leu Gly Ser Ile Cys Gly Val Gln Ser Asp Val
    130                 135                 140
Val Arg Val Ile Pro Ala Ile Asn Ser Tyr Ser Pro Arg Gly Arg Lys
145                 150                 155                 160
Asp Pro Arg
```

<210> 35930
<211> 394
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (312)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35930

```
Ile Cys Lys Leu Thr Ile Ile Ser Gln Phe Lys Gly Gly Asn Asp Asp
1               5                   10                  15
Leu Arg Gln Asp Ala Ile Met Glu Gln Val Phe Glu Gln Val Ser Ser
            20                  25                  30
Leu Leu Lys Asp His Gln Ala Thr Gln Gln Arg Lys Leu Gly Ile Arg
        35                  40                  45
```

```
Thr Tyr Lys Val Leu Pro Leu Thr Ser Asn Ala Gly Ile Ile Glu Phe
    50                  55                  60
Val Pro His Thr Ile Pro Leu His Asp Tyr Leu Met Pro Ala His Gln
65                  70                  75                  80
Arg Tyr Phe Pro Lys Asp Met Lys Pro Asn Val Cys Arg Lys His Ile
                85                  90                  95
Ser Asp Val Gln Thr Arg Ser Phe Glu Gln Arg Val Lys Thr Phe Arg
            100                 105                 110
Gln Ile Thr Asp His Phe His Pro Val Met Arg Tyr Phe Phe Met Glu
        115                 120                 125
Lys Phe Asn Ser Pro Asp Asp Trp Phe Ser Lys Arg Leu Ser Tyr Thr
    130                 135                 140
Arg Ser Thr Ala Ala Ile Ser Ile Leu Gly His Val Leu Gly Leu Gly
145                 150                 155                 160
Asp Arg His Gly His Asn Ile Leu Leu Asp Glu Arg Thr Gly Glu Val
                165                 170                 175
Val His Ile Asp Leu Gly Val Ala Phe Glu Gln Gly Arg Val Leu Pro
            180                 185                 190
Val Pro Glu Val Val Pro Phe Arg Leu Thr Arg Asp Leu Val Asp Gly
        195                 200                 205
Met Gly Ile Thr Lys Thr Glu Gly Val Phe Arg Arg Cys Cys Glu Phe
    210                 215                 220
Thr Leu Glu Ala Leu Arg Gln Glu Ser Tyr Ser Ile Met Thr Ile Leu
225                 230                 235                 240
Asp Val Leu Arg Tyr Asp Pro Leu Tyr Ser Trp Thr Leu Ser Pro Leu
                245                 250                 255
Arg Met Lys Arg Met Gln Asp Ala Gln Glu Ala Gly Asp Gly Pro Pro
            260                 265                 270
Met Ile Ser Gly Ala Ala Glu Asp Gln Arg Ser Ala Asn Glu Pro Ser
        275                 280                 285
Glu Ala Asp Arg Ala Leu Thr Val Val Ala Lys Lys Leu Ser Lys Thr
    290                 295                 300
Leu Ser Val Thr Ala Thr Val Xaa Glu Leu Ile Gln Gln Ala Thr Asp
305                 310                 315                 320
Glu Arg Asn Leu Ala Val Leu Tyr Cys Gly Met Ser Leu Glu Leu Leu
                325                 330                 335
Ser Leu Thr Arg Leu Lys Ala Asn Ile Ile Phe Arg Leu Gly Arg Ile
            340                 345                 350
Cys Ile Gly Thr Gln Lys Cys Val Ala Lys Pro Ile Leu Pro Val Arg
        355                 360                 365
Tyr Val Tyr Pro Pro Arg Pro Phe Ser Thr Trp Arg Pro Cys Cys Ile
    370                 375                 380
Ala Ile Pro Ser Cys Leu Thr Asn Arg Gln
385                 390
```

<210> 35931
<211> 79
<212> PRT
<213> A.fumigatus

<400> 35931

```
Ala Gln Val Thr Met Ser Thr Val Ser Pro Asn Arg Gly Ile Val Val
1               5                   10                  15
Phe Ser Gly Gly Ser Ala Ala Asn Asn Leu Val Asp Val Phe Gly Arg
            20                  25                  30
Ile Arg Glu Ser Lys Asp Cys Leu Leu Ser Tyr Ile Ile Pro Ile Ser
```

```
        35                  40                  45
Asp Asn Gly Gly Ser Ser Ser Glu Leu Ile Arg Ile Phe Gly Gly Pro
    50                  55                  60
Gly Ile Gly Asp Val Arg Ser Lys Thr Gln His Ser Gln Glu Arg
65                  70                  75

<210> 35932
<211> 442
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (416)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35932
Ser Ile Met Leu Ile Thr Asn Pro Ala Leu Leu Gly Ile Leu Ala Ser
1               5                   10                  15
Leu Val Pro Leu Ala Leu Gly Ala Pro Asn Gln Pro Ile Gln Ala Arg
            20                  25                  30
Ser Arg Lys Cys Val Ile Pro Ser Ser Tyr Ala Ser Ser His Gly Thr
        35                  40                  45
Ala Asp Asp Ser Pro Ala Val Ala Ser Ala Phe Ala Gln Cys Ala Glu
    50                  55                  60
Asn Ser Val Ile Val Phe Gln Glu Gly Val Asp Tyr Asn Ile Phe His
65                  70                  75                  80
Pro Ile Lys Ala Thr Asn Leu Ser Asn Val Glu Ile Arg Val Leu Gly
                85                  90                  95
Asn Leu His Leu Pro Gln Asp Ile Thr Ala Val Gln Asn Ile Val Lys
            100                 105                 110
Ser Gly Gln Ser Thr Trp Phe Thr Phe Gln Gly Pro Arg Val Asp Trp
        115                 120                 125
Thr Gly Ala Asp Asp Ile Lys Asn Gly Trp Ile Asn Ser Tyr Gly Gln
    130                 135                 140
Ala Trp Trp Asp Ala Asn Pro Ala Asn Ser Ser Ser Phe Pro Asn Arg
145                 150                 155                 160
Pro His Leu Met Ser Tyr Lys Thr Ser Gln Ala Ser Ile Lys Asn Phe
                165                 170                 175
Arg Ser Arg Lys Pro Ile Ala Trp Asn Val Lys Leu Gln Gly Asp Asp
            180                 185                 190
Ile Thr Val Ser His Ala Ile Val Asp Ala Thr Ser Thr Gly Gly Phe
        195                 200                 205
Pro Phe Asn Thr Asp Gly Phe Asp Val Glu Gly Thr Asn Ile Ser Ile
    210                 215                 220
Thr Asp Ser Val Met Phe Asn Gly Asp Asp Ala Ile Ala Val Asn Thr
225                 230                 235                 240
Pro Ser His Asn Ile Val Phe Ala Arg Asn Thr Ile Gly Tyr Gln Ser
                245                 250                 255
His Gly Met Ser Ile Gly Ser Leu Gly Lys Asp Pro Thr Asp Phe Ala
            260                 265                 270
Asn Ile Thr Asn Leu Arg Phe Glu Asp Val Thr Val Ile Asp Ala Leu
        275                 280                 285
Tyr Ala Ala Arg Phe Lys Ser Trp Ser Gly Gly Arg Gly Leu Val Lys
    290                 295                 300
Asn Val Val Trp Lys Asn Ile Arg Thr Phe Asn Val Thr Phe Pro Ile
```

```
305                 310                 315                 320
Phe Val Thr Gln Ser Tyr Ser Asp Gln Ser Ala Ser Arg Ser Gly Thr
                325                 330                 335
Ile Asp Pro Phe Ser Ser Val Met Met Glu Asp Phe Thr Trp Ser Asp
            340                 345                 350
Phe Ser Gly Thr Ile Asn Thr Tyr His Pro Gly Asp Gly Ser Cys Val
        355                 360                 365
Thr Asp Pro Cys Trp Tyr Asn Val Gly Leu Pro Asn Leu Lys His Thr
    370                 375                 380
Glu Ala Ile Val Leu Glu Cys Asn Thr Glu Ser Ser Cys Lys Asn Phe
385                 390                 395                 400
Arg Thr Glu Gly Ile Arg Leu His Pro Gln Ser Lys Asp Ser Pro Xaa
                405                 410                 415
Val Ile Cys Met Lys Ala Thr Ala Glu Leu Asn Pro Lys Leu Gly Phe
            420                 425                 430
Glu Cys Lys Asn Gly Thr Phe Val Pro His
        435                 440
```

<210> 35933
<211> 78
<212> PRT
<213> A.fumigatus

<400> 35933

```
Gln Gly Tyr Lys Ser Ala Thr Ala Gln Gln Gln Pro Gly Pro Pro Ser
1               5                   10                  15
Asn Pro Thr Ser Pro Ser Ser Ala Pro Ala Tyr Arg Gln Ser Asn Pro
            20                  25                  30
Ser Ser Pro Thr Cys Ala Arg Ala Cys Ser Leu Arg Ala Arg Ala Arg
        35                  40                  45
Ala Arg Ala Arg Ala Thr Val Asn Ala Asn Ala Asn Ala Lys Lys Thr
    50                  55                  60
Tyr Pro Leu Ser Thr Arg Ser Val Ser Ile Thr Arg Ser Leu
65                  70                  75
```

<210> 35934
<211> 92
<212> PRT
<213> A.fumigatus

<400> 35934

```
Tyr Leu Thr Trp Val Thr Gly Ser Thr Gln Ser Gln Arg Ile Met Ala
1               5                   10                  15
Ser Thr Ser Ala Ser Pro Ser Leu Ser Ser Asn Ser Thr Pro Asn Ile
            20                  25                  30
Ser Ala Ser Asp Ala Val Leu His Leu Asn Ser Ala Thr Arg Ile Asp
        35                  40                  45
Ala Pro Leu Gln Asp Val Trp Asn Ala Leu Ile Asp Thr Ser Thr Trp
    50                  55                  60
Pro Arg Trp Asn Thr Phe Val Pro Arg Val Thr Ile Arg Glu Gln Pro
65                  70                  75                  80
Asp Thr Leu Asp Ala Ser Pro Asp Ala Leu Ser Pro
                85                  90
```

<210> 35935
<211> 234

<212> PRT
<213> A.fumigatus

<400> 35935
Arg Ala His Pro Ala Ala Thr Met Gly Ser Asn Asp Thr Thr Glu Lys
1 5 10 15
Leu Phe His Ile Leu Leu Thr Thr Ser His Leu Gln Lys Asn Pro Asn
20 25 30
Asn Val Val Glu Lys Val Arg Ile Pro Gly Thr Tyr Thr Thr Val Gln
35 40 45
Ala Ala Lys Ala Ala Ala Tyr Arg Cys Leu Phe Asp Ala Gly Tyr Glu
50 55 60
Lys Glu Trp Phe Thr Thr Tyr Glu Thr Lys Pro Glu Ile Phe Glu Asn
65 70 75 80
Lys Asp Leu Pro Glu Arg Ser Gly Leu Ala Val Phe Ala Val Ala Pro
85 90 95
Asp Gly Thr Glu Phe Arg Val His Ile Ile Thr Thr Pro Lys Asp Asp
100 105 110
Lys Leu Leu Asp Glu Val Ile Glu Gly His Val Thr Lys Pro Leu Tyr
115 120 125
Tyr Val Val Gln Ala Asn Val Glu Tyr Ser Ala Asp Glu Gly Ser Arg
130 135 140
Val Arg Asp Ile Asp Ile Glu Gly Val Phe Leu Thr Tyr Gln Glu Ala
145 150 155 160
Arg Asp Leu Ala Ser Arg Val Leu Leu Ser Lys Glu Asn Ala Val Thr
165 170 175
Lys Glu Ser Phe Ala Glu Tyr Thr Glu Ala Ala Ala Thr Glu Lys Asp
180 185 190
Cys Gly Tyr Gly Glu Asn Val Val Val Arg Ala Val Ser Glu Tyr Gly
195 200 205
Thr Asn Tyr Leu Ile Ser Val Ile Lys Asn Gln Glu Leu Glu Ala Val
210 215 220
His Leu Ala Glu Ala Ala Met Arg Ile Leu
225 230

<210> 35936
<211> 275
<212> PRT
<213> A.fumigatus

<400> 35936
Glu Thr Pro Ala Phe Asp Arg His Pro Leu Thr Leu His Gln Ser Gln
1 5 10 15
Phe Glu Phe Gln Ile Ser Pro Ser Leu Arg Thr Lys Pro Ala Ser Ile
20 25 30
Gly Asp Thr Phe Gln Ser Gly Asp Ser Ala Ser Pro Lys Gly Phe Gly
35 40 45
Pro Gly Ser Asp Ile Ala Asn Thr Asp Pro Asn Leu Val Ile Thr Ile
50 55 60
Ile Asn His Thr His Leu Leu Val Ile Asn Lys Phe Pro Val Phe Arg
65 70 75 80
Pro Gln Leu Leu Leu Leu Thr Cys Asp Ser Tyr Arg Arg Gln His Glu
85 90 95
Pro Leu Thr Val Glu Asp Phe Ala Ala Ile Gln Ser Val Leu Ser Ser
100 105 110
Ser Lys Glu Arg His Leu Val Ile Tyr Asn Cys Gly Pro Ile Ala Gly

```
        115                 120                 125
Ala Ser Arg Asn His Lys His Val Gln Ile Leu Pro Arg Pro Ala His
    130                 135                 140
Leu Phe Pro Asp Asp Pro Asn Cys Asp Pro Glu Trp Ile Pro Phe Arg
145                 150                 155                 160
Tyr Gly Leu Arg Tyr Leu Gly Gly Pro Asp Phe Glu Asp Pro Glu Tyr
                165                 170                 175
Pro Ser Gln Leu Ser Ala Ser Tyr Gln Glu Leu Leu Ala Glu Ala Lys
            180                 185                 190
Gly Ser Pro Gly Ser Ser Ala Asp Ser Asn Asn Ala Gly Tyr Phe Pro
        195                 200                 205
His Asn Val Ala Leu Val Arg Glu Trp Ile Ile Val Ile Pro Arg Cys
    210                 215                 220
Ser Asn Asn Phe Lys Ala Ile Ser Ala Asn Ala Ala Gly Met Met Gly
225                 230                 235                 240
Ser Val Trp Leu Lys Ser Glu Glu Glu Leu Asp Arg Trp Lys Gln Val
                245                 250                 255
Gly Leu Ser Lys Ala Leu Ala Gly Leu Gly Tyr Pro Arg Glu Ser Glu
            260                 265                 270
Lys Thr Ser
        275

<210> 35937
<211> 266
<212> PRT
<213> A.fumigatus

<400> 35937
Trp Lys Ser Ser Ala Ser Gly His Pro Leu Ile Ser Pro Ala Leu Ser
1               5                   10                  15
Asp Asn Ile Trp Pro Asp Leu Thr Cys Gly Ile Ala Leu Ala Leu Ser
            20                  25                  30
Thr Ala Tyr Thr Pro Pro Leu Val Val Met Ala Gln Asp Gln Asp Asn
        35                  40                  45
Phe Pro Gln Thr Thr Ser Pro Pro Arg Lys Arg Arg Arg Pro Pro Lys
    50                  55                  60
Ser Cys Asp Pro Cys Arg Arg Arg Lys Val Arg Cys Asp Arg Glu Val
65                  70                  75                  80
Pro Cys Gly Pro Cys Gln Arg Ala Arg Thr Ser Leu His Cys Phe Tyr
                85                  90                  95
Arg Pro Ala Val Thr Ala Arg Ser Pro Ser Thr Asp Glu Asp Cys Arg
            100                 105                 110
Leu Thr Ala Ser Cys Gly Pro Glu Gly His Thr Pro Pro Pro Gln Ala
        115                 120                 125
Val Asp Leu Gln Thr Lys Ile Arg Pro Ala Ala Pro Thr Ala Gln Ser
    130                 135                 140
Gln Pro Gln Gly Pro Asn Tyr Asp Gln Thr Lys Ile Ile Gln Asp Leu
145                 150                 155                 160
Gln Asn Arg Val Arg Arg Leu Glu Glu Gln Leu Phe Asp Leu Pro Leu
                165                 170                 175
Ser Lys Gly Ala Ile Gly Pro Asn Pro Ser Val Ser Pro Ser Gln Ala
            180                 185                 190
Leu Arg His Leu His Asp Arg Val Arg Gly Ala Glu Gln Gln Leu Ser
        195                 200                 205
Asp Ala Ser Arg Pro Ser Pro Ser Val Asn Gly Trp Thr Ile Pro Ala
    210                 215                 220
```

```
Thr Leu Pro Arg Leu Arg Ile Ala Pro Asn Asn Thr Lys Leu Phe Gly
225                 230                 235                 240
Pro Ser His Trp Leu His Thr Ala Glu Lys Val Trp Asp Phe Gly Val
                245                 250                 255
Thr Ser Leu Asn Leu Gln Glu Ser Cys Arg
            260                 265
```

<210> 35938
<211> 411
<212> PRT
<213> A.fumigatus

<400> 35938

```
Trp Ser Trp His Arg Ile Arg Thr Ile Ser Arg Arg Pro His Leu His
1               5                  10                  15
Leu Ala Asn Val Ala Asp Pro Pro Ser Pro Val Thr Arg Ala Val Val
            20                  25                  30
Ala Lys Ser Val Val Thr Gly Arg Phe Leu Ala Ala His Ala Ser Val
        35                  40                  45
Arg Glu Arg Arg Cys Thr Val Phe Thr Ala Leu Gln Ser Leu Pro Glu
    50                  55                  60
Ala His Pro Gln Thr Lys Thr Ala Gly Ser Arg Leu Leu Val Gly Arg
65                  70                  75                  80
Arg Asp Ile His Leu Leu Pro Lys Pro Leu Thr Cys Arg Arg Arg Ser
                85                  90                  95
Val Gln Gln His Pro Gln Arg Asn Arg Ser Leu Arg Val Arg Ile Thr
            100                 105                 110
Ile Lys Pro Arg Ser Ser Arg Ile Cys Lys Ile Ala Phe Gly Val Trp
        115                 120                 125
Arg Asn Ser Phe Ser Thr Phe Arg Ser Leu Lys Ala Arg Ser Val Pro
    130                 135                 140
Ile Pro Ala Ser Leu Gln Val Arg Leu Cys Ala Thr Phe Thr Thr Gly
145                 150                 155                 160
Phe Val Glu Pro Asn Asn Ser Cys Leu Met His Leu Gly Pro Val Leu
                165                 170                 175
Arg Ser Met Asp Gly Pro Tyr Arg Pro Arg Phe Leu Val Cys Val Ser
            180                 185                 190
Pro Arg Ile Thr Arg Ser Phe Leu Ala Pro Val Thr Gly Cys Ile Pro
        195                 200                 205
Leu Arg Lys Tyr Gly Ile Ser Glu Leu Leu Pro Ser Thr Tyr Lys Ser
    210                 215                 220
Leu Val Ala Asp Ala Thr Ser Thr His Gln Phe Gln Val Ile Gly Lys
225                 230                 235                 240
Phe Asp Ala Lys Glu Val Glu Pro Ser Leu Gln Asp Val Asp Thr Arg
                245                 250                 255
Ser Glu Phe Ala Ser Ile Phe Lys Asp Cys Arg Gln Leu Arg Gln Ala
            260                 265                 270
Ile Lys Asp Gln Glu Ser Val Arg Leu Asn His Pro Val Pro Asp Leu
        275                 280                 285
Leu Gly Thr Leu Pro Thr Gln Ala Val Cys Asp Val Leu Val Asn Ala
    290                 295                 300
Tyr Leu Arg Thr Phe Glu Leu Ile Tyr Arg Val Ile His Ile Pro Ser
305                 310                 315                 320
Phe Trp Lys Glu Tyr Arg Gln Leu Trp Thr Gln Pro Gln Ser Thr Thr
                325                 330                 335
Thr Ser Phe Leu Met Lys Leu Val Leu Ile Leu Ala Leu Gly Thr Thr
```

```
            340                 345                 350
Phe His Pro Asp Arg Asn Asn Arg Val His Leu Arg Arg Leu Ala His
        355                 360                 365
Thr Trp Ile Tyr Ala Ala Gln Trp Trp Leu Val Gly Pro Ser Glu Lys
    370                 375                 380
Ser Thr Val Asn Leu Asp Gly Leu Gln Val Gly Cys Leu Leu Leu Leu
385                 390                 395                 400
Ala Arg Gln Thr Asn Ser Leu Pro Ala Thr Ser
                405                 410
```

<210> 35939
<211> 77
<212> PRT
<213> A.fumigatus

<400> 35939

```
Ser Arg Ser Pro Cys Leu Pro Thr Arg Phe Ser Phe Thr Met Ser Asp
1               5                   10                  15
Ala Arg Leu Glu Asn Gly Pro Ala Glu Pro Ala Thr Glu Ala Ser Lys
            20                  25                  30
Ala Ile Arg Lys Cys Pro Arg Arg Val Pro Leu Gly Met Ala Gly Lys
        35                  40                  45
Ser Leu Gly His Leu Ser Leu Cys Leu Ser Pro Trp Ala Gly Ser Thr
    50                  55                  60
Val Leu Val Ser Cys Arg Leu Ser Thr Arg Gly Thr Ser
65                  70                  75
```

<210> 35940
<211> 118
<212> PRT
<213> A.fumigatus

<400> 35940

```
Val Arg Gly Glu Pro Ala Glu Gly Leu Phe Glu Leu Gly Cys Ile Leu
1               5                   10                  15
Asn His Ile His Gly Met Tyr Val Thr Val Gln Cys Thr Cys Val Leu
            20                  25                  30
Leu Leu Ala Gln Leu Thr Ile Pro Val Phe Phe Met Pro Phe Thr Ser
        35                  40                  45
Pro Leu Ala Gly Lys Trp Phe Asp Cys Tyr Gly Pro His Leu Pro Ile
    50                  55                  60
Thr Ile Gly Ser Gly Leu His Val Phe Gly Leu Leu Met Ala Ser Leu
65                  70                  75                  80
Ser His Lys Tyr Tyr Gln Phe Thr Leu Ser Gln Ser Val Met Ser Gly
                85                  90                  95
Ile Gly Ser Ser Leu Ile Phe Ile Pro Ala Met Ser Ala Val Ser Phe
            100                 105                 110
Lys Arg Thr Asn Leu Arg
        115
```

<210> 35941
<211> 143
<212> PRT
<213> A.fumigatus

<400> 35941

```
Val Gly Thr Ala Pro Asn Lys Ala Ser Glu Asn Ala Ala Pro Asp Leu
1               5                  10                  15
Val Pro Ser Glu Gly Pro Ile Val Gly Gly Leu Ala Val Ala Gly Ser
            20                  25                  30
Ser Leu Gly Glu Val Ile Phe Pro Leu Met Val Gln His Leu Leu Pro
        35                  40                  45
Gln Val Ser Phe Gly Trp Thr Met Arg Ile Ile Ala Phe Leu Ile Leu
    50                  55                  60
Glu Leu Leu Val Ile Ala Ser Leu Thr Ile Ser Ser Gln Phe Arg His
65                  70                  75                  80
Ala Pro Lys Pro Arg Pro Phe Ser Val Met His Tyr Arg Gly Pro Leu
                85                  90                  95
Trp Lys Leu Asn Leu Asp Leu Leu Cys Val Ala Ser Phe Phe Met Tyr
            100                 105                 110
Tyr Glu Tyr Ser Thr Pro Arg Leu Lys Lys Gly Met Leu Gln Gln Ile
        115                 120                 125
Thr Asn Tyr Ser Phe Pro Met Arg Glu Leu Phe Ile Pro Leu Asp
    130                 135                 140
```

<210> 35942
<211> 193
<212> PRT
<213> A.fumigatus

```
<400> 35942
Arg Ile Ile Phe Pro Leu Phe Phe Val Ala Ser Pro Phe Ser Leu Arg
1               5                  10                  15
Leu Asn Leu Asn Cys Leu Val Phe Leu Ile Phe Leu Asn Tyr Gly Asn
            20                  25                  30
Glu Asp Leu Gln Leu Glu Gln Pro Asp Val Tyr Ala Thr Gly His Leu
        35                  40                  45
Ala Asn Arg Pro Leu Tyr Pro Ala Tyr Cys Trp Asn Arg Ser Leu His
    50                  55                  60
Lys Arg Ser Pro Gln Arg Arg Asn Ala Gln Lys Ile Thr Ser Trp Ser
65                  70                  75                  80
Lys Leu Trp Leu Pro Ser His Pro Gln Leu Phe Lys Thr Leu Leu Leu
                85                  90                  95
Pro Thr Thr Phe Val Lys Val Ala Leu Leu Gln Pro Leu Leu His Ser
            100                 105                 110
Pro Leu Asp Thr Pro Phe Pro Phe Leu Thr Gln His Arg Lys Pro Arg
        115                 120                 125
Arg Ile Ser Ile Pro Ser Phe Asn His His Met Leu Pro Lys Asp Pro
    130                 135                 140
Leu Lys Gly Lys Pro Gln Ser Gln Arg Ser Pro Ser Gly Arg Arg Ile
145                 150                 155                 160
Gln Arg Ile Thr Leu Pro Leu His Ala Ala Glu Pro Gln Ile Val Asn
                165                 170                 175
Arg Val Leu Glu Gly Lys Val Glu Arg Leu Gly Ser Asp Cys Arg Pro
            180                 185                 190
Leu
```

<210> 35943
<211> 258
<212> PRT
<213> A.fumigatus

<400> 35943
Ile Ala Lys Leu Ile Thr Gln Asn Cys Asn Arg Thr His Leu Ile Thr
1 5 10 15
Thr Ile Met Ser His Arg Pro Leu Gly Pro Val Val Ala Leu Pro Pro
20 25 30
Ala Gln Leu Pro Ser Glu Val Thr Leu Ile Gly Arg Thr Val Ala Leu
35 40 45
Thr Lys Leu Ser Ala Asp His Ala Ala Gln Leu Phe Pro Leu Val Gly
50 55 60
Gly Asp Asp Ala Thr Lys Ile Ala Leu Trp Asp Tyr Met Ala Asp Gly
65 70 75 80
Pro Phe Ser Asp Pro Ile Thr Phe Gln Glu Ala Ile Ala Ala Lys Ser
85 90 95
Arg Ser Ser Asp Pro Phe Tyr Phe Ala Val Ile Asp Ile Arg Gln Asn
100 105 110
Pro Asp Pro Glu Lys Gly His Ala Val Gly Tyr Leu Ser Leu Met Asn
115 120 125
Ile Val Pro Gln His Leu Ser Ile Glu Ile Gly Asn Val Leu Phe Ser
130 135 140
Pro Thr Leu Gln Arg Thr Thr Val Ala Thr Glu Ala Phe Tyr Leu Ala
145 150 155 160
Leu Lys Tyr Ala Ile Asp Asp Leu Gly Phe Arg Arg Val Glu Trp Lys
165 170 175
Cys Asn Ala Leu Asn Ala Pro Ser Arg Arg Ala Ala Leu Arg Leu Gly
180 185 190
Phe Thr Phe Glu Gly Ile Phe Arg Gln His Met Val Ile Lys Gly Arg
195 200 205
Asn Arg Asp Thr Ala Trp Phe Ser Met Leu Arg Glu Glu Trp Glu Gly
210 215 220
Gly Val Lys Gly Ala Met Glu Glu Trp Leu Gln Glu Ser Asn Phe Asp
225 230 235 240
Glu Ser Gly Gly Gln Gln Lys Ser Leu Glu Glu Leu Arg Met Gly Arg
245 250 255
Gln Pro

<210> 35944
<211> 497
<212> PRT
<213> A.fumigatus

<400> 35944
Arg His Phe Thr Gly Thr Asn Pro Thr Thr Ile Glu Gln Ala Ser Asp
1 5 10 15
Glu Trp Leu Glu His Phe Ile Thr Ala Ala Glu Ala Pro Glu Asp Gly
20 25 30
Pro Val Lys Glu Ile Leu Thr Asp Leu Arg Asn Ser Cys Arg Lys Ser
35 40 45
Leu Tyr Met Gln Asp Tyr Ser Tyr Phe Arg Lys Ala Ala Gly Leu Asp
50 55 60
Pro Thr Ala Val Ile Lys Cys Glu Phe Asp Glu Ala Gly Lys Lys Arg
65 70 75 80
His Arg Tyr Gly Cys Ala Ser Val Cys Leu Phe Tyr Leu Asn Asp Gln
85 90 95
Gly Gln Leu Tyr Pro Leu Ala Ile Val Ile Asp Trp Arg Gly Lys Ala

```
            100                 105                 110
Glu Thr Ser Val Thr Ile Tyr Asn Arg Glu Leu Ile Lys Arg Lys Asp
        115                 120                 125
Leu Arg Ala Gly Gly Glu Lys Gln Asp Gln Lys His Lys Val Thr Asp
    130                 135                 140
Glu Ala His Asp Trp Ala Trp Arg Tyr Ala Lys Thr Cys Val Gln Cys
145                 150                 155                 160
Ser Asp Trp Leu Arg His Glu Val Thr Val His Leu Thr Asn Thr His
                165                 170                 175
Met Ile Glu Glu Ala Ile Ile Val Ala Ser His Arg Gln Leu Asp Pro
            180                 185                 190
Asp His Pro Val Met Leu Leu Leu Tyr Pro His Trp Gln Lys Thr Leu
        195                 200                 205
Ala Leu Asn Ala Ala Ala Arg Asn Thr Leu Val Pro His Val Ile Val
    210                 215                 220
Asp Leu Ile Gly Phe Gln Ala Ser Glu Gly Phe Ala Phe Ile Arg His
225                 230                 235                 240
Ala Tyr Glu Asn Phe Asp Phe Lys Gly Arg Tyr Val Pro Thr Asp Leu
                245                 250                 255
Arg Gln Arg Gly Phe Pro Pro Glu Glu Leu Asp Ser Pro Lys Phe His
            260                 265                 270
Asn Tyr Ala Tyr Ala Arg Cys Ile Asn Ser Met Trp His Lys Ile Arg
        275                 280                 285
Ser Tyr Val Gln Asp Met Leu Ala Leu Ala Tyr Pro Gly Thr Asp Ala
    290                 295                 300
Asp His Lys Val Arg Asn Asp Gln Cys Ile Gln Ala Trp Ser Asp Glu
305                 310                 315                 320
Met Arg Ser Ser Asp Gly Ala Arg Leu Pro Ser Phe Pro Thr Ile Ser
                325                 330                 335
Thr Phe Glu Glu Leu Val Asp Cys Val Thr Met Cys Ile His Ile Ala
            340                 345                 350
Ser Pro Gln His Thr Ala Val Asn Tyr Leu Gln Asn Tyr Tyr Gln Ser
        355                 360                 365
Phe Val Val Asn Lys Pro Pro Cys Leu Tyr Thr Glu Pro Pro Thr Ser
    370                 375                 380
Leu Gln Ser Leu Leu Gly Tyr Thr Glu Lys Glu Leu Val Glu Ala Leu
385                 390                 395                 400
Pro Met Asn His Pro Arg Glu Trp Leu Leu Ala Ser His Ile Pro Tyr
                405                 410                 415
Leu Leu Ser Phe Lys Pro Gly Asn Lys Glu Ser Leu Ile Val Tyr Ala
            420                 425                 430
Ala Ser Lys Phe Arg Val Tyr His Asn Lys Ala Thr Glu Lys Asp Gln
        435                 440                 445
Ala Ile Ala Ala Ala Thr Gly Lys Phe Tyr Thr Ala Leu Ala Glu Ser
    450                 455                 460
Gln Glu Glu Phe Lys Arg Tyr Gly Gln Ala Thr Asp Asp Trp Glu Thr
465                 470                 475                 480
Ile Glu Tyr Glu Val Leu Ser Pro Glu Trp Asn Ala Val Ser Ile Leu
                485                 490                 495
Ile
```

<210> 35945
<211> 100
<212> PRT
<213> A.fumigatus

<400> 35945
Val Pro Arg Pro Ala Val His Ser Leu Val Gln Thr Leu Ala Ala Glu
1 5 10 15
Leu Val Gly Val Gln Val Arg Val Asn Ala Val Ser Pro Gly Phe Val
20 25 30
Arg Thr Pro Thr Met Gly Val Val Gly Ala Ser Arg Glu Glu Leu Val
35 40 45
Glu Phe Glu Gly Gln Gly Val Lys Ser Thr Pro Met Gly Arg Ile Ala
50 55 60
Glu Pro Glu Glu Val Ala Arg Ala Val Ala Phe Leu Gly Phe Glu Ala
65 70 75 80
Thr Phe Thr Thr Gly Glu Gln Val Val Ile Asp Gly Gly Leu Ala Thr
85 90 95
Leu Arg Leu His
100

<210> 35946
<211> 63
<212> PRT
<213> A.fumigatus

<400> 35946
Val Pro Phe Thr Val Pro Ile Ala Asp Lys His Arg Gln Pro Lys Met
1 5 10 15
Lys Pro Thr Leu Phe Val Leu Ala Leu Ala Gly Val Ala Leu Gly Ala
20 25 30
Lys Thr Cys Thr Pro Ser Phe Asp Tyr Cys Ala Lys Lys Leu Ile Ala
35 40 45
Asp Lys Gly Thr Pro Phe Leu Ala His Phe His Asp Gly Ile Tyr
50 55 60

<210> 35947
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35947
Arg Thr Val Asp Ala Gly Phe Thr Glu Ala Asp Leu Glu Val Val Leu
1 5 10 15
Lys Ala Glu Asp Leu Glu Thr Thr Asp Leu Lys Asn Val Leu Phe His
20 25 30
Cys Lys Asn Pro Gly Asp Val Gly His Ala Lys Val Cys Pro Asn Gly
35 40 45
Cys Thr Asp Pro Ala Thr Glu Gly Ser His Gly Cys
50 55 60

<210> 35948
<211> 100
<212> PRT
<213> A.fumigatus

<400> 35948
Cys Asn Arg Asn Val Ala Asn Pro Pro Ser Ile Thr Thr Cys Ser Pro
1 5 10 15
Val Val Lys Val Ala Ser Asn Pro Arg Asn Ala Thr Ala Arg Ala Thr

```
            20                  25                  30
Ser Ser Gly Ser Ala Ile Leu Pro Ile Gly Val Leu Phe Thr Pro Cys
        35                  40                  45
Pro Ser Asn Ser Thr Asn Ser Ser Leu Asp Ala Pro Thr Thr Pro Ile
    50                  55                  60
Val Gly Val Leu Thr Lys Pro Gly Asp Thr Ala Phe Thr Arg Thr Cys
65                  70                  75                  80
Thr Pro Thr Asn Ser Ala Ala Ser Val Cys Thr Asn Glu Cys Thr Ala
                85                  90                  95
Gly Leu Gly Thr
            100
```

<210> 35949
<211> 250
<212> PRT
<213> A.fumigatus

<400> 35949

```
Lys Val Arg Ser Asn Pro Gly Gly Trp Arg Arg Ile Val Met Asn Leu
1               5                   10                  15
Leu Gly Asn Ser Phe Lys Phe Thr Lys Ser Gly Phe Ile Glu Val Thr
            20                  25                  30
Leu Ala Arg Lys Met Glu Gly Thr Gly Gly Thr Lys Arg Val Tyr Ala
        35                  40                  45
His Leu Thr Ile Thr Asp Thr Gly Cys Gly Ile Ala Pro Glu Tyr Leu
    50                  55                  60
Glu His Lys Leu Phe Gln Pro Phe Thr Gln Glu Asp Ile Leu Thr Glu
65                  70                  75                  80
Gly Val Gly Leu Gly Leu Ser Ile Val Asp Arg Leu Val Thr Asn Ala
                85                  90                  95
Gly Gly Gln Ile Asp Val Lys Ser Thr Val Gly Ile Gly Thr Arg Phe
            100                 105                 110
Glu Val Tyr Ile Pro Val Glu Phe Val Asp Thr Leu Asp Glu Gly Ala
        115                 120                 125
Pro Glu Gln Gln Gln Pro Gln Ser Val Ser Val Ser Arg Val Cys Leu
    130                 135                 140
Val Gly Leu Asn Val Phe Ser Ser Met Lys Thr Ser Ser Gln Arg Leu
145                 150                 155                 160
Ser Val Asn Thr Lys Arg Arg Leu Ser Val Arg Ser Ala Leu Ser Asn
                165                 170                 175
Ala Ile Leu Ser Gln Pro Gly Trp Thr Val Ser Phe Ala Asp Thr Leu
            180                 185                 190
Ser Gln Ala Lys Gly Asp Ile Gly Ile Ile Glu Glu Ser Ser Leu Ala
        195                 200                 205
Glu Lys Ala Asp Leu Glu Gln Ile Thr Thr Asp Leu Thr Arg Leu Ile
    210                 215                 220
Ile Leu Gly Gln Tyr Gly Ser Gly Pro Ser Val Asp Pro Ala Thr Lys
225                 230                 235                 240
Lys Leu Asp Val Val Tyr Val Pro Gln Pro
                245                 250
```

<210> 35950
<211> 117
<212> PRT
<213> A.fumigatus

<400> 35950
Arg Ser Phe Leu Phe Leu Pro Met Trp Asn Trp Lys Ser Ser Arg Trp
1 5 10 15
Leu Ala Gly Ala Leu Leu Trp Thr Cys Asp Ile Gln Arg Ser Phe Glu
20 25 30
Gln Thr Asp Leu Phe Tyr Val Lys Ala Tyr Gly Asp Ala Ile Val Ser
35 40 45
Glu Ala Ala Gln Met Asp Trp Gln Ala Thr Glu Lys Ser Lys Ser Asp
50 55 60
Leu Leu Ser Ser Val Ser His Glu Leu Arg Ser Pro Leu His Gly Met
65 70 75 80
Leu Ala Ser Val Glu Leu Leu Arg Thr Thr Asp Leu Gln Pro Ala Gln
85 90 95
Leu Asp Met Leu Thr Met Ile Glu Thr Cys Gly Leu Thr Leu Met Asp
100 105 110
Thr Leu Asn Tyr Leu
115

<210> 35951
<211> 62
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (50),(52)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35951
Arg Leu Asp Phe Thr Lys Ile Asn Asn Leu Thr Ser Ala Asp Ala Lys
1 5 10 15
Asn Asp Thr Glu Thr Ser Leu Val Asp Leu Ala Cys Glu Phe Asn Leu
20 25 30
Asp Thr Leu Val Glu Asp Val Ala Asp Asn Pro Val Cys Ser His Arg
35 40 45
Ser Xaa Ile Xaa Ala Ser Gln Val Gly Gly Arg Val Pro Ala
50 55 60

<210> 35952
<211> 250
<212> PRT
<213> A.fumigatus

<400> 35952
Asp Ser Met Val Val Ala His Pro Ser Ile Leu Pro Arg Lys Ser Trp
1 5 10 15
Met Trp Ser Thr Phe Leu Asn Arg Lys Gln His Gln Ser Leu Ser Lys
20 25 30
Ser Glu Thr Asn Arg Thr Asp Arg Leu Thr Pro Arg Lys Leu Ile Gly
35 40 45
Ala Leu His Thr Leu Ser Asn Leu Pro Glu Ala Arg Glu Gln Ile Gly
50 55 60
Ser Ser Asp Ser Met Pro His Arg Gln Arg Ser Leu Ser Glu Ala Phe
65 70 75 80
Val Leu Ala Lys Gln Thr Glu Ser Pro Pro Val Val Glu Gly Leu Glu
85 90 95

```
Leu Gly Glu Phe Arg Gly Ser Thr Pro Lys Ala Ser Thr Thr Thr Asp
            100                 105                 110
Arg His Val Leu Ile Val Asp Asp Asn Asp Ile Asn Leu Lys Ile Leu
        115                 120                 125
Ala Thr Phe Met Arg Arg Ile Gly Cys Ser Tyr Glu Ala Ala Thr Asn
    130                 135                 140
Gly Leu Val Ala Leu Glu Lys Tyr Gln Gln Ala Gln Arg Gln Phe Asn
145                 150                 155                 160
Tyr Val Leu Met Gly Arg Leu Pro Leu Leu Gly Val Met Val Gln Leu
                165                 170                 175
Thr Ala Ile Asp Leu Ser Met Pro Val Met Asp Gly Ile Ile Ser Thr
            180                 185                 190
Ser Lys Ile Arg Glu Tyr Glu Glu Glu Asn Ser Leu Pro Arg Ala Ala
        195                 200                 205
Ile Met Ala Val Thr Gly Val Ala Ser Ala Thr Met Gln Gln Gln Ala
    210                 215                 220
Phe Ala Ala Gly Ile Asp Asp Phe Leu Val Lys Pro Leu Ser Leu Arg
225                 230                 235                 240
Asp Leu Lys Arg Val Met Met Asn Ile Ala
                245                 250
```

<210> 35953
<211> 101
<212> PRT
<213> A.fumigatus

<400> 35953

```
His Ser Ser Ser Arg Gln Ile Arg Pro Pro Ile Tyr Ser Leu Lys Gln
1               5                   10                  15
Ser Lys Leu Arg Lys Arg Arg Val Ile Arg Phe Ala Ile Leu Tyr Phe
            20                  25                  30
Gly Met Leu Ile Leu Phe Leu Val Leu Leu Ile Ala Pro Leu Val Val
        35                  40                  45
Arg Ser Met Gly Leu Val Lys Thr Pro Asn Leu Pro Phe Asn Leu Leu
    50                  55                  60
Gln Pro Leu Asp Lys Asp Asn Asn Asp Thr Met Val Thr Tyr Thr Gly
65                  70                  75                  80
Asn Asn Ile Pro Ala Gly Phe Glu Pro Val Glu Ser Ala Ser Ser Val
                85                  90                  95
Ala Thr Ala Thr Ser
            100
```

<210> 35954
<211> 799
<212> PRT
<213> A.fumigatus

<400> 35954

```
Gln Arg Gly Ser Phe Gln Pro Cys Gly Glu Asp Glu Lys Leu Glu Arg
1               5                   10                  15
Glu Leu Glu Arg Met Ala Arg Arg Lys Phe Lys Ile Val Val Ser Met
            20                  25                  30
Gln Arg Tyr Ala Lys Phe Asn Lys Glu Glu Arg Glu Asn Thr Glu Phe
        35                  40                  45
Leu Leu Arg Ala Tyr Pro Asp Leu Gln Ile Ala Tyr Leu Asp Glu Glu
    50                  55                  60
```

```
Pro Pro Val Asn Glu Gly Glu Glu Pro Arg Leu Tyr Ser Ala Leu Ile
65                  70                  75                  80
Asp Gly His Cys Glu Leu Leu Glu Asn Gly Met Arg Lys Pro Lys Phe
                85                  90                  95
Arg Ile Gln Leu Ser Gly Asn Pro Ile Leu Gly Asp Gly Lys Ser Asp
            100                 105                 110
Asn Gln Asn His Ser Ile Ile Phe Tyr Arg Gly Glu Tyr Ile Gln Val
        115                 120                 125
Ile Asp Ala Asn Gln Asp Asn Tyr Leu Glu Glu Cys Leu Lys Ile Arg
    130                 135                 140
Ser Val Leu Ala Glu Phe Glu Glu Leu Thr Thr Asp Asn Val Ser Pro
145                 150                 155                 160
Tyr Thr Pro Gly Ile Pro Ser Thr Asn Thr Asn Pro Val Ala Ile Leu
                165                 170                 175
Gly Ala Arg Glu Tyr Ile Phe Ser Glu Asn Ile Gly Val Leu Gly Asp
            180                 185                 190
Val Ala Ala Gly Lys Glu Gln Thr Phe Gly Thr Leu Phe Ala Arg Thr
        195                 200                 205
Leu Ala Gln Ile Gly Gly Lys Leu His Tyr Gly His Pro Asp Phe Leu
    210                 215                 220
Asn Gly Ile Phe Met Thr Thr Arg Gly Gly Ile Ser Lys Ala Gln Lys
225                 230                 235                 240
Gly Leu His Leu Asn Glu Asp Ile Tyr Ala Gly Met Asn Ala Met Ile
                245                 250                 255
Arg Gly Gly Arg Ile Lys His Cys Glu Tyr Tyr Gln Cys Gly Lys Gly
            260                 265                 270
Arg Asp Leu Gly Phe Gly Ser Ile Leu Asn Phe Thr Thr Lys Ile Gly
        275                 280                 285
Thr Gly Met Gly Glu Gln Met Leu Ser Arg Glu Tyr Tyr Tyr Leu Gly
    290                 295                 300
Thr Gln Leu Pro Leu Asp Arg Phe Leu Ser Phe Tyr Tyr Ala His Pro
305                 310                 315                 320
Gly Phe His Ile Asn Asn Met Phe Ile Met Leu Ser Val Gln Met Phe
                325                 330                 335
Met Ile Val Leu Ile Asn Leu Gly Ala Leu Lys His Glu Thr Ile Thr
            340                 345                 350
Cys Arg Tyr Asn Pro Asp Leu Pro Ile Thr Asp Pro Leu Arg Pro Thr
        355                 360                 365
Tyr Cys Ala Asn Leu Thr Pro Ile Val Asp Trp Val Asn Arg Cys Ile
    370                 375                 380
Ile Ser Ile Phe Ile Val Phe Phe Ile Ser Phe Val Pro Leu Ala Val
385                 390                 395                 400
Gln Glu Leu Thr Glu Arg Gly Val Trp Arg Met Ala Met Arg Leu Ala
                405                 410                 415
Lys His Phe Gly Ser Val Ser Phe Met Phe Glu Val Phe Val Cys Gln
            420                 425                 430
Ile Tyr Ala Asn Ala Val His Gln Asn Leu Ser Phe Gly Gly Ala Arg
        435                 440                 445
Tyr Ile Gly Thr Gly Arg Gly Phe Ala Thr Ala Arg Ile Pro Phe Gly
    450                 455                 460
Val Leu Tyr Ser Arg Phe Ala Gly Pro Ser Ile Tyr Ala Gly Ala Arg
465                 470                 475                 480
Ser Leu Leu Met Leu Leu Phe Ala Thr Ser Thr Val Trp Thr Ala Ala
                485                 490                 495
Leu Ile Trp Phe Trp Val Ser Leu Leu Ala Leu Cys Ile Ser Pro Phe
            500                 505                 510
```

```
Leu Phe Asn Pro His Gln Phe Ala Trp Asn Asp Phe Phe Ile Asp Tyr
        515                 520                 525
Arg Asp Tyr Leu Arg Trp Leu Ser Arg Gly Asn Ser Arg Ser His Ala
    530                 535                 540
Ser Ser Trp Ile Gly Phe Cys Arg Leu Ser Arg Thr Arg Ile Thr Gly
545                 550                 555                 560
Tyr Lys Arg Lys Leu Leu Gly Val Pro Ser Glu Lys Gly Ser Gly Asp
                565                 570                 575
Val Pro Arg Ala Arg Leu Thr Asn Ile Phe Phe Ser Glu Ile Ile Ala
            580                 585                 590
Pro Leu Val Leu Val Ala Val Thr Leu Val Pro Tyr Leu Tyr Ile Asn
        595                 600                 605
Ser Arg Thr Gly Val Arg Asp Asn Pro Glu Pro Thr Asp Ala Ile Leu
    610                 615                 620
Arg Leu Ala Ile Val Ala Ala Gly Pro Ile Ala Ile Asn Ala Gly Val
625                 630                 635                 640
Ala Gly Val Phe Phe Gly Met Ala Cys Cys Met Gly Pro Ile Phe Ser
                645                 650                 655
Met Cys Cys Lys Lys Phe Gly Ala Val Leu Ala Ala Ile Ala His Ala
            660                 665                 670
Ile Ala Val Ile Val Leu Leu Ala Ile Phe Glu Val Met Phe Phe Leu
        675                 680                 685
Glu Ser Trp Ser Trp Pro Arg Met Leu Ile Gly Met Ile Ala Ala Ala
    690                 695                 700
Ala Ile Gln Arg Phe Ile Tyr Lys Leu Ile Ile Ala Leu Ala Leu Thr
705                 710                 715                 720
Arg Glu Phe Lys His Asp Gln Ala Asn Ile Ala Trp Trp Thr Gly Lys
                725                 730                 735
Trp Tyr Asn Met Gly Trp His Ser Met Ser Gln Pro Arg Arg Glu Phe
            740                 745                 750
Leu Cys Lys Ile Thr Glu Leu Gly Tyr Phe Ser Ala Asp Phe Val Leu
        755                 760                 765
Gly His Val Leu Leu Phe Ala Met Leu Pro Ala Leu Cys Val Pro Phe
    770                 775                 780
Ile Asp Lys Phe His Ser Val Met Leu Phe Trp Leu Arg Pro Arg
785                 790                 795
```

<210> 35955
<211> 953
<212> PRT
<213> A.fumigatus

<400> 35955

```
Pro Val Leu Ser Ser Gln Met Leu Gly Ser Asn Glu Ala Pro Pro Val
1               5                   10                  15
Glu Asn Trp Arg Thr Ile Arg Arg Leu Ile Gly His Asp Asn Asp Val
            20                  25                  30
Gln Asp Leu Gly Trp Ser Tyr Asp Ser Ser Ile Leu Val Ser Val Gly
        35                  40                  45
Leu Asp Ser Lys Val Val Val Trp Ser Gly His Thr Phe Glu Lys Leu
    50                  55                  60
Lys Thr Leu Ser Ile His Gln Ser His Val Lys Gly Ile Thr Phe Asp
65                  70                  75                  80
Pro Ala Asn Lys Tyr Phe Ala Thr Ala Ser Asp Asp Arg Thr Val Arg
                85                  90                  95
Ile Phe Arg Phe Thr Ser Pro Ser Pro Asn Ser Thr Ala His Asp Gln
```

```
                100                 105                 110
Met Asn Asn Phe Val Leu Glu His Thr Ile Ser Ala Pro Phe Gln Asn
            115                 120                 125
Ser Pro Leu Thr Ala Tyr Phe Arg Arg Cys Ser Trp Ser Pro Asp Gly
    130                 135                 140
Met His Ile Ala Ala Ala Asn Ala Val Asn Gly Pro Val Ser Ser Val
145                 150                 155                 160
Ala Ile Ile Asn Arg Gly Ser Trp Asp Gly Asp Ile Asn Leu Ile Gly
                165                 170                 175
His Glu Ala Pro Val Glu Val Cys Ala Phe Ser Pro Arg Leu Tyr Ser
            180                 185                 190
Ser Gln Pro Val Ser Lys Ser Ala Val Asp Asn Gln Asn His Ala Met
        195                 200                 205
Gln Asn Val Thr Val Ile Ala Cys Ala Gly Gly Asp Lys Ser Leu Ser
    210                 215                 220
Ile Trp Ile Thr Ser Asn Pro Arg Pro Ile Val Val Ala Gln Glu Met
225                 230                 235                 240
Ala Ala Lys Ser Ile Ser Asp Leu Ala Trp Ser Pro Asp Gly Lys Cys
                245                 250                 255
Leu Phe Ala Thr Ala Leu Asp Gly Thr Ile Leu Ala Val Arg Phe Glu
            260                 265                 270
Asp Gly Glu Leu Gly Tyr Pro Met Ala Met Glu Glu Asn Glu Lys Ser
        275                 280                 285
Leu Thr Lys Phe Gly Thr Asn Arg Arg Gly Ala Gly Ile Ala Glu Thr
    290                 295                 300
Thr Asp Gly Leu Leu Leu Glu Glu Lys Ser Lys Ala Gly Glu Ile Lys
305                 310                 315                 320
Asp Val Glu Gly Arg Met Gly Ala Leu Met Gly Asp Gly His Ala Thr
                325                 330                 335
Ala Glu Ser Met Val Asn Gly Lys Thr Ala Pro Leu Pro Ser Asn Gly
            340                 345                 350
Ala Thr Pro Ala Arg Gly Pro Ser Pro Ala Ala Asp Thr Gln Lys Ala
        355                 360                 365
Gln Pro Asn Gly Thr Ala Ala Thr Pro Ala Ala Pro Glu Pro Glu Lys
    370                 375                 380
Pro Asp Pro Tyr Gln Ala Lys Leu Glu Arg Leu Lys Gln Arg Pro Thr
385                 390                 395                 400
Tyr Thr Lys Asp Gly Lys Lys Arg Ile Ala Pro Leu Leu Val Ser Gly
                405                 410                 415
Ala Gly Ala Ala Glu Ser Ser Leu Pro Gln Ala Arg Leu Met Ala Ser
            420                 425                 430
Val Ser Ser Gln Val Lys Ala Asp Val Pro Gln Ser Ile Val Asp Leu
        435                 440                 445
Ser Lys Pro Phe Asp Gly Leu Pro Lys Gly Gly Leu Ser Ala Leu Leu
    450                 455                 460
Phe Gly Asn Lys Arg Lys Leu Ala Gln Leu Glu Gly Asp Glu Asp Gly
465                 470                 475                 480
His Val Glu Lys Arg Val Ala Leu Ala Ser Gln Asn Gly Ala Thr Pro
                485                 490                 495
Ile Leu Ala Asn Thr Pro Asp Gly Leu Leu Pro Ala Gln Pro Gln Pro
            500                 505                 510
Ala Pro Thr Gly Gln Gln Pro Thr Pro Glu Phe Ile Arg Pro Ala Val
        515                 520                 525
Thr Asn Pro Cys Met Ala Ile Ser Gln Leu Arg Leu Ala Val Pro Lys
    530                 535                 540
Val Arg Ser Gln Ile Val Arg Ala Ile Asp Ser Asn Gly Arg Pro Thr
```

```
545                 550                 555                 560
Glu Pro Pro Ser Ala Thr Gly Glu Pro Gly Lys Ser Arg Ala Asp Val
                565                 570                 575
Val Phe Glu Ala Arg Asn Pro Ser Pro Ala Ser Leu Thr Gly Arg Ala
            580                 585                 590
Val Asp Arg Glu Pro Val Arg Leu Thr Leu Phe Arg Gly Glu Gln Pro
        595                 600                 605
Leu Trp Gln Asp Phe Leu Pro Arg Thr Val Leu Leu Val Thr Gly Asn
    610                 615                 620
Gln Ser Met Trp Ser Ala Ala Cys Glu Asp Gly Ser Val Tyr Ile Trp
625                 630                 635                 640
Ser Pro Ala Gly Arg Arg Leu Val Ser Ala Leu Val Leu Glu Ala Gln
                645                 650                 655
Pro Val Ile Leu Glu Cys Asn Gly Pro Trp Ile Leu Cys Ile Ser Ala
            660                 665                 670
Val Gly Met Cys Tyr Val Trp Asn Val Lys His Leu Ser Ser Pro His
        675                 680                 685
Pro Pro Ile Ser Leu Gln Pro Val Leu Asp Ala Ala Ile His Thr Leu
    690                 695                 700
Gly Ala His Pro Ser Ala Ala Pro Ala Ile Thr Asn Ala Arg Ile Asn
705                 710                 715                 720
Ser Glu Gly Arg Val Val Val Ala Leu Ser Asn Gly Glu Gly Tyr Ser
                725                 730                 735
Tyr Ser Pro Ser Met Tyr Thr Trp Gln Arg Val Ser Glu Ala Trp Trp
            740                 745                 750
Ala Val Gly Ser Gln Tyr Trp Asn Ser Thr Glu Ala Pro Val Gly Asn
        755                 760                 765
Leu Gln Ser Ala Gly Pro Gln Gln Asp Lys Glu Thr Thr Ala Ala Val
    770                 775                 780
Ser Ala Gly Ile Ile Pro Phe Leu Glu Arg Asn Thr Thr Asn Glu Thr
785                 790                 795                 800
Pro Leu Arg Gly Arg Ala Tyr Phe Leu Gln Arg Leu Ile Lys Val Leu
                805                 810                 815
Leu Ser Arg Glu Gly Tyr Glu Ser Phe Glu Ser Ser Val Ser Ile Ala
            820                 825                 830
His Met Glu Asn Arg Leu Ala Ala Ala Leu Ser Leu Gly Ala Lys Glu
        835                 840                 845
Glu Phe Arg Leu Tyr Leu Ser Met Tyr Ala Lys Arg Leu Gly Ala Glu
    850                 855                 860
Gly Leu Lys Met Lys Val Glu Glu Leu Leu Lys Gly Leu Ile Gly Gly
865                 870                 875                 880
Leu Phe Glu Glu Glu Asp Glu Thr Gly Ala Gly Arg Arg Leu Gln Ala
                885                 890                 895
Asn Glu Lys Glu Asp Arg Asn Trp Gln Glu Ser Ser Asp Thr Leu Cys
            900                 905                 910
Gly Trp Pro Arg Glu Val Leu Leu Lys Glu Val Ile Leu Ala Leu Gly
        915                 920                 925
Lys Leu Gln Gly Ile Pro Ser Ser Ser Leu Asp Ala His Met Ser Leu
    930                 935                 940
Thr Leu Leu Phe Leu Cys Ala Ile Arg
945                 950
```

<210> 35956
<211> 698
<212> PRT
<213> A.fumigatus

<400> 35956

```
Ile Pro Leu Gln Ala Glu Ile Pro Cys Gln Ser Ile His Gln Ser Thr
1               5                  10                  15
Gln Gln Arg His Ala Glu Ala Pro Ser Gln Arg Met Ala Ser Gln Trp
            20                  25                  30
Phe Ser Pro Cys Ala Ser Ser Asn Pro Asp Leu Ile Lys Glu Gly Phe
        35                  40                  45
Val Ile Pro Phe Gly Pro Asp Asn Phe Arg Leu Ile Val Val Ser Gln
    50                  55                  60
Glu Tyr Ala Gly Asp Trp Asp Ser Lys Glu Lys Trp Tyr Gly Thr Glu
65                  70                  75                  80
Tyr Lys Val Gly Lys Ile Pro Glu Asp Phe Met Ala Asp Ile Arg Glu
                85                  90                  95
Ala Leu Asp Thr Thr Pro Glu Thr Arg Leu Ser Asp Leu His Met Pro
            100                 105                 110
His Lys Asn Glu Phe Val Pro Thr Arg Leu Ser Val Glu Lys Lys Glu
        115                 120                 125
Val Ser Glu Pro Ala Lys Thr Pro Lys Leu Ile Arg His Asp Asp His
    130                 135                 140
Val Arg Leu Trp Phe Lys Lys Asp Asp Arg Phe Trp Val Pro Lys Gly
145                 150                 155                 160
Thr Val His Ile Thr Leu Arg Asn Pro Leu Ala Trp Ala Thr Pro Ala
                165                 170                 175
Asn Leu Val Lys Ser Lys Leu Tyr Cys Glu Leu Val Lys Asp Ala Leu
            180                 185                 190
Val Glu Tyr Ser Tyr Asp Ala Glu Leu Ala Gly Leu Asp Tyr His Leu
        195                 200                 205
Ser Ala Ser Val Phe Gly Leu Asp Val Ser Val Gly Gly Tyr Asn Asp
    210                 215                 220
Lys Met Ala Val Leu Leu Glu Lys Val Phe Thr Ser Met Arg Asp Leu
225                 230                 235                 240
Val Val Asn Pro Asn Arg Phe His Ile Ile Lys Glu Arg Leu Ser Arg
                245                 250                 255
Gly Tyr Arg Asn Ala Glu Tyr Gln Gln Pro Phe Tyr Gln Val Gly Asp
            260                 265                 270
Tyr Thr Arg Tyr Leu Thr Ser Glu Lys Thr Trp Ile Asn Glu Gln Tyr
        275                 280                 285
Ala Ala Glu Leu Glu His Ile Glu Ala Glu Asp Ile Ser Ser Phe Phe
    290                 295                 300
Pro Gln Leu Leu Ser Gln Asn His Ile Glu Val Leu Ala His Gly Asn
305                 310                 315                 320
Leu Tyr Lys Glu Asp Ala Leu Lys Met Thr Asp Leu Val Glu Asn Ile
                325                 330                 335
Leu Gln Ser Arg Pro Leu Pro Gln Ser Gln Trp His Val Arg Arg Asn
            340                 345                 350
Ile Ile Ile Pro Pro Gly Ser Asn Phe Ile Tyr Glu Arg Thr Leu Arg
        355                 360                 365
Asp Pro Ala Asn Ile Asn His Cys Ile Glu Tyr Tyr Val Tyr Val Gly
    370                 375                 380
Ser Ile Thr Asp Asp Met Leu Arg Ala Lys Leu Leu Leu Phe Ala Gln
385                 390                 395                 400
Met Thr Asp Glu Pro Ala Phe Asp Gln Leu Arg Ser Lys Glu Gln Leu
                405                 410                 415
Gly Tyr Val Val Trp Ser Gly Ala Arg Tyr Ser Ala Thr Thr Ile Gly
            420                 425                 430
```

```
Tyr Arg Val Ile Ile Gln Ser Glu Arg Thr Ala Glu Tyr Leu Glu Ser
        435                 440                 445
Arg Ile Asp Asn Phe Leu Ile Gln Thr Gly Glu Thr Leu Glu Asn Met
    450                 455                 460
Ser Glu Lys Asp Phe Glu Gly His Lys Arg Ser Val Ile Asn Lys Arg
465                 470                 475                 480
Leu Glu Lys Leu Lys Asn Leu Ser Ser Glu Thr Ser Arg Phe Trp Ser
                485                 490                 495
His Ile Gly Ser Glu Tyr Phe Asp Phe Leu Gln Asn Glu Ser Asp Ala
            500                 505                 510
Ala Asn Val Arg Ala Leu Thr Lys Ala Asp Ile Val Asp Phe Tyr Lys
        515                 520                 525
Gln Leu Ile Asp Pro Arg Ser Pro Thr Arg Gly Lys Leu Ser Ile Tyr
    530                 535                 540
Leu Asn Ala Gln Gly Gly Ala His Thr Lys Leu Glu Gly Lys Asp Gln
545                 550                 555                 560
Gln Ser Arg Leu Val Ser Leu Leu Gly Lys Gln Leu Glu Gly Ala Gly
                565                 570                 575
Phe Ala Val Asp Thr Ser Arg Met Ser Ser Val Phe Glu Ser Ala Asp
            580                 585                 590
Leu Ser Ala Ser Asp Ala Asp Gln Leu Leu Ala Val Leu Lys Lys Phe
        595                 600                 605
Leu Leu Ser Glu Met Ser Leu Ser Glu Gln Gln Thr Ala Pro Val Leu
    610                 615                 620
Glu Gln Ala Arg Gln Asn Ile Gly Leu His Ala Lys Gln Leu Gly Ile
625                 630                 635                 640
Glu Thr Val Glu Lys Gly Ser Lys Pro Val Thr Asn Gly Val Gly Gln
                645                 650                 655
Pro Lys Thr Asp Arg Lys Val Thr Tyr Ile Thr Asn Val Pro Glu Phe
            660                 665                 670
Lys Ala Arg Met Val Met Ser Ala Gly Pro Ile Ala Val Thr Asp Ile
        675                 680                 685
Thr Glu Phe Glu Asp Phe Asp Ala Lys Leu
    690                 695
```

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<210> 35957
<211> 245
<212> PRT
<213> A.fumigatus

<400> 35957

```
Lys Tyr Gly Ser Glu Phe Ile Lys Phe Tyr Gln Lys His Tyr Ser Ala
1               5                   10                  15
Asn Arg Met Lys Leu Cys Val Leu Gly Arg Glu Ser Leu Asp Glu Leu
            20                  25                  30
Glu Lys Trp Val Glu Glu Leu Phe Ser Glu Val Glu Asn Lys Asp Leu
        35                  40                  45
Pro Gln Asn Arg Trp Asp Asp Val Gln Pro Trp Arg His Glu Asp Leu
    50                  55                  60
Gly Ile Gln Ile Phe Ala Lys Pro Val Met Asp Thr Arg Ser Val Asp
65                  70                  75                  80
Ile Tyr Phe Pro Phe Leu Asp Glu Glu Thr Leu Tyr Glu Ser Gln Pro
                85                  90                  95
Ser Arg Tyr Ile Ser His Leu Ile Gly His Glu Gly Pro Gly Ser Ile
            100                 105                 110
Leu Ala Tyr Ile Lys Ala Lys Gly Trp Ala Asn Gly Leu Ser Ala Gly
```

```
        115                 120                 125
Val Met Pro Ile Cys Pro Gly Ala Ala Ala Phe Thr Ile Ser Ile Arg
    130                 135                 140
Leu Thr Lys Glu Gly Leu Gln Gln Tyr Arg Glu Val Ala Lys Val Val
145                 150                 155                 160
Phe Gln Tyr Ile Ala Met Leu Lys Glu Arg Glu Pro Gln Gln Trp Val
                165                 170                 175
Phe Asp Glu Met Lys Asn Leu Ala Glu Val Glu Phe Arg Phe Lys Gln
            180                 185                 190
Lys Ser Pro Ala Ser Arg Phe Thr Ser Arg Leu Ser Ser Val Met Gln
        195                 200                 205
Lys Pro Leu Pro Arg Glu Trp Leu Leu Ser Gly Ser Leu Pro Ala Gln
    210                 215                 220
Val Arg Thr Pro Ile Leu Ser Arg Lys Ala Leu Ser Tyr Pro Ser Ala
225                 230                 235                 240
Leu Thr Thr Ser Gly
                245
```

<210> 35958
<211> 347
<212> PRT
<213> A.fumigatus

<400> 35958

```
His Tyr Lys Ile Arg Val Ala Lys Phe Ser Glu Arg Pro Ala Ala Gly
1               5                   10                  15
Cys Ser Gly Ala Val Thr Gln Ser Arg Lys Ser Leu Leu Asp Trp Trp
            20                  25                  30
Ala Thr Leu Pro Glu Glu Thr Asp Cys Arg Asp Leu Asn Pro Ser Gly
        35                  40                  45
Pro Leu Phe Arg Ser Asn Val His Leu Lys Leu Asp Tyr Cys Leu Thr
    50                  55                  60
Arg Ile Phe Ile Gly Arg Pro Phe Leu Phe Ser Asn Met Lys Ser Thr
65                  70                  75                  80
Asn Pro Ala Gly Phe Gln Gly Pro Pro Phe Lys Ala Thr Pro Gly Leu
                85                  90                  95
Ser Lys Asn Trp Ser Thr Leu Val Thr Asp Cys Val Glu Ala Ala Leu
            100                 105                 110
Glu Ile Ile Asp Leu Cys Arg Leu Leu Arg Asp Glu Ser Gly Leu Ala
        115                 120                 125
Arg Ala Ser Phe Thr Glu Phe Ser Ser Cys Arg Ala Ala Leu Leu Val
    130                 135                 140
Ile Leu Ala Gln Ser Leu Thr Lys Arg Thr Glu Arg Leu Arg Glu Ala
145                 150                 155                 160
Leu Glu Lys Gly Met Ala Leu Ile Lys Ile Met Ser Met Gly Val Gly
                165                 170                 175
Ser Ala Arg Ser Ala Val Ser Val Ile Glu Ala Leu Glu Arg Ala Ile
            180                 185                 190
Arg Arg Leu Glu Glu Trp Ser Glu Ser Gln Ala Gln Arg Asn Ala Gly
        195                 200                 205
Val Val Glu Ser Ala Tyr Asp Arg Phe Lys Asn Trp Glu Met Leu Trp
    210                 215                 220
Lys Thr Gly Pro Ile Ser Pro Gly Thr Thr Val Thr Phe Pro Glu Gln
225                 230                 235                 240
Tyr Thr Pro Ala Arg Pro Gly Thr Gly Ile Pro Ala Val Pro Val Thr
                245                 250                 255
```

```
Pro Met Thr Gly Thr Glu Ala Gly Asn Asp Ala Ile Glu Gly Asp Val
            260                 265                 270
Ala Ser Thr Asp Leu Ala Ser Ser Ser Asp Phe Ser Ala Pro His Ala
        275                 280                 285
Phe Ser Gln Met Pro Pro Leu Gly Phe Asp His Phe Val Ser Asn Phe
    290                 295                 300
Pro Gln Glu Leu Gly Glu Phe Thr Ala Ile Pro Cys Phe Glu Thr Asp
305                 310                 315                 320
Pro Gln Gln Gly Leu Gly Ser Asp Met Lys Ala Ser Gln Gly Cys Pro
                325                 330                 335
Pro Asp Thr Arg Trp Met Gln Phe Met Ser Glu
            340                 345
```

<210> 35959
<211> 375
<212> PRT
<213> A.fumigatus

<400> 35959

```
Arg Ile Arg Gln Ser Leu Asn Phe Gln Ala Thr Ala Glu Lys Tyr Leu
1               5                   10                  15
Phe Lys Gln Leu Val Lys Thr Lys Arg Ile Ala Glu Ser Pro Val Phe
            20                  25                  30
Leu Lys Phe Lys Glu Arg Lys Asn Ile Ser Thr Glu Gly Pro Arg Ser
        35                  40                  45
Thr Ala Glu Ala Asn Val Thr Ala Arg Leu Tyr Lys Ser Asn Pro Val
    50                  55                  60
Lys Asn Val Phe Pro Gly Ile Met Asp Gly Ile Arg Gln Leu Leu Gly
65                  70                  75                  80
Leu Glu Ala Ala Ala Ala Gly Lys Lys Asn Val Ser Glu Gln Lys Lys
                85                  90                  95
Gly Ser Thr Asp Gln Arg Lys Ser Glu Ser Lys Glu Pro Ser Leu Asp
            100                 105                 110
Gly Gly Ser Glu Leu Glu Glu Glu Ser Asp Ala Asp Ser Arg Lys Thr
        115                 120                 125
Ala Ser Lys Ala Ala Ala Arg Ser Ala Lys Val Ala Ser Glu Glu Ala
    130                 135                 140
Asp Arg Glu Glu Gly Ser Asp Val Asp Met Asp Asp Ala Glu Ser Val
145                 150                 155                 160
Asp Tyr Ser His Phe Asp Ala Arg Leu Ala Ser Asp Ser Gly Ser His
                165                 170                 175
Ser Asp Gly Glu Ser Asp Ala Glu Glu Ala Ser Asp Ser Asp Asn Ser
            180                 185                 190
Asn Ile Ser Arg Ser Ile Ser Arg Ser Pro Ser Pro Glu Lys Pro Thr
        195                 200                 205
Lys Lys Ser Lys Lys Ala Thr Ser Thr Pro Ala Thr Ser Thr Thr Phe
    210                 215                 220
Leu Pro Ser Leu Thr Met Gly Gly Tyr Phe Ser Gly Ser Glu Ser Glu
225                 230                 235                 240
Pro Glu Asp Leu Glu Gly Thr Ala Gly Pro Pro Arg Arg Lys Asn Arg
                245                 250                 255
Met Gly Gln Gln Ala Arg Arg Ala Leu Trp Glu Lys Lys Tyr Gly Ser
            260                 265                 270
Gly Ala Asn His Ile Lys Lys Gln Lys Glu Asn Glu Trp Lys Asn Arg
        275                 280                 285
Asp Ser Gly Trp Asp Ala Arg Arg Gly Ala Thr Asp Gly Thr Glu Gly
```

```
    290                 295                 300
Pro Arg Gly Lys Arg Gly Leu Gly Gln Gly Arg Pro Trp Gln Arg Asn
305                 310                 315                 320
Asn Asn Ser Thr Gly Gly Asp Arg Pro Gln Arg Gly Pro Pro Gly Gly
                325                 330                 335
Ser Asn Lys Lys Asn Val Lys Asp Asp Lys Pro Leu His Pro Ser Trp
            340                 345                 350
Glu Ala Ala Arg Lys Ala Lys Glu Gln Lys Ser Met Ala Ala Phe Gln
        355                 360                 365
Gly Lys Lys Val Thr Phe Asp
    370                 375
```

<210> 35960
<211> 142
<212> PRT
<213> A.fumigatus

<400> 35960

```
Gly Asn Leu Ser Gln Ser Ala Phe Arg Pro Trp Trp Cys Leu Leu Arg
1               5                   10                  15
Arg His Ser Arg Ser Gly Glu Pro Arg Trp Asp Thr Val Thr Ser Ser
            20                  25                  30
His Asp Arg Pro Thr Trp Ala Lys Ser Val Glu Trp Ala Lys Ala Asp
        35                  40                  45
Leu Leu Gln Pro Asp Thr Tyr Lys Pro Phe Leu Arg Asp Ala Asp Val
    50                  55                  60
Val Val His Ser Met Gly Ile Leu Leu Glu Ala Asp Tyr Lys Gly Val
65                  70                  75                  80
Val Arg Gly Lys Glu Pro Val Ile Ser Gly Leu Gln Arg Ala Phe Ser
                85                  90                  95
Ser Ser Lys Leu Gly Ser Gln Asn Pro Leu Thr Arg Arg Asp Gly Glu
            100                 105                 110
Arg Leu Glu Pro Lys Glu Arg Asp Gly Gln Leu Thr Tyr Glu Ile Met
        115                 120                 125
Asn Arg Asp Ser Gly Ser Tyr Met Leu Gly Leu Ser Ile Arg
    130                 135                 140
```

<210> 35961
<211> 151
<212> PRT
<213> A.fumigatus

<400> 35961

```
Ser Cys Gly Ala Asp Ser Lys Leu Glu Thr Thr Ala Ile Ala Leu Ala
1               5                   10                  15
Lys Glu Ser Ser Ser Glu His Val Pro Thr Phe Val Tyr Ile Ser Ala
            20                  25                  30
Ala Ser Gly Ala Pro Ile Leu Pro Ser Arg Tyr Ile Thr Thr Lys Arg
        35                  40                  45
Glu Ala Glu Thr Thr Ile Glu Ser Lys Leu Pro Glu Leu Arg Ser Ile
    50                  55                  60
Phe Ile Arg Pro Pro Phe Met Tyr Asp Ser Ser Arg Lys Phe Thr Leu
65                  70                  75                  80
Pro Ile Ala Leu Gly Gly Phe Val Ala Ser Gln Leu Asn Ala Leu Leu
                85                  90                  95
Gly Asp Arg Leu Arg Phe Leu Gly Ala Met Val Asp Lys Pro Phe Gln
```

```
            100                 105                 110
Val Asp Leu Val Gly Glu Ala Val Val Glu Ala Met Glu Asp Glu Ser
        115                 120                 125
Ile Arg Gly Ala Val Gly Thr Lys Gln Ile Glu Asn Leu Ala Thr Lys
    130                 135                 140
Ala Trp Arg Lys Ser Met Leu
145                 150
```

<210> 35962
<211> 271
<212> PRT
<213> A.fumigatus

<400> 35962

```
Val Thr Trp Ser Gln Pro Ser Thr Asp Pro Pro Phe Leu Pro Thr Cys
1               5                   10                  15
Leu Pro Thr Val Val His Met Leu Met Leu Lys Gln Lys Asn Ala Ala
            20                  25                  30
Glu Arg Asn Leu Lys Glu Thr Ala Ala Glu Thr Gln Arg Leu Ala Thr
        35                  40                  45
Asp Pro Ala Leu Leu Ser Ser Leu Ser Arg Lys His Ala Phe Ala Ser
    50                  55                  60
His Asn Leu Leu Lys Ala Asp Thr Glu Ala Ala Gly Glu Asp Phe Glu
65                  70                  75                  80
Arg Lys Arg Ala Trp Asp Trp Thr Ile Asp Glu Ser Glu Lys Trp Asp
                85                  90                  95
Arg Arg Met Glu Lys Lys Gln Arg His Arg Asp Asp Val Ala Phe Gln
            100                 105                 110
Asp Tyr Thr Gln Asp Ala Arg Lys Val Tyr Lys Arg Gln Leu Arg Gln
        115                 120                 125
Met Gln Pro Asp Met Ala Ala Tyr Glu Arg Glu Lys Leu Ala Ala Ile
    130                 135                 140
Glu Lys Ala Ala Ala Asn Gly Asp Leu Glu Ile Val Glu Thr Asn Asp
145                 150                 155                 160
Gly Glu Met Ile Ala Val Asp Lys Asn Gly Thr Phe Tyr Ser Thr Ala
                165                 170                 175
Asp Thr Ile Gly Phe Thr Glu Asn Lys Pro Asp Arg Ala Gly Val Asp
            180                 185                 190
Lys Leu Val Ala Asp Leu Arg Lys Ala Glu Glu Val Arg Leu Lys Lys
        195                 200                 205
Arg Arg Glu Arg Arg Gly Asp Glu Glu Pro Asp Val Thr Tyr Ile Asn
    210                 215                 220
Glu Lys Asn Lys Gln Phe Asn Gln Lys Leu Ala Arg Phe Tyr Asn Lys
225                 230                 235                 240
Val Cys Pro Phe Thr Lys Thr Ser Ala Phe Arg Thr Glu Leu Met Pro
                245                 250                 255
Phe Ser Thr Leu Arg Arg Phe Ala Thr Val Ser Asn Val Val Gln
            260                 265                 270
```

<210> 35963
<211> 1006
<212> PRT
<213> A.fumigatus

<400> 35963

```
Tyr Arg Phe Ser Cys Leu Val Ser Met Gly Val Thr Gly Leu Trp Thr
```

```
1               5                  10                  15
Val Val Gln Pro Cys Ala Arg Pro Ile Lys Leu Glu Thr Leu Asn Lys
            20                  25                  30
Lys Arg Leu Ala Val Asp Ala Ser Ile Trp Ile Tyr Gln Phe Leu Lys
        35                  40                  45
Ala Val Arg Asp Lys Glu Gly Asn Ala Leu Arg Asn Ser His Ile Val
    50                  55                  60
Gly Phe Phe Arg Arg Ile Cys Lys Leu Leu Tyr Phe Gly Ile Lys Pro
65                  70                  75                  80
Val Phe Val Phe Asp Gly Gly Ala Pro Val Leu Lys Arg Gln Thr Ile
                85                  90                  95
Ala Gly Arg Lys Lys Arg Arg Glu Gly Arg Arg Glu Asp Ala Val Arg
            100                 105                 110
Thr Ala Gly Lys Leu Leu Ala Val Gln Met Gln Arg Ser Ala Glu Glu
        115                 120                 125
Glu Ala Ala Arg Gln Lys Lys Gly Ala Ser Arg Gln Asp Glu Glu Glu
    130                 135                 140
Val Pro Asp Asn Pro Val Tyr Asp Glu Glu Thr Tyr Leu Thr Glu Lys
145                 150                 155                 160
Glu Lys Arg Gln Gly Arg Ala Phe Arg Lys Thr Asp Ala Tyr His Leu
                165                 170                 175
Pro Asp Leu His Val Ser Leu Glu Asp Met Gly Ala Pro Asn Asp Pro
            180                 185                 190
Arg Ile Met Ser Arg Ala Glu Leu Glu Glu Tyr Ala Arg Gln Phe His
        195                 200                 205
Gln Gly Glu Asp Ile Asn Leu Tyr Asp Phe Ser Lys Ile Asp Phe Asp
    210                 215                 220
Ser Pro Phe Phe Leu Ser Leu Pro Ala Thr Asp Arg Tyr Asn Ile Leu
225                 230                 235                 240
Asn Ala Ala Arg Leu Arg Ser Arg Leu Arg Met Gly Tyr Ser Lys Glu
                245                 250                 255
Gln Leu Asp Asn Met Phe Pro Asp Arg Met Ala Phe Ser Lys Phe Gln
            260                 265                 270
Ile Glu Arg Val Lys Glu Arg Asn Asp Leu Thr Gln Arg Leu Met Asn
        275                 280                 285
Leu Asn Gly Met Asn Gly Glu Glu Ala Phe Tyr Asn Ser Gly Gln Arg
    290                 295                 300
Ile Ala Gly Glu Arg Gly Arg Glu Tyr Val Leu Val Lys Asp Asn Ala
305                 310                 315                 320
Val Glu Gly Gly Trp Val Leu Gly Val Val Gly Asn Lys Gly Glu Gly
                325                 330                 335
His Ala Asp Arg Pro Ile Asp Val Asp Arg Tyr Gly Gln Lys Asp Val
            340                 345                 350
Thr Tyr Asp His Glu Glu Ala Ser Asp Gly Asp Asp Gly Ala Phe Glu
        355                 360                 365
Asp Val Pro Ile Glu Gly Leu Asn Arg Leu Pro Lys Leu Asn Phe Pro
    370                 375                 380
Gln Lys Asp Ala Phe Asn Glu Pro Ile Glu Lys Pro Val Thr Ser Val
385                 390                 395                 400
Ser Arg Arg Arg Asp Ser Leu Phe Gln Glu Thr Glu Asp Asn Ser Leu
                405                 410                 415
Phe Val Gln Asp Gly Asp Leu Ala Gly Ala Leu Pro His Gln Arg Leu
            420                 425                 430
His Ile Asp Asp Phe Pro Gly Gly Thr Val Asp Ser Glu Asp Glu Asp
        435                 440                 445
Leu Gln Arg Ala Ile Ala Met Ser Leu Glu Pro Ser Ala Ser Arg Ile
```

```
    450                 455                 460
Glu Asp Met Pro Asp Ile Pro Leu Asn Arg Asn Asp Val Pro Ala Ala
465                 470                 475                 480
Pro Pro Lys Glu Thr Ser Pro Gly Leu Ala Glu Ser Asp Asp Asp Glu
                485                 490                 495
Met Asp Phe Ala Ala Ala Leu Ala Arg Ser Arg Arg Lys Glu Arg Lys
            500                 505                 510
Pro Tyr Asn Ser Val Pro Arg Pro Val Met Asp His Pro Phe Glu Gly
        515                 520                 525
Pro Phe Pro Phe Glu Ser Ile Arg Leu Asn Pro Ser Lys Ala Glu Asn
    530                 535                 540
Pro Pro His Glu Glu Leu Asp Glu Glu Gly Val Gly Phe Glu Lys Glu
545                 550                 555                 560
Ser Ala Lys Lys Glu Glu Ser Leu Pro Leu Pro Pro Trp Phe Ser Gly
                565                 570                 575
Glu Gln Leu Asn Glu Glu Phe Val Ala Asp Lys Ile Asp Asn Thr Ser
            580                 585                 590
Leu Glu Ala Tyr Arg Asp Arg Ala Met Asn Pro Asp His Leu Phe Gln
        595                 600                 605
Lys Glu His Arg Ser Pro Asp Val Ile Asp Val Asp Lys Ile Pro Gly
    610                 615                 620
Pro Glu Glu Val Ile Asp Leu Glu Ala Glu Pro Lys Ala Glu Lys Pro
625                 630                 635                 640
Asp Val Ala Val Leu Ser Arg Pro Glu Asn Ala Gln Val His Leu Asp
                645                 650                 655
Asp Ile Ala Val Pro Lys Phe Ser Gly Lys Asp Lys Ala Val Glu Glu
            660                 665                 670
Val Thr Cys Glu Gln Arg Ala Thr Gly Gly Lys Thr Pro Leu Thr Glu
        675                 680                 685
Thr Lys Lys Asn Val Ala His Ala Ser Pro Ser Pro Glu Pro Glu Phe
    690                 695                 700
Glu Asp Val Thr Ile Gln Thr Glu Thr Lys Pro Thr Glu Val Thr Val
705                 710                 715                 720
Thr Arg Asn Gln Pro Gln Ile Phe Asp Glu Ser Asp Gln Ala His Val
                725                 730                 735
Val Val Glu Asp Asp Asp Asp Phe Ser Asp Pro Glu Asp Glu Glu Leu
            740                 745                 750
Met Arg Gln Leu Ala Ala Glu Gly Glu Glu His Val Arg Phe Ala Ala
        755                 760                 765
Thr Leu Asn Asn Asn Val Gln Gln Ser Ser Thr Phe Asp Tyr Glu Gln
    770                 775                 780
Glu Leu Arg Gln Leu Arg Ser Gln Gln Lys Lys Asp Arg Arg Asp Ala
785                 790                 795                 800
Asp Glu Val Thr Gln Val Met Ile Thr Glu Cys Gln Gln Leu Leu Ser
                805                 810                 815
Leu Phe Gly Leu Pro Tyr Ile Thr Ala Pro Met Glu Ala Glu Ala Gln
            820                 825                 830
Cys Ala Glu Leu Val Ser Leu Gly Leu Val Asp Gly Ile Ile Thr Asp
        835                 840                 845
Asp Ser Asp Ile Phe Leu Phe Gly Gly Thr Arg Val Tyr Lys Asn Met
    850                 855                 860
Phe Asn Gln Gly Lys Phe Val Glu Cys Tyr Leu Thr Ser Asp Met Glu
865                 870                 875                 880
Lys Glu Tyr Ala Phe His Arg Arg Lys Leu Ile Ser Leu Ala His Leu
                885                 890                 895
Leu Gly Ser Asp Tyr Thr Glu Gly Ile Ser Gly Ile Gly Pro Val Thr
```

```
            900                 905                 910
Ala Leu Glu Ile Leu Thr Glu Phe Ser Ser Leu Glu Glu Phe Arg Asp
        915                 920                 925
Trp Trp Thr Gln Ile Gln Thr Gly Met Tyr Val Pro Glu Thr His Ala
    930                 935                 940
Ala Phe Tyr Lys Lys Phe Arg Lys Thr Ala Thr Lys Ile Phe Ile Pro
945                 950                 955                 960
Pro Thr Phe Pro Asn Pro Gln Val Asp Lys Ala Tyr Leu Glu Pro Glu
                965                 970                 975
Val Asp Ser Asp Pro Ser Pro Phe Gln Trp Ala Phe Pro Thr Tyr Met
            980                 985                 990
Gly Cys Glu Pro Ser Thr Asp Gly Asp Glu Arg Ile Arg Val
        995                 1000                1005

<210> 35964
<211> 70
<212> PRT
<213> A.fumigatus

<400> 35964
Ile Thr His Ile Gly Leu Leu Lys Arg Ser Leu Leu Gln Arg Arg Phe
1               5                   10                  15
Trp Ile Met Lys Gly Ile Phe Val Ala Asn Lys Ala Phe Ser Leu Gln
            20                  25                  30
Val Phe Met Asn Ile Val Leu Asp Glu Ala Phe Glu Glu Lys Gln Gly
        35                  40                  45
Gly Glu Lys Val Ala Ile Gly Met Val Val Arg Cys Ala Asn Trp Arg
    50                  55                  60
Thr Ala Val Ser Glu Gly
65                  70

<210> 35965
<211> 463
<212> PRT
<213> A.fumigatus

<400> 35965
Tyr Ser Asp His Phe Tyr Val Ala Thr Leu Met Gln Ser Leu Cys His
1               5                   10                  15
Ala Met Leu Gly Lys Val Glu Ser Arg Asp Val Asp Ile Asp Asp Phe
            20                  25                  30
Asp Met Glu Arg Met Leu Glu Ile Gln Ala Glu Glu Gln Leu Glu Lys
        35                  40                  45
Asp Ala Ile Ala Glu Phe Asp Arg Tyr Arg Arg Met Asp Glu Trp Ser
    50                  55                  60
Ser Ser Phe Gln Asn Val Tyr Ser Arg Ala Ala Leu Arg Cys Gln Met
65                  70                  75                  80
Gln Leu Met Arg Ala Lys Ile Leu Asp Val Asp Ile Met Gln Phe Leu
                85                  90                  95
Pro Tyr Thr Arg Ala Gly Thr Tyr Asp Leu Leu Arg Ala Asp Ala Phe
            100                 105                 110
Glu Cys Leu Val Glu Leu Asp Ile Phe Lys Ser Pro Glu Leu Val Lys
        115                 120                 125
Trp Phe Met Phe Thr Met Ser Ser Asp Ser Ser Leu Trp Leu Arg Arg
    130                 135                 140
Arg Leu His Asp Leu Phe Gly Lys Ala Leu Ala Pro Val Ala Phe Gly
```

```
145                 150                 155                 160
Arg Glu Pro Glu Asn Glu Pro Ser Ala Thr Ala Asp Ser Leu Ile Ile
                165                 170                 175
Glu Gln Glu Ser Ser Thr Lys Val Arg Gln Ala Asp Leu Ala Arg Lys
            180                 185                 190
Gln Thr Val Thr Gly Ala Ile Glu Ala Leu Lys Gly Glu Ile Ser Gly
        195                 200                 205
Asp Gln Asn Phe Lys Glu Cys Leu Trp Ala Ala Cys Asn Ser Pro Gly
    210                 215                 220
Ile Gly Ile Leu Glu Leu Ser Val Phe Thr Asp Leu Cys Lys Val Leu
225                 230                 235                 240
Tyr Asp Ser Val Thr Ser Val Met Val Lys Leu Lys Tyr Pro Arg Tyr
                245                 250                 255
Trp Gln Val Lys His Leu Gly Lys Val Ile Pro Phe Gln Ser Trp Ile
            260                 265                 270
Ser Asn Leu Ile Leu Ile Ala Ser Gly Pro His Ala Phe Leu Thr Val
        275                 280                 285
Gln Pro Asn Gln Asp Tyr Pro Arg Thr Leu Lys Arg Phe Leu His Lys
    290                 295                 300
Trp Glu Ala Gln Thr Arg Arg Glu Thr Asp Ala Ser Thr Trp Ala Pro
305                 310                 315                 320
Tyr His Ile Gln Ala Ile Glu Ala Gly Leu Lys His Pro Leu Ser Lys
                325                 330                 335
Ser Ser Ser Asn Leu Ala Thr His Ser Glu Ala Ala His Pro Lys Thr
            340                 345                 350
Leu Arg Phe Ala Gly Thr Ser Ala Thr Glu Asp Ala Gly Cys Ser Ile
        355                 360                 365
Asp Ala Val Asp Thr Lys Trp Trp Arg Arg Arg Ala Gln Thr Glu Thr
    370                 375                 380
Gln Ile Arg Ala Glu Ala Glu Ile Ser Cys Leu Pro Ala Val Val Phe
385                 390                 395                 400
Tyr Arg Asn Phe Phe Thr Ser Val Leu Phe Thr Ser His Leu Phe Glu
                405                 410                 415
Thr Trp Arg Gly Met Val Glu Gln Ala Ser Arg Arg Met Val Gly Arg
            420                 425                 430
Pro Val Ser Asn Asp Leu Tyr Met Leu Thr Phe Ile Ile Phe Tyr Asp
        435                 440                 445
Gly Ala Ala Cys Ser Leu Ala Leu Gly Phe Ile Gly Phe Phe Val
    450                 455                 460
```

<210> 35966
<211> 250
<212> PRT
<213> A.fumigatus

<400> 35966

```
Arg Ser Arg Met Cys Leu Asn Ala Arg Met Gly Asp Ile Pro Asn Gly
1               5                   10                  15
Ala Ile Thr Ser Ser Gln Phe Gln Lys Ile Cys Glu Arg Leu Gly His
            20                  25                  30
Ala Lys Leu Asp Thr Phe Phe Gln Gln Trp Val Tyr Gly Ala Gly Cys
        35                  40                  45
Pro Arg Phe Gln Ala Thr Gln Arg Phe Asn Lys Lys Lys Leu Val Val
    50                  55                  60
Glu Met Met Ile Lys Gln Val Gln Ala Asp Gln Pro Ser Thr Arg Asp
65                  70                  75                  80
```

```
Leu Asp Lys Asn Thr Phe Met Arg Asp Val Lys Glu Glu Ile Arg Gly
                85                  90                  95
Val Tyr Ala Gly Asn Ile Gln Pro Val Phe Ser Gly Ser Met Thr Ile
            100                 105                 110
Arg Ile His Glu Ala Asp Gly Thr Pro Tyr Glu His Ile Val Glu Ile
        115                 120                 125
Lys Glu Gly Val Thr Lys Phe Asp Ile Pro Tyr Asn Thr Lys Tyr Lys
    130                 135                 140
Arg Leu Lys Arg Asn Lys Arg Gln Lys Glu Arg Ala Ala Ala Val Ser
145                 150                 155                 160
Gly Gly Asp Pro Asn Ala Glu Thr Gln Glu Asp Val Leu Leu Tyr Cys
                165                 170                 175
Leu Gly Asp Val Leu Gln Thr Glu Glu Glu Met Gln Glu Trp Arg Leu
            180                 185                 190
Ala Asp Trp Ser Lys Glu Asp Glu Asp Arg Met Gly Gln Glu Ser Tyr
        195                 200                 205
Glu Trp Ile Arg Met Asp Ala Asp Phe Glu Trp Ile Cys Lys Leu Ser
    210                 215                 220
Leu Val Met Pro Gly Tyr Met Tyr Leu Ser Gln Leu Gln Gln Asp Arg
225                 230                 235                 240
Asp Val Val Ala Gln Leu Glu Val Ser Ala
                245                 250
```

<210> 35967
<211> 149
<212> PRT
<213> A.fumigatus

<400> 35967

```
Ser Leu Gln Tyr Met Ala Ala Gln Arg Glu His Pro Leu Ile Ser Thr
1               5                   10                  15
Ile Phe Val Arg Thr Leu Met Asp Arg Arg Tyr Phe Tyr Gly Ile Arg
            20                  25                  30
Glu Ala Ala Ala Arg Ala Leu Val Lys His Ala Lys Glu Glu Thr Asn
        35                  40                  45
Trp Leu Gly Leu Phe His Leu Glu Arg Ala Phe Gln Glu Leu Phe Cys
    50                  55                  60
Leu Pro Gly Ser Pro Met Thr Arg Ser Asn Asp Phe Ser Asp Arg Ala
65                  70                  75                  80
Ala Tyr Ala Leu Gln Leu Ala Ile Pro Glu Ala Ile Ser Lys Val Arg
                85                  90                  95
Asp Asn Asp Gly Lys Thr Pro Leu Arg Val Lys Arg Phe Leu Tyr Asp
            100                 105                 110
Lys Leu Lys Phe Asn Asp Asn Ser Asn Asn Glu Val Ser Lys Ser Phe
        115                 120                 125
Tyr Lys Thr Leu Thr Ile Arg Leu His Phe Ile Ser Ile Pro Ile Ile
    130                 135                 140
Ser Thr Ser Pro Leu
145
```

<210> 35968
<211> 141
<212> PRT
<213> A.fumigatus

<400> 35968

```
Ser Arg Trp Tyr Leu Leu Asp Gly Gln Pro Ala Lys Arg Arg Gly Pro
1               5                  10                  15
Lys Pro Asp Ser Arg Pro Ala Leu Thr Arg Arg Gln Glu Leu Asn Arg
            20                  25                  30
Gln Ala Gln Arg Thr His Arg Glu Arg Lys Glu Gln Tyr Ile Arg Ser
        35                  40                  45
Leu Glu Ile Glu Val Ser Arg Leu Arg Glu Ala Phe Thr Gln Glu Met
    50                  55                  60
Ser Ala Ala Asn Leu Ala Val Val Gln His Arg Glu Met Leu Gln Thr
65                  70                  75                  80
Val Asn Asp Glu Asn Ala Ile Leu Lys Glu Leu Leu Thr Ala His Gly
                85                  90                  95
Ile Gln Phe Glu Ala Glu Leu Glu Arg Arg Arg Ala Glu Arg Arg Ser
            100                 105                 110
Ala Gly Arg Gly Phe Gln Ser Ser Pro Leu Ala Gly Ser Ser Val Val
        115                 120                 125
Ser Gln Ala Pro Ala Ala Leu Val Phe Thr Thr Gly Leu
    130                 135                 140
```

<210> 35969
<211> 398
<212> PRT
<213> A.fumigatus

<400> 35969

```
Val Phe Leu Gly Ser Leu Asp Glu Arg Gln Leu Gly Ser Arg Thr Ser
1               5                  10                  15
Ser Ala Val Leu Pro Asp Thr Val Ala Lys Glu Ser Gln Leu Thr Val
            20                  25                  30
Pro Thr Thr Ala Pro Glu Thr Thr Ile Pro Glu Ala Thr Ala Ala Glu
        35                  40                  45
Ala Ala Ala Pro Val Pro Val Val Thr Asp Ala Asn Ala Pro Val Ser
    50                  55                  60
Glu Val Pro Ala Glu Thr Ala Leu Pro Glu Arg Leu Lys Glu Lys Asp
65                  70                  75                  80
Thr Ser Pro Ala Glu Leu Thr Ala Ala Ser Pro Ser Glu Ser Val Asp
                85                  90                  95
Leu Thr Gly His Ala Lys Arg Pro Tyr Glu Ser Ser Leu Phe His Lys
            100                 105                 110
Asp Glu Glu His Lys Pro Pro Lys Met Ala Lys Val Glu Asp Ser Glu
        115                 120                 125
Ala Ala Pro Ala Ala Thr Glu Thr Lys Ala Gly Asp Leu Gln Pro Glu
    130                 135                 140
Lys Pro Ser Glu Ser Thr Val Gln Pro Leu Val Val Pro Gly Leu Gly
145                 150                 155                 160
Ala Glu Ser Ala Asp Thr Ser Gln Lys Val Glu Ser Ala Glu Ala Val
                165                 170                 175
Ala Pro Thr Thr Ala Pro Ser Ala Ala Gln Ala Ala Ala Ser Thr Thr
            180                 185                 190
Ser Pro Val Val Pro Ala Ala Val Ala Thr Ala Gly Ala Glu Ser Glu
        195                 200                 205
Ala Asp Ala Glu Ala Arg Gln Lys Gln Glu Val Lys Glu Ser Ile Gln
    210                 215                 220
Ala Phe Thr Gly Glu Gly Gln Ala Pro Pro Ser Lys Glu Pro Gln Gln
225                 230                 235                 240
Glu Pro Gln Gln Glu Pro Gln Gln Glu Pro Gln Gln Glu Pro Gln Gln
```

```
                245                 250                 255
Glu Pro Gln Gln Glu Pro Glu Glu Lys Ala Lys Glu Lys Ala Gln Glu
            260                 265                 270
Thr Ala Pro Val Lys Ala Thr Pro Glu Thr Pro Thr Lys Ala Lys Pro
        275                 280                 285
Asn Val Ala Ala Ala Ala Ala Ala Ala Ala Met Arg Gly Lys Ser Ala
    290                 295                 300
Ala Ser Pro Ala Pro Ala Thr Glu Ala Ala Glu Lys Thr Ala Ala Glu
305                 310                 315                 320
Pro Lys Glu Thr Gln Pro Asp Thr His Asp Gln Val Pro Thr Glu Thr
                325                 330                 335
Pro Arg Gly Glu Glu Thr Ala Ala Lys Glu Thr Gln Gln Pro Glu Thr
            340                 345                 350
Ala Glu Gly Arg Lys Ser His Glu Glu Ala Gln Thr Ala Val Asp Lys
        355                 360                 365
Ala Gln Glu Ala Ala Lys Ala Glu Ala Ala Lys Ala Asp Lys Arg Lys
    370                 375                 380
Ser Gly Phe Trp Ser Trp Ile Lys Arg Lys Val Lys Gly Thr
385                 390                 395
```

<210> 35970
<211> 201
<212> PRT
<213> A.fumigatus

<400> 35970

```
Leu Ala Met Gln Ser Ala His Thr Arg Ala Ala Ser Ser Thr Arg Thr
1               5                   10                  15
Arg Ser Thr Ser Leu Pro Arg Trp Pro Arg Ser Arg Thr Leu Lys Pro
            20                  25                  30
Arg Pro Gln Pro Gln Lys Pro Lys Leu Gly Thr Cys Asn Pro Arg Ser
        35                  40                  45
Gln Ala Ser Leu Gln Cys Asn Pro Trp Leu Ser Gln Gly Leu Val Leu
    50                  55                  60
Asn Pro Gln Thr Arg Leu Arg Arg Trp Ser Leu Gln Lys Leu Leu Pro
65                  70                  75                  80
Arg Pro Pro Leu Leu Gln Leu Pro Arg Leu Leu Pro Pro Leu His Pro
                85                  90                  95
Leu Ser Phe Pro Leu Gln Leu Leu Pro Gln Val Gln Arg Ala Lys Pro
            100                 105                 110
Thr Arg Arg Pro Asp Arg Ser Arg Arg Leu Lys Arg Ala Ser Lys Leu
        115                 120                 125
Ser Pro Ala Arg Asp Arg Pro Pro Arg Pro Arg Ser Pro Ser Lys Ser
    130                 135                 140
Pro Ser Lys Ser Pro Ser Lys Ser Pro Ser Lys Ser Pro Ser Lys Ser
145                 150                 155                 160
Pro Ser Lys Ser Leu Arg Arg Arg Pro Arg Lys Arg Pro Arg Arg Pro
                165                 170                 175
Arg Pro Ser Arg Arg Leu Arg Arg Leu Pro Gln Arg Pro Asn Pro Thr
            180                 185                 190
Ser Leu Pro Leu Leu Arg Pro Gln Pro
        195                 200
```

<210> 35971
<211> 156
<212> PRT

<213> A.fumigatus

<400> 35971

```
Val Ser Leu Gly Ser Ala Ala Val Phe Ser Ala Ala Ser Val Ala Gly
1               5                  10                  15
Ala Gly Glu Ala Ala Asp Phe Pro Leu Met Ala Ala Ala Ala Ala Ala
            20                  25                  30
Ala Ala Thr Leu Gly Leu Ala Phe Val Gly Val Ser Gly Val Ala Leu
        35                  40                  45
Thr Gly Ala Val Ser Trp Ala Phe Ser Leu Ala Phe Ser Ser Gly Ser
    50                  55                  60
Cys Trp Gly Ser Cys Trp Gly Ser Cys Trp Gly Ser Cys Trp Gly Ser
65                  70                  75                  80
Cys Trp Gly Ser Cys Trp Gly Ser Leu Asp Gly Gly Ala Cys Pro Ser
                85                  90                  95
Pro Val Lys Ala Trp Met Leu Ser Leu Thr Ser Cys Phe Cys Leu Ala
            100                 105                 110
Ser Ala Ser Ala Ser Leu Ser Ala Pro Ala Val Ala Thr Ala Ala Gly
        115                 120                 125
Thr Thr Gly Asp Val Val Glu Ala Ala Ala Trp Ala Ala Glu Gly Ala
    130                 135                 140
Val Val Gly Ala Thr Ala Ser Ala Asp Ser Thr Phe
145                 150                 155
```

<210> 35972
<211> 277
<212> PRT
<213> A.fumigatus

<400> 35972

```
Asp Val Ser Ala Asp Ser Ala Pro Ser Pro Gly Thr Thr Arg Gly Cys
1               5                  10                  15
Thr Val Asp Ser Leu Gly Phe Ser Gly Cys Arg Ser Pro Ala Leu Val
            20                  25                  30
Ser Val Ala Ala Gly Ala Ala Ser Glu Ser Ser Thr Leu Ala Ile Leu
        35                  40                  45
Gly Gly Leu Cys Ser Ser Ser Leu Trp Lys Arg Leu Leu Ser Tyr Gly
    50                  55                  60
Arg Phe Ala Trp Pro Val Lys Ser Thr Leu Ser Asp Gly Asp Ala Ala
65                  70                  75                  80
Val Asn Ser Ala Gly Glu Val Ser Phe Ser Leu Ser Leu Ser Gly Ser
                85                  90                  95
Ala Val Ser Ala Gly Thr Ser Asp Thr Gly Ala Leu Ala Ser Val Thr
            100                 105                 110
Thr Gly Thr Gly Ala Ala Ala Ser Ala Ala Val Ala Ser Gly Met Val
        115                 120                 125
Val Ser Gly Ala Val Val Gly Thr Val Asn Trp Asp Ser Leu Ala Thr
    130                 135                 140
Val Ser Gly Asn Thr Ala Glu Asp Val Arg Glu Pro Ser Cys Leu Ser
145                 150                 155                 160
Ser Lys Asp Pro Arg Asn Thr Tyr Leu Val Pro His His Leu Leu Arg
                165                 170                 175
Pro Thr Ile Arg Pro Asp Pro Pro Ser Lys Pro Gly Ser Cys Arg Arg
            180                 185                 190
Arg Pro Ser Gly Tyr Ser His Ser Leu Arg Ile Arg Gln Leu Leu Leu
        195                 200                 205
```

```
Tyr Pro Ala Arg Lys Thr Ala Cys Gly Val Pro Met Arg His Pro Asp
    210                 215                 220
Ala Pro Pro Thr Arg Thr Ser Trp Arg Cys Arg Asp Pro Lys Pro Ala
225                 230                 235                 240
Leu Leu Pro Arg Trp Met Ser Arg His Cys Gln Trp Phe Pro Arg Leu
                245                 250                 255
Thr Cys Leu Leu Arg Leu Cys Ser Phe Ser Pro Gln Glu Pro Arg Thr
            260                 265                 270
Arg Ala Lys Arg Lys
        275
```

<210> 35973
<211> 205
<212> PRT
<213> A.fumigatus

<400> 35973

```
Pro Glu Ala Thr Leu Ala Leu Val Arg Leu Gly Gly Phe Gly Phe Ser
1               5                   10                  15
Cys Leu Leu Ser Phe Val Asn Gly Arg Leu Cys Leu Leu Met Arg Leu
            20                  25                  30
Pro Ala Leu Gly Cys Phe Gly Leu Leu Gly Leu Leu Cys Ser Arg Leu
        35                  40                  45
Phe Ser Pro Trp Ser Leu Gly Gly Asp Leu Val Met Ser Ile Arg Leu
    50                  55                  60
Ser Leu Leu Gly Phe Gly Ser Cys Leu Leu Gly Gly Phe Gly Gly Arg
65                  70                  75                  80
Cys Arg Arg Ser Ser Arg Leu Ser Ser His Gly Cys Gly Arg Ser Ser
                85                  90                  95
Gly Ser Asp Val Gly Phe Gly Leu Cys Gly Ser Leu Arg Ser Arg Leu
            100                 105                 110
Asp Gly Arg Gly Leu Leu Gly Leu Phe Leu Gly Leu Leu Leu Arg Leu
        115                 120                 125
Leu Leu Gly Leu Leu Leu Gly Leu Leu Leu Gly Leu Leu Leu Gly Leu
    130                 135                 140
Leu Leu Gly Leu Leu Leu Gly Leu Leu Gly Arg Gly Gly Leu Ser Leu
145                 150                 155                 160
Ala Gly Glu Ser Leu Asp Ala Leu Phe Asn Leu Leu Leu Leu Ser Gly
                165                 170                 175
Leu Arg Val Gly Phe Ala Leu Cys Thr Cys Gly Ser Asn Cys Ser Gly
            180                 185                 190
Asn Asp Arg Gly Cys Ser Gly Gly Ser Ser Leu Gly Ser
        195                 200                 205
```

<210> 35974
<211> 615
<212> PRT
<213> A.fumigatus

<400> 35974

```
Ile Trp Ala Leu Thr Arg Ser Thr Gly Ile Arg Gln Phe Lys Asp Phe
1               5                   10                  15
Leu Thr Ser Ile Gly Gln Thr Glu Lys Glu Gly Glu Lys Ala Lys Lys
            20                  25                  30
Phe Arg Ile Leu Lys Ala Tyr Cys Asp Thr Gln Ile Ser Arg Asn Gly
        35                  40                  45
```

```
Ala Gly Asp Glu Ala Ile Cys Phe Pro Asp Leu Ile Gln Thr Trp Ser
    50                  55                  60
Phe Ala Asp Ser Ser Asn Asn Glu Ser Leu Leu Thr Val Val Pro Ser
65                  70                  75                  80
Val Leu Ala Ile Phe Leu Lys Thr Ile Ser Thr Gln Leu Asp Leu Arg
                85                  90                  95
Asp Phe Gly Leu Ala Leu Cys Lys His Leu Met His Lys Asp Gln Leu
            100                 105                 110
Arg Leu Phe Asn Arg Gly Leu Thr Ala Leu Lys Thr Lys Glu His Leu
        115                 120                 125
Ile Ser Pro Cys Leu Arg Leu Leu Thr Glu Ile Val Ser Phe Asp Gly
    130                 135                 140
Gly Ala Val Ala Arg His Val Tyr Met Ala Arg Tyr Ile Thr Phe Lys
145                 150                 155                 160
Arg Leu Asp Val Phe Leu Thr Pro Asn Lys Ala Gln Leu Glu Glu Ala
                165                 170                 175
Asp Glu Ser His Lys Ser Thr Leu Arg Arg Asn Ala Gln Lys Tyr Val
            180                 185                 190
Leu Ala Asn Leu Arg Val Gln His Val Asn Ala Lys Thr Asp Leu Val
        195                 200                 205
Glu Gln His Lys Val Ile Lys Ala Phe Leu Glu Phe Val Arg Lys Asp
    210                 215                 220
Pro Arg Asp Val Val Leu Glu Ile Ile Lys Ser Ile Asp Arg Asp Ile
225                 230                 235                 240
Ile Gln Asp Thr Thr Leu Pro Arg Ser Ala Lys Lys Lys Phe Phe Ser
                245                 250                 255
Arg Trp Asn Leu Glu Arg Leu Val Thr Leu Tyr Gly Tyr Asp Arg Glu
            260                 265                 270
Ser Glu Glu Pro Asn Pro Ala Gly Ile Ser Ile Ala Asp Glu Val His
        275                 280                 285
Lys Ile Leu Met Asn Ile Cys Thr Asp Pro Ala Leu Gly Val Leu Leu
    290                 295                 300
Pro Glu Thr Gly Trp Tyr Pro Asn Gly Thr Asp Pro Glu Thr Leu Pro
305                 310                 315                 320
Thr Glu Asp Asp Ser Ser Ile Glu Leu Gly Leu Asp Ser Ala Leu Tyr
                325                 330                 335
Val Asp Lys Tyr Lys Glu Ser Val Pro Val Arg Asn Ser Thr Leu Ser
            340                 345                 350
Tyr Leu Ile Gln Ala Leu Arg Pro Asp Met Asp Arg Leu Gln Ile Glu
        355                 360                 365
Leu Leu Ile Ala Ile Phe Lys Lys Thr Pro Glu Leu Val Ala Asp Tyr
    370                 375                 380
Phe Thr Lys Lys Thr Met Phe Ile Ser Asp Pro Lys Pro Thr Ser Ser
385                 390                 395                 400
Trp Met Ala Glu Ser Ala Leu Leu Tyr Ser Ile Val Ser Leu Pro Ile
                405                 410                 415
Pro Leu Asn Cys Gly Trp Asn Asp Lys Leu Pro Thr Leu Pro Pro Pro
            420                 425                 430
Val Ser Val Val Ile Glu Asn Ile Leu Pro Arg Pro Leu Thr Gln Lys
        435                 440                 445
Ile Met Thr Arg Cys Leu Asn Leu Asn Ala Glu Ile Val Thr Leu Phe
    450                 455                 460
Ala Val Arg Ile Leu Thr Ile Ala Phe Asn Lys Leu Arg Ala Ala Leu
465                 470                 475                 480
Lys Ile Phe Asn Ala Asp His Gly Ser Ser Gln Pro Phe Trp Thr Gln
                485                 490                 495
```

```
Ala Ala Gly Lys Leu Val Ala Glu Phe Cys Arg Arg Cys Pro Val Val
            500                 505                 510
Lys Asp Val Val Val Leu Phe Arg Arg Thr Ser Lys Glu Asp Leu Gln
        515                 520                 525
Gln Gln Glu Ala Val Ser Glu Leu Leu Ala Cys Tyr Tyr Glu Ile Val
    530                 535                 540
Pro Asp Ala Ala Phe Asp Glu Asn Phe Asp Val Ser Leu Val Leu Val
545                 550                 555                 560
Asp Ile Leu Glu Arg Leu Glu Ser Ser Asn Leu Gln Ala Glu Asp Gly
                565                 570                 575
Glu Ser Leu Leu Ser Gln Leu Gln Asn Val Leu Lys Ile Ala Gln Leu
            580                 585                 590
Ser Ala Ser Met Arg Trp Trp Gln Gln Pro Gly Lys Gln Arg Arg Gln
        595                 600                 605
Arg His Leu Lys Val Leu His
    610                 615

<210> 35975
<211> 280
<212> PRT
<213> A.fumigatus

<400> 35975
Gln His Pro Gly Ser Met Gln Tyr Ser Ala Phe Thr Ser Ile Leu Lys
1               5                   10                  15
Val Leu Ile Lys Thr Ser Asp Lys Glu Ser Ser Lys Glu Ile Glu Asn
            20                  25                  30
Leu Leu Thr Thr Val Leu Lys Glu Asn Ser Ile Ile Arg Asn Ser Ser
        35                  40                  45
Ala Phe Ser Ser Leu Arg Ser Ser Phe Asp Ala Thr Glu Ser Glu Ser
    50                  55                  60
Ile Gly Tyr Gln Leu Ala Phe Phe Asp Asn Cys Ala Cys Arg Ile Ala
65                  70                  75                  80
Lys Lys Pro Val His Tyr Asp Asp Leu Leu Ala Ser Leu Thr Glu Gly
                85                  90                  95
Glu Asn Gln Pro Thr Ser Leu Ile Val Ala Ala Ile Thr Glu Gln Trp
            100                 105                 110
Pro Phe Val Ala Lys Asn Gly Asn Ala Ala Ala Glu Leu Ala Val Cys
        115                 120                 125
Thr Trp Ile Ala Arg Val Phe Gly Arg Leu Lys Gln Ala Gly Asp Asp
    130                 135                 140
Pro Lys Thr Leu Lys Ala Ala Arg Asp Asn Val Leu Gln Thr Ile Val
145                 150                 155                 160
Ser Lys Gln Ile Lys Ser Thr Leu Lys Lys Val Leu Lys Asp Thr Asp
                165                 170                 175
Glu Thr Thr Asp Lys Asp Gly Met Pro Gln Asp Gly Val Ser Arg Ser
            180                 185                 190
Glu Pro Asn Gly Thr Lys Asp Lys Ala Ala Gln Val Asp Leu Arg Glu
        195                 200                 205
Ile Phe Gly Thr Leu Pro Thr Glu Ser Lys Thr His Asn Glu Leu His
    210                 215                 220
Lys Trp Glu Lys Glu Glu Leu Glu Ile Ala Val Glu Gln Gly Arg Ile
225                 230                 235                 240
Ser Asp Leu Val Leu Cys Leu Cys Ser Glu His Glu Glu Ile Arg Arg
                245                 250                 255
Gln Ala Phe Ala Asn Leu His Arg Phe Met Ala Lys Leu Arg Val Cys
```

```
            260                 265                 270
Phe Ser Cys Thr Ile Asn Glu Glu
        275                 280

<210> 35976
<211> 120
<212> PRT
<213> A.fumigatus

<400> 35976
Leu Thr Arg Ser Gln Glu Ser Lys Tyr Ala Glu Trp Arg Ser Val Tyr
1               5                   10                  15
Ile Leu Thr Gly Glu Leu Leu Glu Thr Val Arg Leu Thr Gly Phe Glu
            20                  25                  30
Ser Pro Val Pro Trp Ile Val Gly Glu Cys Ala Thr Cys Cys Leu Ser
        35                  40                  45
Val Leu Thr Asn Pro Met His Lys Leu Tyr Gly Lys Val Asn Lys Phe
    50                  55                  60
Leu Gln Lys Ala Pro Ser Trp Glu Val Gly Lys Ile Pro Ser Tyr Trp
65                  70                  75                  80
Ile Asp Lys Val Leu Leu His Glu Pro Glu Leu Asp Asp Gly Tyr Phe
                85                  90                  95
Glu Glu Thr Ser Trp Leu Leu Asp Leu Leu Ile Lys Gly Leu Arg Thr
            100                 105                 110
Glu Arg Val Ser Glu His Phe Leu
        115                 120

<210> 35977
<211> 108
<212> PRT
<213> A.fumigatus

<400> 35977
Leu Leu Gln Asp Met Asp Ile Tyr Arg Arg Ala Asn Val Phe Glu Arg
1               5                   10                  15
Val Leu Ser Phe Tyr Asp Ser Pro Thr Val Gly Val Ser Ala Lys Arg
            20                  25                  30
Lys Ile Leu His Leu Leu Tyr Arg Ser Thr Gln Val Gly Gly Ser Thr
        35                  40                  45
Thr Leu Val Thr Arg Ala Gly Val Val Ser Trp Ile Gln Thr Gln Leu
    50                  55                  60
Pro Val Val Asn Ala Lys Glu Ala Ala Thr Phe Ala Ala Met Ala Asp
65                  70                  75                  80
Thr Leu His Leu Thr Ala Asp Gln Asp Arg Val Thr Lys Trp Ser Asp
                85                  90                  95
Gly Ala Val Ala Gln Asp Ile Glu His Ile Ala Gly
            100                 105

<210> 35978
<211> 77
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (59)
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<223> Identity of amino acid sequences at the above locations are unknown.

<400> 35978
Tyr Thr Leu Gly Ala Phe Asn Pro Phe Gly Ala Leu His Asn Gly Glu
1 5 10 15
His Thr Phe Cys Gly Pro Lys Asp Phe Phe His Pro Glu Leu Ser Phe
20 25 30
Phe Ala Arg Lys Ile Glu Trp Pro Pro Ser Phe Pro Leu Asn Lys Phe
35 40 45
Leu Pro Val Asn Asn Glu Met Leu Phe Ile Xaa Ser Ser Tyr Pro His
50 55 60
Tyr Pro Trp Thr Cys Ala Gly Gln Thr Asn Pro Lys Thr
65 70 75

<210> 35979
<211> 78
<212> PRT
<213> A.fumigatus

<400> 35979
Cys Val Gly Phe Thr Arg Ser Ala Asp Pro Ser Gly Pro Val Val Lys
1 5 10 15
Thr Leu Glu Phe Gly Ile Asn Ile Ile Ile Ser Glu His Leu Pro Gly
20 25 30
Val Asn Tyr Tyr Gly Val Ser Gly Ser Thr Phe Met Lys Leu Thr Val
35 40 45
Tyr Phe Met Pro Phe Cys Leu Leu Gly Lys Ile Ala Ile Ser Val Asp
50 55 60
Ala Val Trp Thr Val Pro Arg Phe Cys Ile Asn Ala Ser Glu
65 70 75

<210> 35980
<211> 60
<212> PRT
<213> A.fumigatus

<400> 35980
Trp Ala Leu Lys Arg Phe Leu Asn Pro Val Met Val Val Lys Asn Asn
1 5 10 15
Leu Ile Asn Leu Gln Pro Leu Ala Gln His Phe Trp Asp Lys Asp Ala
20 25 30
Leu Pro Lys Arg Asp Asn Pro Pro Gly Ile Leu Ala Gln Arg Glu Pro
35 40 45
Lys Gln Ser Ser Trp Thr Ser Gly Asn Gly Ile Ser
50 55 60

<210> 35981
<211> 338
<212> PRT
<213> A.fumigatus

<400> 35981
Ile Asn Phe Leu Gln Tyr Gly Leu Thr Leu Thr Glu Pro Asn Thr Lys
1 5 10 15
Val Thr Ala Val Ser Met Val Val Trp Ser Arg Gln Asp Glu Arg Ile
20 25 30

```
Leu Asp Met Asp Lys Ile Ser Phe Ala Leu Asp Ser Val Ser Cys Thr
        35                  40                  45
Asp Gly Met Thr Leu Lys Phe Lys Asn Lys Leu Phe Tyr Leu Ala Ala
    50                  55                  60
Lys Phe Ala Trp Glu Trp Val Asn Tyr Asn Asp Met Arg Ser Phe Val
65                  70                  75                  80
Met Val Ser Ser Trp Glu Gly Cys Gly Thr Pro Arg Glu Arg Asp Pro
                85                  90                  95
Trp Val Val Ser Asn Ala Val Phe Asp Asp Lys Ala Ser Thr Ala Lys
            100                 105                 110
Leu Ala Ala Thr Lys Ser Thr Trp Gln Lys Val Ser Asn Thr Thr Val
        115                 120                 125
Leu Asp Phe Gly Asp Ile Val Val Gly His Gln Gly Thr Lys Asp Lys
    130                 135                 140
Arg Phe Leu Asp Val Ser Leu Asn Lys Ala Phe Thr Leu Asp Val Ser
145                 150                 155                 160
Ser Ser Phe Pro Thr Glu Ile Val Asn Trp Thr Met Asn Thr Pro Phe
                165                 170                 175
Val Asp Ala Ser Leu Ala Ile Asn Cys Val Asn Cys Gly Thr Thr Gly
            180                 185                 190
Thr Leu Ala Phe Ala Gly His Val Glu Ala Ser Leu Phe Gly Gly Leu
        195                 200                 205
Glu Lys Phe Glu Leu Ser Ala Thr Pro Arg Asn Ile Ala Ala Asn Leu
    210                 215                 220
Asp Leu Ser Leu Glu Phe Lys Gly Glu Val Asp Phe Asp Gly Leu Pro
225                 230                 235                 240
Ala Pro Gly Lys Glu Trp Thr Leu Val Glu Leu Pro Leu Pro Ser Gly
                245                 250                 255
Trp Arg Val Pro Gly Val Leu Thr Phe Gly Pro Asn Val Lys Ile Asn
            260                 265                 270
Ala Gly Tyr Thr Ile Glu Tyr Ile Gly Gly Glu Ala Ser Val Thr Thr
        275                 280                 285
Gly Ile Ser Ala Arg Val Pro Asp Ser Ser Val Ala Lys Val Asn Phe
    290                 295                 300
Gly Gln Gln Glu Pro Gly Asp His Leu Gly Met Asp Ser Arg Asn Arg
305                 310                 315                 320
Asn Gln Ala Ser Arg Asp Arg Gly Ala Asn Pro Cys Glu Ser Lys Thr
                325                 330                 335
Leu His
```

<210> 35982
<211> 114
<212> PRT
<213> A.fumigatus

<400> 35982

```
Pro Gly Met His Lys Asn Lys Leu Thr Lys Val Ala Glu His Ile Tyr
1               5                   10                  15
Glu Gly Asn Trp Val Arg Asp Phe Ile Asp Tyr Leu Val Thr Asn Tyr
            20                  25                  30
Tyr Pro Ala Thr Ile Glu Asp Pro Asn Val Gln Asp Asn Thr Lys Cys
        35                  40                  45
Lys Gly Ala Ile Asn Thr Phe Gly Ile Gln Arg Asp Ile Ser Thr Pro
    50                  55                  60
Asn Pro Thr Val Ala Phe Asn Tyr Ser Glu Ala Leu Met Gln Asn Leu
```

65 70 75 80
Gly Thr Val His Thr Ala Ser Thr Leu Met Ala Ile Phe Pro Asn Arg
85 90 95
Gln Asn Gly Met Lys Tyr Thr Val Ser Phe Ile Lys Val Glu Pro Asp
100 105 110
Thr Pro

<210> 35983
<211> 140
<212> PRT
<213> A.fumigatus

<400> 35983
Ala Val Ser Val Phe Arg Glu Ala Asp Asp Leu Leu Asp Leu Ile Ile
1 5 10 15
Val Pro Thr Arg Ser Ala Ser Asp Gly Ser Arg Ser Glu Ile Arg Arg
20 25 30
Glu Arg Arg Asp Ala Asp Ser Asp Asp Leu Val Lys Met Arg Thr Val
35 40 45
Val Leu Ala Gly Pro Arg Trp Glu Leu Val Phe Ser Phe Ser Ser Val
50 55 60
Pro Asp Asp Ile Asp Thr Ser Asp Asp Asp Ser Gly Pro Ser Leu Asp
65 70 75 80
Glu Leu Pro Ser Ser Glu Glu Ser Asp Ser Asp Ser Ser Glu Leu Asp
85 90 95
Ser Ser Glu Leu Val Ser Ser Glu Leu Val Ser Leu Glu Ser Glu Ser
100 105 110
Ser Glu Ser Asp Pro Ser Glu Leu Val Ser Ser Glu Leu Asp Ser Ser
115 120 125
Val Ser Glu Asp Leu Glu Lys Arg Ser Ala Glu Arg
130 135 140

<210> 35984
<211> 98
<212> PRT
<213> A.fumigatus

<400> 35984
Ser Glu Tyr Leu Ser Cys Gln Gly Lys Ser Asn Gly Thr Thr Asn Val
1 5 10 15
Val Cys Arg Phe Asn Glu Glu Met Met Thr Ala Gly His His Val Lys
20 25 30
Lys Gly Asp Glu Ile Gly Leu Phe Gln Phe Gly Gly Ser Ser Ile Leu
35 40 45
Val Ala Phe Glu Arg Asp Arg Ile Arg Phe Asp Glu Asp Leu Glu Lys
50 55 60
Leu Ser His Gln Gln Ile Met Val Asp Val Glu Val Gly Met Ser Leu
65 70 75 80
Gly Lys Ala Thr Gln Lys Gly His Thr Ala Thr Asn Ala Val Thr Ala
85 90 95
Ser Leu

<210> 35985
<211> 672

<212> PRT
<213> A.fumigatus

<400> 35985

```
Arg Arg Gln Pro Arg Arg Arg Met Thr Val Arg Ile Thr Gly Ala Pro
1               5                  10                  15
Thr Gly Pro Leu Thr Ala Glu Pro Val Ile Ala Gln Gly Leu Glu Pro
            20                  25                  30
Leu Pro Gln Pro Glu Gln Ile Thr Glu Glu Thr Glu Lys Pro Asn Tyr
        35                  40                  45
Ser Ser Leu Pro Ala Trp Leu Ala Asn Pro Val Arg Glu Pro Ala Ser
    50                  55                  60
Lys Arg Ala Arg Phe Ser Glu Leu Gly Ile Asn Ser Asn Leu Leu Arg
65                  70                  75                  80
Val Leu Glu Asp His Gly Tyr Lys Glu Ala Phe Ala Val Gln Ser Thr
                85                  90                  95
Val Ile Pro Leu Leu Leu Gln Gly Leu Arg Arg His Pro Gly Asp Leu
            100                 105                 110
Cys Ile Ser Ala Ala Thr Gly Ser Gly Lys Thr Leu Ser Tyr Val Leu
        115                 120                 125
Pro Leu Val Thr Ala Leu Lys Pro Thr Pro Ala Pro Arg Met Arg Gly
    130                 135                 140
Leu Ile Val Val Pro Thr Arg Glu Leu Val Lys Gln Ala Arg Glu Ala
145                 150                 155                 160
Cys Glu Leu Cys Ala Thr Gly Ser Gly Leu Arg Ile Gly Ser Ala Val
                165                 170                 175
Gly Asn Val Ala Ile Lys Asp Glu Gln Arg Thr Leu Met Arg Val Asp
            180                 185                 190
Gln Cys Tyr Gly Pro Glu Leu Ser Lys Gln Arg Gln Thr Val Asp Leu
        195                 200                 205
Thr Gly Glu Asp Trp Thr Asn Phe Ser Leu Met Asn Tyr Leu Ala Glu
    210                 215                 220
Ala Gly Glu Leu Ser Glu Ser Leu Pro Gly Tyr Val Gln Arg Ala Glu
225                 230                 235                 240
Pro Asn Ile Asp Ile Leu Ile Cys Thr Pro Gly Arg Leu Val Asp His
                245                 250                 255
Leu Arg Tyr Thr Lys Gly Phe Thr Leu Glu His Leu Gln Trp Leu Val
            260                 265                 270
Ile Asp Glu Ala Asp Arg Leu Leu Asn Glu Ser Phe Gln Glu Trp Val
        275                 280                 285
Asp Val Val Met Asn Ser Leu Asp Ala Arg Lys Ala Pro Lys Thr Phe
    290                 295                 300
Gly Ser Ser Gly Lys Phe Met Ala Glu Leu Gly Leu Pro Ile Gln Ser
305                 310                 315                 320
Arg Glu Pro Arg Lys Val Ile Leu Ser Ala Thr Met Thr Arg Asp Ile
                325                 330                 335
Ser Lys Leu Asn Ser Leu Arg Leu Ala Asn Pro Lys Leu Val Ile Ile
            340                 345                 350
Gly Ser Ala Glu Pro Thr Ala Thr Glu Glu Ala Glu His Asp Gly Val
        355                 360                 365
Pro Thr Thr Ser Asp Glu Gln Phe Thr Leu Pro Ser Thr Leu Lys Glu
    370                 375                 380
Tyr Ser Val Ser Val Gly Asp Gly Ser Gln Lys Pro Leu Tyr Leu Leu
385                 390                 395                 400
Gln Leu Leu Gln Ser His Ile Asn Leu Asp Thr Gln Asn Gln Arg Ser
                405                 410                 415
```

```
Ala Glu Arg Phe Ser Arg Ser Ser Asp Thr Glu Glu Ser Ser Ser Asp
            420                 425                 430
Asp Thr Ser Ser Asp Gly Ser Asp Ser Glu Asp Ser Asp Ser Ser Asp
        435                 440                 445
Thr Ser Ser Asp Asp Thr Ser Ser Asp Glu Ser Ser Ser Asp Glu Ser
    450                 455                 460
Glu Ser Asp Ser Ser Glu Asp Gly Ser Ser Ser Ser Asp Gly Pro Glu
465                 470                 475                 480
Ser Ser Ser Asp Val Ser Ile Ser Ser Gly Thr Asp Glu Lys Glu Lys
                485                 490                 495
Thr Asn Ser His Arg Gly Pro Ala Arg Thr Thr Val Leu Ile Phe Thr
            500                 505                 510
Lys Ser Ser Glu Ser Ala Ser Arg Leu Ser Arg Leu Ile Ser Leu Leu
        515                 520                 525
Asp Pro Ser Leu Ala Asp Arg Val Gly Thr Ile Ile Lys Ser Asn Lys
    530                 535                 540
Ser Ser Ala Ser Arg Lys Thr Leu Thr Ala Tyr Arg Arg Gly Lys Ile
545                 550                 555                 560
Ser Ile Ile Val Ala Thr Asp Arg Ala Ser Arg Gly Leu Asp Leu Val
                565                 570                 575
Ser Leu Thr His Val Val Asn Tyr Asp Val Pro Pro Ser Val Thr Thr
            580                 585                 590
Tyr Val His Arg Val Gly Arg Thr Ala Arg Ala Gly Lys Glu Gly Ser
        595                 600                 605
Ala Trp Thr Leu Val Ala His Arg Glu Gly Arg Trp Phe Val Asn Glu
    610                 615                 620
Ile Ser Lys Gly Ser Asp Gly Lys Ile Thr Arg Ser Ala Lys Val Glu
625                 630                 635                 640
Arg Val Asn Val Lys Leu Asp Thr Ser Ala Glu Ile Lys Ser Arg Tyr
                645                 650                 655
Ala Ala Ala Leu Asp Thr Leu Glu Lys Glu Val Lys Thr Gly Gly Lys
            660                 665                 670
```

<210> 35986
<211> 90
<212> PRT
<213> A.fumigatus

```
<400> 35986
Lys Asp Ser Pro Gly Asp Ser Asp Asp Ser Ser Glu Arg Lys Glu Asp
1               5                   10                  15
Lys Pro Gly Lys Ala Leu Gln Ser Thr Lys Asp Ser Lys Asp Glu Arg
            20                  25                  30
Gly Thr Asn Ser Ala Lys Asn Asn Phe Ser Gly Ile Leu Ser Lys Phe
        35                  40                  45
Glu Arg Ser Ala Lys Leu Lys Glu Ala Ala Lys Ala Lys Asn Asp Ser
    50                  55                  60
Ala His Asn Gly Gly Thr Tyr Trp Ala Thr Tyr Arg Arg Thr Arg His
65                  70                  75                  80
Cys Thr Gly Leu Arg Ala Ser Ser Thr Thr
                85                  90
```

<210> 35987
<211> 206
<212> PRT
<213> A.fumigatus

<400> 35987
Arg Arg Thr Arg Cys Ser Trp Pro Ala His Arg Val Ala Gly Ala Ser
1 5 10 15
Thr Leu Arg Leu Thr Gln Gly Glu Gly Glu Gly Gly Thr Gly Ala Ala
20 25 30
Gly Thr Ser Ile Val Val Ile Gly Glu Leu Ile Gly Leu Ser Ala Val
35 40 45
Asp Ile Ala Gly Gly Ala Gly Gly Arg Gly Ala Ala Gly Val Ile Asp
50 55 60
Gly Asp Ala Glu Ala Gly Gly Asn Glu Gly Arg Ile Gly Gly Glu Ile
65 70 75 80
Asp Gly Gly Glu Ile Pro Glu Glu Ser Leu Ala Gly Leu Gly Val Leu
85 90 95
Lys Leu Glu Asp Gly Gly Glu Val Gly Gly Gly Gly Asp Leu Asp Gly
100 105 110
Asp Ala Thr Ala Val Gly Val Asp Ala Pro Gly Leu Asp Val Gly Gly
115 120 125
Ala Gly Leu Asp Gly Leu His Val Ala Ala Gly Val Gly Asp Gly Pro
130 135 140
Glu Ile Asp Ile Leu Ala His Val Val Asp Asp Leu Asp Ala Ala Ala
145 150 155 160
Gly Gly Ala Gly Ser Glu Arg Glu Gly Arg Ser Ser Glu Gly Glu Gly
165 170 175
Ser Ser Glu Ala Glu Glu Leu Gly Glu Arg His Asp Asp Cys Gly Val
180 185 190
Gly Gly Ser Asp Ile Cys Cys Cys Glu Gly Val Thr Thr Val
195 200 205

<210> 35988
<211> 207
<212> PRT
<213> A.fumigatus

<400> 35988
His Phe Gly Ala Arg Leu Ile Leu His Cys Pro Leu Leu Ser Thr Val
1 5 10 15
Thr Leu Cys Arg Ser Asp Cys Cys His Ser Phe Thr Thr Thr Asn Ile
20 25 30
Thr Thr Thr Asn Thr Thr Ile Ile Met Ser Phe Ser Lys Phe Phe Ser
35 40 45
Leu Ala Ala Ala Phe Ala Leu Thr Ala Ser Ala Leu Pro Leu Ala Pro
50 55 60
Arg Ala Pro Ser Gly Gly Val Gln Ile Val Asn Asn Met Gly Glu Asn
65 70 75 80
Val Tyr Leu Trp Ser Val Ser Asp Thr Ser Ser Asp Met Gln Thr Val
85 90 95
Gln Pro Gly Ser Ser Tyr Val Glu Thr Trp Arg Ile Asn Pro Asn Gly
100 105 110
Gly Gly Val Ser Ile Lys Ile Ser Thr Ala Ala Asp Leu Ala Ser Val
115 120 125
Leu Gln Phe Glu Tyr Thr Glu Ala Gly Glu Thr Leu Phe Trp Asp Leu
130 135 140
Ser Ser Ile Asn Leu Ser Pro Asp Ser Pro Leu Ile Ala Ala Gly Phe
145 150 155 160
Gly Val Ser Ile Asp Asp Ala Ser Cys Pro Thr Ala Ser Cys Ala Pro

```
                165                 170                 175
Gly Asp Val Asn Cys Ala Glu Ser Tyr Gln Phe Pro Asp Asp His Asn
            180                 185                 190
Thr Arg Ala Cys Gly Thr Gly Ala Ala Phe Thr Leu Thr Leu Gly
        195                 200                 205

<210> 35989
<211> 262
<212> PRT
<213> A.fumigatus

<400> 35989
Ser Ser Thr Val Leu Tyr Phe Gln Leu Ser Leu Ser Val Asp Gln Thr
1               5                   10                  15
Val Val Thr Pro Ser Gln Gln Gln Ile Ser Leu Pro Pro Thr Pro Gln
            20                  25                  30
Ser Ser Cys Leu Ser Pro Ser Ser Ser Ala Ser Leu Leu Pro Ser Pro
        35                  40                  45
Ser Leu Leu Arg Pro Ser Leu Ser Leu Pro Ala Pro Pro Ala Ala Ala
    50                  55                  60
Ser Arg Ser Ser Thr Thr Trp Ala Arg Met Ser Ile Ser Gly Pro Ser
65                  70                  75                  80
Pro Thr Pro Ala Ala Thr Cys Arg Pro Ser Asn Pro Ala Pro Pro Thr
                85                  90                  95
Ser Arg Pro Gly Ala Ser Thr Pro Thr Ala Val Ala Ser Pro Ser Arg
            100                 105                 110
Ser Pro Pro Pro Pro Thr Ser Pro Pro Ser Ser Ser Leu Ser Thr Pro
        115                 120                 125
Arg Pro Ala Arg Leu Ser Ser Gly Ile Ser Pro Pro Ser Ile Ser Pro
    130                 135                 140
Pro Ile Leu Pro Ser Leu Pro Pro Ala Ser Ala Ser Pro Ser Met Thr
145                 150                 155                 160
Pro Ala Ala Pro Arg Pro Pro Ala Pro Pro Ala Met Ser Thr Ala Leu
                165                 170                 175
Ser Pro Ile Ser Ser Pro Met Thr Thr Ile Leu Val Pro Ala Ala Pro
            180                 185                 190
Val Pro Pro Ser Pro Ser Pro Trp Val Lys Arg Ser Val Leu Ala Pro
        195                 200                 205
Ala Thr Leu Cys Ala Gly His Glu His Leu Val Arg Leu Tyr Thr His
    210                 215                 220
Phe Leu Pro Leu Glu Asp Met Lys Val Val Arg Asn Thr Ser Arg Gln
225                 230                 235                 240
Ala Leu Phe Leu Arg Val Met Thr His Thr Ala His Asp Tyr Ala Glu
                245                 250                 255
Asp Gly Leu Tyr Gln Arg
            260

<210> 35990
<211> 626
<212> PRT
<213> A.fumigatus

<400> 35990
Ser Tyr Ser Pro Arg Pro Gly Ser Phe Gln Pro Arg Gly Glu Asp Leu
1               5                   10                  15
Arg Ser Ala Tyr Ile Asp Lys Pro Pro Ser Arg Tyr Gln Leu Arg Ser
```

```
            20                  25                  30
Ala Leu Ser Lys Ile Leu Pro Thr Asp Glu Met Ala Ala Glu Thr Arg
        35                  40                  45
Arg Phe Trp Ser Ser Glu Leu Gln Lys Tyr Ser Glu Leu Asp Ala Pro
    50                  55                  60
Ala Trp Pro Asp Leu Thr Gly Lys Arg Lys Pro Glu Thr Ala Val Gln
65                  70                  75                  80
Glu His Asn Leu Ile Ser Glu Gln Met Arg Met Thr Glu Pro Leu Glu
                85                  90                  95
Lys Leu Gln Ser Ile Ser Ala Glu Leu Gly Val Ser Ser Ile Ala Ser
            100                 105                 110
Leu Ile Arg Ala Ala Trp Gly Phe Val Ser Leu Ser Tyr Leu Gly Val
        115                 120                 125
Pro Ala Ala Val Phe Ala Glu Thr Val Ser Asp Arg Ile Leu His Ala
    130                 135                 140
Asp Leu Asp Asn Gly Ile Gly Pro Leu Ile Ser Val Val Pro Val Pro
145                 150                 155                 160
Phe Asp Pro Glu Gly Thr Ala Arg Glu Val Leu Ala Glu Gln Gln Arg
                165                 170                 175
Ile Ser Thr Gln Ser Arg Lys Tyr Arg His Ile His Ala Arg Glu Val
            180                 185                 190
Arg Arg Met Leu Asn Arg Pro Arg Gly Glu Pro Leu Tyr Pro Ala Val
        195                 200                 205
Phe Ala Phe His Pro Ala Gly Ala Glu Ala Asp Gly Thr Thr Asn Pro
    210                 215                 220
Gly Leu Trp His Glu Leu Glu Asp Arg Ile Gly Leu His Val Glu His
225                 230                 235                 240
Pro Met Ala Phe Asn Val Leu Gln Asn Ala Asp Ser Ser Leu Val Leu
                245                 250                 255
Glu Val Phe Ser Asp Ala Ser Leu Met Ser His Glu His Leu Ser Ile
            260                 265                 270
Phe Val Arg Gln Val Asp Ser Leu Val Ser Ala Met Leu Ala Asn Pro
        275                 280                 285
Asp Lys Glu Leu Arg Glu Leu Ile Asn His Leu Pro Pro Ser Leu Arg
    290                 295                 300
Ser Lys Ser Ser Gln His Val Ser Glu Ala Val Arg Asn Ser Val Thr
305                 310                 315                 320
Leu Ser Pro Thr His Trp Leu Glu Leu Asn Ala Arg Glu His Pro Glu
                325                 330                 335
Trp Thr Ala Val Glu Val Ala Ser Ser Ile Ser Ala Ser Gly Ile Glu
            340                 345                 350
Lys Gln Ser Met Ser Tyr Gly Thr Leu Asn Ala Ala Ala Asn Cys Val
        355                 360                 365
Ala Ala Phe Ile Ala Ser Val Gly Tyr Lys Asn Arg Met Ile Ala Val
    370                 375                 380
Cys Ala Gly Arg Asn Leu Pro Ser Tyr Pro Val Ile Val Gly Val Phe
385                 390                 395                 400
Lys Ser Gly Asn Thr Tyr Leu Pro Ile Asp Asn Asn Leu Pro Asn Asp
                405                 410                 415
Arg Lys Thr Phe Leu Ile Glu Asp Gly Asn Cys Pro Leu Val Phe Thr
            420                 425                 430
Glu Thr Ala Phe Ala Ala Thr Phe Ser Asp Val Pro Glu Thr Cys Arg
        435                 440                 445
Val Leu Cys Ile Asp His Pro Ser Phe Val Asp Ser Leu Ala Gly Met
    450                 455                 460
Pro Thr Asp Asn Arg Ala Tyr Ala Ser Asp Pro Gln Asp Asn Ala Tyr
```

```
465                 470                 475                 480
Leu Leu Tyr Thr Ser Gly Ser Thr Gly Lys Pro Lys Gly Val Met Val
                485                 490                 495
Ser Arg Ala Asn Leu Ser Ala Phe Ile Glu Ser Phe Ser Glu Phe Val
            500                 505                 510
Cys Arg Val Ala Pro Ser Thr Leu Glu Leu Gly Gly Arg Gly Arg Tyr
        515                 520                 525
Leu Ala Gln Ala Ser Arg Ala Phe Asp Val His Leu Leu Glu Met Phe
    530                 535                 540
Phe Ala Trp Arg His Gly Met Ala Ser Val Thr Ala Glu Arg Thr Met
545                 550                 555                 560
Leu Leu Asp Asp Leu Gln Leu Thr Ile Thr Lys Trp Gly Ile Thr His
                565                 570                 575
Ala Ser Met Val Pro Ser Leu Val Asp Gln Thr Asn Leu Arg Pro Glu
            580                 585                 590
Leu Cys Pro Glu Leu Lys Tyr Leu Ser Val Gly Gly Glu Lys Ile Ser
        595                 600                 605
Lys Arg Val Leu Asp Thr Trp Ala Ser Ser Pro Arg Gly Trp Lys Asp
    610                 615                 620
Pro Arg
625
```

<210> 35991
<211> 244
<212> PRT
<213> A.fumigatus

<400> 35991

```
Ser Lys Gln Lys Val Ile Leu Tyr Gly Leu Glu Asn Cys Gln Gly Lys
1               5                   10                  15
Ala Leu Gln Ala Leu Val Ile Leu Ala Leu Asp Leu Val Gly Ser Ser
            20                  25                  30
Asn Gly Pro Pro Gly Trp Lys Leu Leu Ala Leu Ile Thr Arg Ser Val
        35                  40                  45
Val Gln Leu Gly Leu Ala Val Glu Ser Lys Ser Ser Leu Ile Ala Pro
    50                  55                  60
Val Tyr Pro Ser Ile Tyr Thr Leu Arg Ala Val Ile Leu Pro Glu Pro
65                  70                  75                  80
Gly Ser Trp Ile Glu Asp Glu Ser Arg Arg Arg Leu Phe Trp Met Val
                85                  90                  95
Tyr Phe Leu Asp Arg Tyr Ser Thr Ile Ala Thr Ala Phe Asp Phe Ala
            100                 105                 110
Leu Asp Asp Lys Asp Ile Asp Arg Lys Leu Pro Cys Lys Asp Glu Tyr
        115                 120                 125
Phe Thr Lys Asn Glu Pro Val Glu Thr Arg Trp Phe Gln His Thr Ser
    130                 135                 140
Glu Arg Pro Asp Tyr Leu Asn Arg Ala Glu Asn Val Gly Ser Phe Gly
145                 150                 155                 160
Leu Tyr Val Glu Ile Leu Gly Ile Phe Ser Arg Ile His Leu Phe Leu
                165                 170                 175
Lys Arg Pro Val Asp Ile Gly Ser Leu Ser Asp Val Glu Glu Trp Gln
            180                 185                 190
Thr Thr Tyr Arg Lys Leu Asp Asn Glu Leu Thr Ser Trp Glu Phe Asn
        195                 200                 205
Leu Pro Pro Glu Tyr Ala Tyr Glu Asn Ser Ser Arg Leu Phe Asn Gly
    210                 215                 220
```

```
Ser Lys His Ser Lys Ser Leu His Cys Asp Trp Val Gln Leu His Ser
225                 230                 235                 240
Thr Phe Gln Thr


<210> 35992
<211> 188
<212> PRT
<213> A.fumigatus

<400> 35992
Arg Leu Pro Lys Gln His Cys Cys Ile Arg Asp Gln Ile Ser Arg Cys
1               5                  10                  15
Gly Ile Val Arg Ala Ile Lys Asn Asp Ile Val Ile Phe Glu Asn Thr
            20                  25                  30
Arg Ser Phe Leu Arg Arg Glu Val Cys Ser Ile Arg Tyr Val Cys Arg
        35                  40                  45
Val Gly Ile Gln Pro Glu Thr Arg Glu Ala Thr Ser Gln Cys Leu Asn
    50                  55                  60
Arg Phe Asp Gly Asp His His Cys Thr Asp Ser Arg Arg Tyr Ser Ile
65                  70                  75                  80
Ala Leu Ser Thr Leu Asn Val Pro Thr Phe Leu Leu Leu Cys Arg Thr
                85                  90                  95
Cys Arg Cys Arg Phe Glu Phe Ser Thr Val Ser Pro Ser Thr Arg Pro
            100                 105                 110
Lys Val Pro Thr Pro Ala Pro Ala Arg Tyr Ser Ala Ala Gly His Pro
        115                 120                 125
Ser Pro Pro Ala Pro Thr Met Arg Thr Arg Ala Ala Arg Ser Phe Asn
    130                 135                 140
Trp Pro Ala Gln Val Ile Arg Ser Ile Ser Asn Val Ile Ile Thr Lys
145                 150                 155                 160
Pro Thr Gln Arg Ile Val Val Phe Leu Gly Gly Ser Met His Ile Pro
                165                 170                 175
Cys Asn Pro Ser Trp Gly Thr Ile Ile Cys Leu Pro
            180                 185

<210> 35993
<211> 210
<212> PRT
<213> A.fumigatus

<400> 35993
Thr Ser Glu Thr Ala Gly Lys Ala Pro Glu Phe Glu Val Ile Tyr Leu
1               5                  10                  15
Tyr Ile Arg Tyr Trp Leu Phe Met Glu Asn Leu Glu Gln Thr Cys Ala
            20                  25                  30
Ser Leu Arg Ala Gln Ile Ala Ala Thr Glu Ala Gln Leu Ala Gly Leu
        35                  40                  45
Lys Arg Glu Leu Glu Ile Ala Glu Gln Ala Ala Glu Val Lys Ala Gln
    50                  55                  60
Ser Thr Thr Arg Thr Ile Thr Ala Glu Asp Gly Lys Thr Asn Glu Thr
65                  70                  75                  80
Arg Glu Trp Pro Leu Leu Ser Glu Glu Tyr Lys Arg Tyr Gly Arg Gln
                85                  90                  95
Met Ile Val Pro Gln Leu Gly Leu Gln Gly Met Cys Ile Glu Pro Pro
            100                 105                 110
```

```
Arg Lys Thr Thr Ile Leu Cys Val Gly Leu Val Ile Met Thr Leu Leu
        115                 120                 125
Met Leu Leu Ile Thr Cys Ala Gly Gln Leu Lys Leu Arg Ala Ala Arg
    130                 135                 140
Val Leu Ile Val Gly Ala Gly Gly Leu Gly Cys Pro Ala Ala Leu Tyr
145                 150                 155                 160
Leu Ala Gly Ala Gly Val Gly Thr Leu Gly Leu Val Asp Gly Asp Thr
                165                 170                 175
Val Glu Asn Ser Asn Leu His Arg Gln Val Leu His Arg Ser Lys Asn
            180                 185                 190
Val Gly Thr Phe Lys Val Asp Ser Ala Ile Glu Tyr Leu Arg Glu Ser
        195                 200                 205
Val Gln
    210
```

<210> 35994
<211> 379
<212> PRT
<213> A.fumigatus

<400> 35994

```
Lys Gln Glu Cys Trp Asn Val Gln Ser Arg Gln Arg Asp Arg Ile Ser
1               5                   10                  15
Pro Arg Val Ser Thr Met Met Ile Pro Ile Glu Ser Val Gln Ala Leu
            20                  25                  30
Thr Gly Cys Phe Pro Arg Leu Arg Leu Asn Pro His Pro Thr Tyr Val
        35                  40                  45
Pro Tyr Arg Ala His Leu Thr Pro Gln Glu Ala Pro Gly Ile Phe Lys
    50                  55                  60
Asp Tyr Asp Ile Val Leu Asp Cys Thr Asp Asn Pro Ala Thr Arg Tyr
65                  70                  75                  80
Leu Ile Ser Asp Thr Ala Val Leu Leu Gly Lys Pro Leu Val Ser Ala
                85                  90                  95
Ser Ala Leu Arg Thr Glu Gly Gln Leu Met Val Leu Asn Tyr Pro Pro
            100                 105                 110
Arg Pro Val Gly Asp Lys Ser Gly Gly Pro Cys Tyr Arg Cys Val Phe
        115                 120                 125
Pro Lys Pro Pro Pro Ala Asn Ser Val Val Ser Cys Ala Asp Gly Gly
    130                 135                 140
Ile Leu Gly Pro Val Val Gly Thr Met Gly Val Leu Gln Ala Leu Glu
145                 150                 155                 160
Ala Ile Lys Val Ile Thr Ser Pro Ala Val Asn Pro Ser Ala Ser Pro
                165                 170                 175
Pro Ser Leu Leu Ile Phe Ser Ala Tyr Ser Thr Pro Leu Phe Arg Thr
            180                 185                 190
Ile Arg Leu Arg Ala Arg Arg Ala Asn Cys Ala Val Cys Ser Ala Asp
        195                 200                 205
Ala Ser Val Thr Leu Glu Thr Leu Lys Asn Gly Ser Thr Asp Tyr Val
    210                 215                 220
Phe Phe Cys Gly Val Ala Gly Leu Glu Ala Thr Leu Ser Pro Glu Glu
225                 230                 235                 240
Arg Ile Ser Pro Leu Glu Phe Lys Lys Arg His Pro Lys Glu Val Pro
                245                 250                 255
Gln Asp Gly Gly Arg Ile Asn Lys Glu Pro Thr Ile Ile Asp Val Arg
            260                 265                 270
Glu Lys Val Gln Phe Asp Ile Cys Ser Leu Glu Asn Ser Ile Asn Ile
```

```
        275                 280                 285
Pro Ile Ser Thr Ile Leu Ser Ser Ala Ser Ser Pro Thr Asn Val Asp
    290                 295                 300
Ala Asn Ala Gln Pro Ser Leu Pro Phe Trp Leu Pro Arg Glu Leu Ala
305                 310                 315                 320
Ser Ala Asp Ser Thr Asp Pro Ile Tyr Val Val Cys Arg His Gly Asn
                325                 330                 335
Asp Ser Gln Ile Ala Val Arg Arg Leu Lys Glu Leu Gly Leu Asp Arg
            340                 345                 350
Gly Gly Gln Arg Tyr Val Gly Asp Ile Gln Gly Gly Leu Arg Ala Trp
        355                 360                 365
Arg Glu Gln Ile Asp Pro Asp Trp Pro Glu Tyr
    370                 375
```

<210> 35995
<211> 169
<212> PRT
<213> A.fumigatus

<400> 35995

```
Asn Phe Ala Gly Ser Met Met Ser Ile Asn Leu Thr Ile Ser Asp Ile
1               5                   10                  15
His Ala Leu Gly Lys Asp Gln Ala Phe Asp Ile Leu Ala Gln Ile Ala
            20                  25                  30
Arg Ile Glu Lys Lys Thr Phe Pro Ala Asn Glu Ala Phe Pro Phe Gly
        35                  40                  45
Glu Asp Leu Trp Lys Lys Lys Pro Asn Thr Arg Val Leu Tyr Ala Val
    50                  55                  60
Ser Thr Ala Ser Gly Val Pro Arg Arg Leu Val Ala Tyr Ala Val Tyr
65                  70                  75                  80
Val Arg Gln Lys Gly Val Ala Leu Leu His Lys Val Cys Val Val Glu
                85                  90                  95
Ala Phe Arg Arg Gln Gly Ile Gly Met Gln Leu Met Asn Tyr Ile Arg
            100                 105                 110
Gln Arg Leu Gln Lys Glu Gly Cys Gln Tyr Ile Gln Leu Trp Val Asp
        115                 120                 125
Lys Ala Arg Glu Pro Ala Arg Ser Leu Tyr Asn Arg Ser Gly Phe Glu
    130                 135                 140
Glu Arg Glu Glu Ile Ala Asp Tyr Tyr Ala Pro Gly Arg Thr Gly Ile
145                 150                 155                 160
Arg Met Val Leu Asp Leu Lys Arg Gly
                165
```

<210> 35996
<211> 733
<212> PRT
<213> A.fumigatus

<400> 35996

```
Arg Ala Met Ala Leu Ile Ala Leu Val Val Leu Ala Leu Leu Val Ala
1               5                   10                  15
Val Asn Ala Ser Leu Val Ser Asn Tyr Pro Val Asn Ala Gln Leu Pro
            20                  25                  30
Pro Val Ala Arg Val Ser Arg Pro Phe His Phe Val Phe Ser Pro Gly
        35                  40                  45
Thr Phe Ser Gly Thr Glu Thr Glu Thr Gln Tyr Ser Leu Gln Ser Ala
```

```
    50                  55                  60
Pro Ser Trp Leu His Leu Asp Ser Ser Ser Arg Thr Leu Ser Gly Thr
65                  70                  75                  80
Pro Thr Ser Arg Asp Met Gly Pro Asn Lys Phe Lys Leu Val Ala Asn
                85                  90                  95
Asn Gly Pro Asp Ser Ala Asn Met Glu Val Thr Leu Val Val Thr Ala
            100                 105                 110
Glu Asp Gly Pro Lys Pro Gly Lys Pro Leu Leu Pro Gln Leu Glu Ala
        115                 120                 125
Ile Gly Ala Thr Ser Ala Pro Ser Thr Ile Phe Val His Ser Gly Asp
    130                 135                 140
Ser Phe Val Ile Ser Phe Asp His Asp Thr Phe Thr Asn Thr Arg Lys
145                 150                 155                 160
Ser Thr Phe Phe Tyr Ala Thr Ser Pro Gly Asn Thr Pro Leu Pro Ser
                165                 170                 175
Trp Val Gln Phe Asp Pro Ser Asn Leu Glu Phe Phe Gly Thr Thr Pro
            180                 185                 190
Asn Thr Gly Pro Gln Thr Phe Thr Phe Asn Leu Val Ala Ser Asp Val
        195                 200                 205
Ala Gly Phe Ser Ala Ala Ile Met Ser Phe Glu Met Thr Val Ser Pro
    210                 215                 220
His Ile Leu Ser Phe Asn Gln Ser Thr Gln Thr Leu Phe Leu Thr Arg
225                 230                 235                 240
Gly Lys His Phe Asn Ser Ser His Phe Arg Asp Ile Leu Thr Leu Asp
                245                 250                 255
Gly Arg Gln Pro Glu Asn Gly Glu Val Thr Ser Thr Glu Ala Gln Ala
            260                 265                 270
Pro Ser Trp Leu Thr Phe Asp Arg Asp Thr Ile Ser Leu Ser Gly Thr
        275                 280                 285
Pro Pro Ala Asn Ala Met Asn Glu Asn Val Thr Ile Ser Val Arg Asp
    290                 295                 300
Thr Tyr Gly Asp Val Thr Arg Met Ile Val Thr Leu Gln Tyr Ser Gln
305                 310                 315                 320
Phe Phe Thr Asp Asn Ile Lys Glu Cys Asp Ala Val Ile Gly Asp Asp
                325                 330                 335
Phe Val Leu Val Phe Asn Ser Ala Ile Leu Lys Asn Asp Ser Val Gln
            340                 345                 350
Leu Glu Val Asn Leu Gly Gln Gln Leu Ser Trp Leu Arg Tyr Asn Pro
        355                 360                 365
Asp Asn Lys Thr Leu Tyr Gly His Ala Pro Ser Asp Leu Gln Pro Gly
    370                 375                 380
Arg Phe Pro Ile Thr Leu Thr Ala Arg Glu Gly Thr Ala Glu Asp Ser
385                 390                 395                 400
Glu Gln Phe Ile Ile Arg Ala Val Arg Gly Asp Arg Gln Asp Gly Gly
                405                 410                 415
Glu Ala Lys Leu Thr Asn Thr Asn Asn Gly Gly Gly Gly His Gly Lys
            420                 425                 430
Lys Ala Gly Ile Ile Ala Val Ala Val Val Ile Pro Ile Val Phe Val
        435                 440                 445
Met Val Ile Leu Ser Leu Phe Cys Cys Trp Arg Tyr Lys Arg Lys Ala
    450                 455                 460
Lys Ala Ala Ala Gln Glu Glu Gly Gln Phe Pro Thr Glu Lys Asp Ser
465                 470                 475                 480
Arg Leu Thr Pro Arg Asn Leu Pro Pro Cys Arg Pro Tyr Glu Thr Ile
                485                 490                 495
Lys Pro Asn Asp Pro Pro Ile Ile Phe Arg Ser Pro Ser Leu Ser Ser
```

```
            500                 505                 510
Ser Lys Pro Pro Lys Leu Glu Leu Arg Pro Leu Trp Ser Glu Lys Ser
        515                 520                 525
Leu Glu Asp Ser Arg Gln Ala Arg Asn Ser Asp Asp Lys Glu Asn Ser
    530                 535                 540
Leu Ala His Ser Thr Ile Glu Trp Asp Phe Ala Pro Leu Thr Cys His
545                 550                 555                 560
Asn Pro Gln Glu Glu Lys Gln Thr Asp Asp Val Ser Pro Gln Asn Lys
                565                 570                 575
Arg Leu Ser Phe Gln Ser Ser Pro Ser Leu His Arg Arg Thr Thr Ala
            580                 585                 590
Asn Ser Thr Lys Arg Glu Pro Leu Lys Ser Ile Gln Pro Arg Arg Ser
        595                 600                 605
Leu Lys Arg Asn Ser Ala Ala Ser Ser Arg Ser Arg Arg Tyr Ser Arg
    610                 615                 620
Arg Ser Ser Gly Ile Ser Ser Val Ala Ser Gly Leu Pro Val Arg Leu
625                 630                 635                 640
Ser Gly Ala Gly His Gly Ala Gly Gly Phe Gly Pro Pro Gly His Gly
                645                 650                 655
Val Val His Val Ser Trp Gln Asn Thr His Ala Ser Leu Gln Ser Asp
            660                 665                 670
Glu Ser Ser Val Gly Asn Ile Ala Pro Leu Phe Pro Arg Pro Pro Pro
        675                 680                 685
Arg Gly Arg Asn Ser Val Glu Phe Arg Ile Leu Asp His Pro Arg Gln
    690                 695                 700
Leu Thr Val Arg Ala Val Glu Pro Glu Ser Pro Thr Ile Ser Glu Ser
705                 710                 715                 720
Asp Ser Leu Glu Ala Phe Val His Tyr Arg Ala Lys Met
                725                 730
```

<210> 35997
<211> 88
<212> PRT
<213> A.fumigatus

<400> 35997

```
Phe Leu Ser Tyr Arg Ile Pro Asn Thr Ile Leu Tyr Tyr Pro Val Ser
1               5                   10                  15
Thr Ile Leu Lys Phe Arg Tyr Leu Ile Tyr Leu Asn Ile Thr Ile Arg
            20                  25                  30
Thr Gly Pro Asp Ser Val Ile Ile Lys Arg Val Pro Lys Phe Ser Leu
        35                  40                  45
Phe Arg Pro Val Ile Ser Leu Gly Thr Ala Phe Ile Phe Pro Arg Ile
    50                  55                  60
Pro Ser Phe Leu Ile Asn Thr Arg Phe Ile Lys Leu Pro Ile Thr Pro
65                  70                  75                  80
Glu Leu Ile Ile Thr Leu Val Asn
                85
```

<210> 35998
<211> 87
<212> PRT
<213> A.fumigatus

<400> 35998

```
Lys Thr Ala Phe Arg Ile Lys Phe Arg His Phe Lys Tyr Leu Val Ile
```

```
1               5                   10                  15
Leu Phe Arg Leu Thr Asn Thr Pro Ala Leu Phe Lys Arg Phe Ile Lys
            20                  25                  30
Glu Val Leu Tyr Lys Val Leu His Tyr Phe Ile Val Val Tyr Leu Asp
        35                  40                  45
Asn Ile Leu Ile Phe Leu Glu Asn Lys Asn Lys Tyr Ile Glu Tyr Val
    50                  55                  60
Lys Glu Val Leu Gln Glu Leu Gln Lys Val Asn Ile Arg Leu Lys Leu
65                  70                  75                  80
Lys Lys Cys Glu Phe Tyr Val
                85
```

<210> 35999
<211> 75
<212> PRT
<213> A.fumigatus

<400> 35999

```
Ser Leu Gly Pro Ser Glu Tyr Pro Ile Ser Pro Val Leu Phe Ser Ser
1               5                   10                  15
Thr Asn Lys Ser Pro Phe Pro Lys Pro Arg Asn Asp Val Tyr Gly Pro
            20                  25                  30
Tyr Asn Pro Ser Tyr Leu Gln Thr Ser Gly Pro Lys Ser His Thr Gln
        35                  40                  45
Ser Pro Ala Val Thr Gly Thr Ser Val Val Ala Val Lys Phe Gly Gly
    50                  55                  60
Gly Val Ala Ile Ala Ala Asp Asn Leu Gly Thr
65                  70                  75
```

<210> 36000
<211> 237
<212> PRT
<213> A.fumigatus

<400> 36000

```
Arg Ser Asn Ser Val Glu Glu Leu Gln Ser Pro Leu Ile Thr Trp Val
1               5                   10                  15
Arg Lys Met Gly Asp Leu Leu Cys Ser Thr Arg Thr Thr Asp Pro Lys
            20                  25                  30
Asn Leu Ser Ile Ala Ser Tyr Gly Ser Leu Ala Arg Phe Ser Asp Val
        35                  40                  45
Lys Arg Leu Arg Val Phe Gly Glu Ser Ala Val Ile Gly Phe Ser Gly
    50                  55                  60
Asp Val Ser Asp Met Gln His Ile Asp Arg Leu Leu Glu Ser Ile Asp
65                  70                  75                  80
Ile Arg Glu Asn Tyr Ser Thr His Gly Asn Thr Leu Asn Ala Lys Asn
                85                  90                  95
Leu His Thr Tyr Leu Ser Lys Val Phe Tyr Lys Arg Arg Ser Glu Phe
            100                 105                 110
Asn Pro Leu Trp Asn Gln Val Leu Val Ala Gly Phe Asp Gly Asn Asn
        115                 120                 125
Gln Pro Phe Leu Ser Ser Ala Asp Leu Leu Gly Thr Thr Phe Ser Ala
    130                 135                 140
Pro His Leu Ala Thr Gly Phe Gly Ala His Leu Ala Ile Pro Ile Leu
145                 150                 155                 160
Arg Arg Leu Phe Pro Glu Glu Lys Pro Val Glu Glu Ile Thr Lys Glu
```

```
                165                 170                 175
Glu Ala Val Asn Ala Leu Lys Glu Cys Leu Lys Val Leu Trp Tyr Arg
            180                 185                 190
Asp Ala Arg Ser Leu Asp Lys Phe Ser Leu Ala Val Ile Thr Lys Glu
        195                 200                 205
Gly Val Glu Met His Glu Asp Gln Lys Ile Glu Lys Gln Ser Trp Ala
    210                 215                 220
Phe Ala Glu Ser Ile Arg Gly Tyr Gly Ala Gln Val Asn
225                 230                 235
```

<210> 36001
<211> 254
<212> PRT
<213> A.fumigatus

<400> 36001

```
Leu Phe Lys Cys Leu Ser Ile Ser Ser Leu Ser Gly Gln Arg Leu Ile
1               5                   10                  15
Arg Phe Leu Ala Lys Asp Gly Gln Val Tyr Tyr Gly Asp Ala Ile Leu
            20                  25                  30
Pro Val Gly Val Ser Asp Leu Ala Lys Val Thr Lys Ala Lys Val Ile
        35                  40                  45
Gln Gly Asp Ile Phe Gly Gln His Tyr Val Thr Asp Gln Val Ser Glu
    50                  55                  60
Val Gln Met Leu Leu Ala Pro Leu Ala Arg Lys Asp Ile Arg Thr Val
65                  70                  75                  80
Arg Cys Leu Gly Leu Asn Tyr Glu Gln His Ala Arg Glu Ser Asn Leu
                85                  90                  95
Pro Ile Pro Lys Tyr Pro Val Leu Phe Tyr Lys Pro Val Thr Ser Ile
            100                 105                 110
Ala Gly Pro Arg Asp Asp Ile Pro Ile Ser Thr Met Ala Gln Glu Gly
        115                 120                 125
Glu Gly Leu Asp Tyr Glu Cys Glu Leu Val Ile Val Ile Gly Lys Glu
    130                 135                 140
Ala Lys Asp Val Pro Glu Ser Arg Ala Leu Asp Tyr Val Leu Gly Tyr
145                 150                 155                 160
Ala Val Gly Asn Asp Val Ser His Arg Asp Trp Gln Ile Lys Arg Gly
                165                 170                 175
Gly Gly Gln Trp Gly Leu Gly Lys Gly Phe Asp Gly Trp Ala Pro Phe
            180                 185                 190
Gly Pro Gly Ile Val Ser Ser Arg Leu Ile Arg His Pro Asn Ala Leu
        195                 200                 205
His Ile Ser Thr Arg Leu Asn Gly Gln Val Val Gln Ser Ser Ser Thr
    210                 215                 220
Arg Asp Met Ile Phe Ser Val Ala Lys Val Val Ala Phe Leu Ser Gln
225                 230                 235                 240
Gly Thr Thr Leu Leu Pro Gly Asp Leu Ile Phe Thr Gly Thr
                245                 250
```

<210> 36002
<211> 78
<212> PRT
<213> A.fumigatus

<400> 36002

```
Cys Arg Leu Asp Leu Ser Arg Ala Leu Pro Thr Ser Ala Pro Phe Met
```

```
1               5                   10                  15
Ala Ser Glu Asp Leu Ala Ala Arg Gln Gly Ala Gly Ser Asn Val Pro
            20                  25                  30
Val Val Arg Ser Arg Gly Ala Ser Ala Cys Glu Lys Cys Arg Leu Arg
        35                  40                  45
Lys Thr Lys Cys Asp Asn Arg Arg Pro Ser Cys Gly Phe Cys Leu Lys
    50                  55                  60
Arg Arg Val Thr Cys Val Tyr Gln Asp Asp Asn Asn Ala Gly
65                  70                  75
```

<210> 36003
<211> 222
<212> PRT
<213> A.fumigatus

<400> 36003

```
Leu Cys Gly Val Ser Met Val Asn Thr Arg Ala Pro Asn Ser Ser Gly
1               5                   10                  15
Ser Arg Val Val Asp Ile Pro Ile Gly Ala Met Leu Asn Gly Leu Gln
            20                  25                  30
Thr Phe Pro Gln Trp Arg Asp Thr Phe Gly Gln Pro Thr Gly Asp Phe
        35                  40                  45
Phe Gly Phe Met Asn Ala Val Cys Pro Val Ala Lys Val Ile Gly Leu
    50                  55                  60
Phe Pro Ala Thr Trp Ile Gly Asp Arg Tyr Gly Arg Lys Lys Val Leu
65                  70                  75                  80
Tyr Thr Gly Phe Ala Leu Leu Pro Ile Gly Ala Ala Val Gln Ala Ala
                85                  90                  95
Ala Gln Asn Thr Pro Met Phe Ile Val Ala Gly Phe Leu Ile Gly Phe
            100                 105                 110
Ala Thr Ser Phe Leu Ser Gln Pro Ser Pro Ile Leu Val Thr Glu Leu
        115                 120                 125
Ala Tyr Pro Thr His Arg Ala Thr Ala Thr Ala Leu Tyr Asn Thr Cys
    130                 135                 140
Phe Val Arg Asp Leu Ile Phe Glu Ala Gly Thr Ile Leu Ile Ser His
145                 150                 155                 160
Leu Ser Thr Ser Gly Pro Ser Ser Pro Arg Gly Gln His Ser Glu Leu
                165                 170                 175
Ser Gly Cys Ser Arg Arg Gly Pro Gly Glu Ser His Pro Tyr Ser Asn
            180                 185                 190
Lys Pro Tyr Arg Pro Phe Lys Leu Leu Leu Ser Ser Gly Ser Gln Ser
        195                 200                 205
Leu Leu Gly Pro Leu Ser Leu His Met Pro Arg Leu His Tyr
    210                 215                 220
```

<210> 36004
<211> 371
<212> PRT
<213> A.fumigatus

<400> 36004

```
Ser Pro Thr Ser Val Pro Arg Gly Arg Pro Arg Arg Val Val Asn Ile
1               5                   10                  15
Arg Asn Phe Pro Ala Ala Val Asp Val Val Leu Glu Asn Pro Ile Leu
            20                  25                  30
Thr Pro Thr Ser His Thr Gly Leu Ser Asn Cys Phe Cys Leu Leu Gly
```

```
        35                  40                  45
Pro Lys Val Ser Ser Val Arg Cys Pro Tyr Thr Cys Arg Gly Ser Ile
    50                  55                  60
Thr Asn Lys Thr Arg Trp Leu Met Ala Asn Lys Lys Glu Glu Glu Ser
65                  70                  75                  80
Arg Arg Ile Leu Thr Lys Tyr His Ala Gly Gly Asp Glu Asn Ser Pro
                85                  90                  95
Leu Val Glu Phe Glu Leu Asn Glu Ile Ala Gln Ala Leu Glu Leu Glu
            100                 105                 110
Lys Ala Ser Glu His Ala Pro Ser Tyr Phe Glu Leu Val Arg Thr Gly
        115                 120                 125
Pro Asn Arg His Arg Thr Ala Leu Ala Phe Leu Ile Ala Phe Phe Thr
    130                 135                 140
Gln Trp Asn Gly Cys Ser Val Leu Ser Tyr Tyr Leu Ala Leu Val Leu
145                 150                 155                 160
Asn Thr Ile Gly Ile Thr Ala Pro Ala His Gln Thr Leu Ile Asn Gly
                165                 170                 175
Met Leu Gln Ile Phe Asn Trp Ile Val Ala Val Cys Gly Gly Ala Leu
            180                 185                 190
Leu Val Asp Arg Val Gly Arg Arg Ser Leu Phe Leu Val Gly Thr Ser
        195                 200                 205
Gly Met Leu Leu Ser Tyr Ile Ala Trp Thr Val Leu Asn Ser Glu Phe
    210                 215                 220
Ala Lys Thr His Asp Gln Arg Leu Gly Ser Ala Val Leu Ala Phe Ile
225                 230                 235                 240
Phe Ile Tyr Tyr Phe Phe Tyr Asp Ile Ser Trp Thr Pro Leu Pro Val
                245                 250                 255
Ala Tyr Thr Ala Glu Ile Phe Pro Tyr Thr Leu Arg Gly Arg Gly Met
            260                 265                 270
Thr Ile Asn Phe Val Gly Thr Tyr Phe Gly Leu Ile Ser Gly Gln Phe
        275                 280                 285
Leu Asn Pro Ile Ala Met Lys Asp Leu Ser Trp Arg Tyr Tyr Ile Val
    290                 295                 300
Phe Cys Ala Ile Leu Phe Val Met Val Leu Ala Ile Tyr Leu Trp Val
305                 310                 315                 320
Pro Glu Thr Lys Gly Arg Thr Leu Glu Glu Ile Ala Glu Val Phe Asp
                325                 330                 335
Gly Pro Arg Ser His Leu Thr Ala Gly Ala Val Asp Glu Asn Ser Ala
            340                 345                 350
Lys Gly Ser Gly Lys Val Pro Glu Val Glu Phe Arg Glu Asp Val Ala
        355                 360                 365
Thr Arg Gly
    370
```

<210> 36005
<211> 151
<212> PRT
<213> A.fumigatus

<400> 36005

```
Ala Arg Thr His Ala Asn Met Asn Glu Ser His Glu Ala Gly Lys Asn
1               5                   10                  15
Ser Ser Thr Asn Val Glu Glu Arg Glu Glu Glu Val Leu Arg Leu Ala
            20                  25                  30
Arg Gln Phe Thr Glu Gln Ser Arg Tyr Ser Thr Ala Gly Gln Thr Pro
        35                  40                  45
```

```
Phe Ala Ala Glu Ala Gly Ser Ala Leu Asp Pro Asn Gly Glu Arg Phe
    50                  55                  60
Asn Ala Arg Ala Trp Cys Lys Ala Met Leu Gln Met His Ile Gly Asp
65                  70                  75                  80
Lys Glu Ala His Pro Leu Arg Thr Leu Gly Val Ala Phe Ser Asn Leu
                85                  90                  95
Asn Val His Gly Phe Gly Ser Asp Thr Asp Tyr Gln Lys Ser Val Gly
            100                 105                 110
Asn Val Trp Leu Lys Thr Leu Ser Leu Ala Arg Ile Ala Phe Gly Gln
        115                 120                 125
Lys Gln Arg Lys Val Asp Ile Leu Gln Asn Leu Glu Ile Phe Thr Gly
    130                 135                 140
Ser Ala Arg Thr Thr Leu Ser
145                 150
```

<210> 36006
<211> 84
<212> PRT
<213> A.fumigatus

```
<400> 36006
Ser Arg Asn Ile Phe Pro His Ile Ile Tyr Pro Met Asn Ile Val Pro
1               5                   10                  15
Ile Leu Arg Leu Val Ser Asp Leu Val Ala Lys Tyr Gln Ser Lys Glu
            20                  25                  30
Phe Gly Leu Pro Tyr Asn Lys Val Cys Phe Arg Pro Asp Tyr Ser Ser
        35                  40                  45
Ser Gly Ser Tyr Ser Ala Gln Val Gly Glu Thr Asp Ala Ser Asp Glu
    50                  55                  60
Gly Ser His Leu Ala Ser Asn Phe Glu Gly Glu Glu Ala Val Asp Arg
65                  70                  75                  80
Glu Thr Glu Glu
```

<210> 36007
<211> 140
<212> PRT
<213> A.fumigatus

```
<400> 36007
Asn Met Phe Ser Asp Arg Ser Val Arg Ser Thr Lys Ser Lys Glu Lys
1               5                   10                  15
Cys Tyr Thr Cys Arg Arg Gln Arg Ile Val Cys Asp Ala Gly Lys Pro
            20                  25                  30
Ser Cys Met Arg Cys Ile Ser Arg Gly Val Glu Cys Leu Gly Tyr Ser
        35                  40                  45
Ala Thr Pro Ile Arg Trp Val Ala Pro Thr Ser Thr Leu Ser Ser Glu
    50                  55                  60
Ala Pro Thr Pro Ser Asn Ile Ser His Ile Lys Gly Gln Glu Arg Arg
65                  70                  75                  80
Lys Arg Gly Arg Pro Lys Leu Phe Leu Met Gln Ala Ala Pro Arg Ser
                85                  90                  95
Ser Lys Asp Gly Ser Asp Pro Gln Arg Ser Asp Glu Glu Leu Glu Ser
            100                 105                 110
Gln Lys Gly Ala Arg Arg Gly Ser Thr Ser Arg Thr Ala Ala Val Leu
        115                 120                 125
```

```
Pro Ser Thr Ser Ser Pro Arg Gly Trp Lys Asp Pro
    130                 135                 140

<210> 36008
<211> 705
<212> PRT
<213> A.fumigatus

<400> 36008
Trp Ser Lys Pro Leu Ala Ala Pro Ile Val Val Asn Ser Lys Asp Leu
1               5                  10                  15
Gly Pro Ser Gly Gln Pro Pro Thr Ser Ser Ile Thr Val Ala Pro Ile
            20                  25                  30
Ser Lys Ser Phe Pro Pro Ser Gly Arg Leu Asn Gly Gln Trp Gly Met
        35                  40                  45
Pro Pro Leu Ser Ala Tyr Thr Pro Phe Glu Ser Leu Leu Phe Phe Gln
    50                  55                  60
Ser Leu Ala Thr Leu Gly Thr Arg Pro Ile Asn Phe Ala Ser Ile Ser
65                  70                  75                  80
Asp Ile Leu Arg Asn Asn Thr Phe Val Arg Glu Asn Val Ala Phe Asn
                85                  90                  95
Ala Asp Arg Leu Ser Pro Glu Ala Leu Glu Glu Leu Tyr Thr Thr Leu
            100                 105                 110
Met Arg Glu Gly Leu Asp Gly Ala Arg Ala Val Ser Leu Pro Glu Gln
        115                 120                 125
Asn Gly Val His Pro Glu Gly Ala Gln Pro Thr Asn Pro Leu Lys Arg
    130                 135                 140
Lys Ile Ala Ser Pro Arg Pro Glu Val Leu Val Asp Asn Gly Arg Ser
145                 150                 155                 160
His Ala Ser Phe Leu Pro Glu Leu Val Ser His Leu Tyr Ala Arg Tyr
                165                 170                 175
Lys Glu Leu Ala Thr Arg Glu Ile Arg Asn Glu Glu Arg Arg Tyr Lys
            180                 185                 190
Glu Ile Ser Asp Glu Ile Glu Arg Leu Gln Lys Glu Glu Arg Gln Asn
        195                 200                 205
Pro Ser Gln Ser Ala Pro Val Pro Thr Ser Val Gln Ala Ser Thr Val
    210                 215                 220
Arg Gly Pro Gln Thr Lys Lys Asp Phe Ala Pro Glu Pro Met Asp Leu
225                 230                 235                 240
Asp Val Lys Glu Glu Arg Pro Ala Gln Gln Leu Arg Gln Glu Pro Ser
                245                 250                 255
Arg Pro Ala Val Gln Pro Pro Leu Asp Ser Lys Val Lys Gln Ile Glu
            260                 265                 270
Gln Glu Ser Pro Arg Asn Asp Ile Leu Pro Ser Ser Thr Arg Glu Glu
        275                 280                 285
Leu Ala Gln Pro Thr Gly Pro Ser Val Ser Ala Ala Ala Thr Gln Gln
    290                 295                 300
Pro Gln Val Leu Ser Thr Gln Pro Pro Ala Gln Pro His Gln Glu Gln
305                 310                 315                 320
Pro Arg Pro Gln Gln Gln Gln Gln Pro Gln Pro Gln Pro Gln Pro
                325                 330                 335
Asp Asp Gly His Ala Pro Ser Ala Val Gln Gln Ala Gln Ala Asn Val
            340                 345                 350
Pro Pro Thr Ala Ser Leu Ala Gln Lys Ala Lys Asn Gly Pro Ala Val
        355                 360                 365
His Ser Gln Gln Pro Ala Ala Ala Pro Ser Pro Ser Leu Gly Asn Leu
```

```
    370                 375                 380
Pro Thr Phe Thr Ala Val Ser Trp Gln Ala Gln His Asp Val His Lys
385                 390                 395                 400
Pro Thr Pro Val Pro Ala Pro Ala Pro Ser Pro Ser Pro Ala Ala Arg
                405                 410                 415
Pro Val Glu Lys Lys Gly Ala Leu Gly Ala Thr Ser Val Ser Ala Pro
            420                 425                 430
Gln Pro Pro Thr Pro Gln Pro Ile Val Gln Gln Trp Pro Leu His Gln
        435                 440                 445
Pro Pro Gln Thr Pro Gln Pro Pro Pro Leu Ala Asp Lys Ser Ala Met
    450                 455                 460
Val Glu Arg Thr Ser Thr Asn Pro Leu Gln His Ala Pro Lys Pro Glu
465                 470                 475                 480
Pro Glu Lys Pro Phe Gln Ala Thr Pro Arg Thr Pro Val Pro Pro Thr
                485                 490                 495
Pro Gly Pro Gly Ser Ala Pro Ile Val Ser Thr Ala Val Asn Gly His
            500                 505                 510
Ala Arg Gly Tyr Gln Thr Pro Val Gly Ala Ala Gln Gly Leu Phe Ser
        515                 520                 525
Glu Ala Gln Asn Val His Arg Pro Gln Leu Ser Ala Asp Thr Arg Ser
    530                 535                 540
Ser Thr Pro Trp Lys Lys Thr Pro Arg Leu Ser Ile Pro Pro Ser Pro
545                 550                 555                 560
Arg Ser Pro Ile Arg Pro Arg Pro Glu Asp Val Ser Pro Ile Ser Glu
                565                 570                 575
Arg Ala Pro Ser Pro Ile Glu Phe Pro Glu Pro Leu Leu Glu Glu Thr
            580                 585                 590
Glu Ser Arg Gln Asn Lys Arg Arg Ala Val Glu Glu Lys Gly Ala Arg
        595                 600                 605
Thr Ile Gln Glu Pro Ser Leu Pro Gln Asp Leu Glu Leu Lys Gly Arg
    610                 615                 620
Leu Lys Pro Lys Val Glu Lys Ala Thr Gly Ser Ala Ala Ala Lys Lys
625                 630                 635                 640
Arg Asp Arg Ser Thr Thr Ser Ser Arg Ser Arg Gly Arg Ser Val Val
                645                 650                 655
Ser Arg Asp Glu Glu Ser Val Ala Glu Val Gly Asn Val Pro Leu Glu
            660                 665                 670
Lys Ile Lys His Glu Leu Pro Gly Thr Pro Thr Asn Ile Gln Glu Pro
        675                 680                 685
Pro Glu Leu Glu Gly Arg Ala Ser Gly Ala Arg Lys Gly Ala Ala Ala
    690                 695                 700
Leu
705
```

<210> 36009
<211> 71
<212> PRT
<213> A.fumigatus

<400> 36009

```
Leu Ile Pro Leu His Pro Ala Thr Phe His His His Ile Leu Asn Pro
1               5                   10                  15
Ser Asn Ile Cys Pro Phe His Gln Ile Gln Thr Phe Gln Val Asn Phe
            20                  25                  30
Ser Leu Ile Leu Lys His Tyr Phe Arg Pro Tyr Ser Tyr Trp Ala Val
        35                  40                  45
```

```
Phe Val Gly Phe Trp Thr Leu Val Ser Leu Ser Arg Phe Phe Ser Leu
    50                  55                  60
Arg Phe Ser Ala Leu Met Val
65                  70

<210> 36010
<211> 138
<212> PRT
<213> A.fumigatus

<400> 36010
Lys Ala Thr Glu Gly Gly Ala Ala Glu Ser Leu Thr Val Ser Thr Cys
1               5                   10                  15
Ala Asp Val Cys Thr Gly Ile Tyr Ser Thr Arg Thr Thr Asn Lys Lys
            20                  25                  30
Arg Leu Cys Ala Gly Ala His Gly Leu Gly Cys Gln Gly Gly Glu Ala
        35                  40                  45
Arg Ser Ala Thr Ser Ala Gly Thr Gln Pro Ala Arg Ser Pro Ala Thr
    50                  55                  60
Val Gly Phe Gln Gly Gln Ala Asn Arg Ala Gly Ile Ala Ala Gln Arg
65                  70                  75                  80
Tyr Phe Thr Leu Phe Asn Ala Arg Arg Ala Ser Ala Thr Asp Arg Ala
                85                  90                  95
Val Gly Ile Gly Arg Ser Asp Thr Thr Thr Pro Gly Ala Ile His Ser
            100                 105                 110
Thr Ala Ser Ser Thr Ala Ser Arg Thr Ala Pro Thr Ala Ala Ala Ala
        115                 120                 125
Ala Ala Thr Ala Thr Ala Ala Ala Ala Gly
    130                 135

<210> 36011
<211> 513
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (4)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36011
Val Leu Thr Xaa Ile Asp Asp Arg Arg Lys Tyr Ser Arg Ser Pro Ser
1               5                   10                  15
Ser Ser Arg Ser Pro His Ser Arg Arg Arg Lys Ser Phe Ser Glu Gln
            20                  25                  30
Ala Leu Gly Ala Phe Gly Leu Gly Ala Ala Ala Ser Ser Ala Ser Arg
        35                  40                  45
His Arg Asp Tyr Ser Arg Gly Arg Ser Tyr Gly His His Gly Arg Ser
    50                  55                  60
His Ser Tyr Ser Pro Ser Arg Ser Arg Ser Arg Asp Cys His Arg Arg
65                  70                  75                  80
Asp Lys Ser Glu Gln Arg Ile Ala Gln Ala Ala Arg Ala Ala Leu Thr
                85                  90                  95
Ala Ala Ala Val Glu Ala Phe Arg Val Arg Lys Glu Pro Gly Glu Trp
            100                 105                 110
Thr Gly Glu Lys Gly Lys Arg Ile Leu Thr Ala Ala Ile Thr Ala Ala
```

```
        115                 120                 125
Gly Thr Asp Gly Leu Val Asp Arg Asn Pro Asn Lys His Ser Lys Arg
    130                 135                 140
His Ile Ile Glu Ser Thr Leu Ala Gly Leu Ala Ala Asn His Phe Val
145                 150                 155                 160
Asn Gly Pro Arg Ser Lys Ser Arg Ser Lys Ser Arg Gly Arg Gly Ser
                165                 170                 175
Asp Ser Lys Leu Lys Asn Leu Ala Ala Thr Gly Ala Leu Ala Ala Val
            180                 185                 190
Gly Lys Glu Ala Tyr Glu Arg Phe Lys Ser Arg Ser Arg Ser Arg His
        195                 200                 205
Arg Gly Arg Ser Ser Ser Arg Asp Ser Tyr Asp Glu Ser Asp Ser Pro
    210                 215                 220
Arg Arg His Arg Ser Arg Lys Arg Ser Lys Ser Val Ser Glu Phe Ile
225                 230                 235                 240
Asn Gln Gly Met Glu Ala Leu Gly Leu Gly Asp Lys Asp Arg Asp Lys
                245                 250                 255
Asp Trp Asp Asp Arg Arg Gly Arg His Arg Gly Arg Pro Ser Arg Tyr
            260                 265                 270
Asp Asp Tyr Ser Asp Ser Asp Arg Asp Ser Glu Pro Gly Glu Arg Arg
        275                 280                 285
Ala Arg His Ser Arg Asp Val Gly Arg Pro Arg Ser Val Tyr Ala Thr
    290                 295                 300
Gln Ala Pro Ser Ser Ala Ile Thr Thr Thr Ser Gly Ala Arg Gly Ser
305                 310                 315                 320
His Ala Asp Asp Gly Gly Tyr His His Ser Thr Pro Asp Ser Glu Ser
                325                 330                 335
Ser Ser Asp Leu Gly Asp Ser Ser Asp Glu Lys Lys Gln Arg Lys Lys
            340                 345                 350
Leu Asn Arg Gln Ala Leu Met Thr Ala Gly Leu Ala Thr Ile Ala Thr
        355                 360                 365
Val His Ala Ala His Gly Leu His Gln Asn Met Glu Lys Arg Lys Gln
    370                 375                 380
Arg Met Gln Met Val Lys Asp Gly Ala Ile Ser Pro Glu Glu Ala Arg
385                 390                 395                 400
Arg Leu Arg Ile Lys Ala Asn Leu Ala Asp Ala Ala Ser Ile Gly Leu
                405                 410                 415
Ser Ala Leu Ser Ile Lys Gly Ala Val Ala Glu Trp Lys Glu Ala Asp
            420                 425                 430
Glu Lys Arg Arg Glu Arg Ala Glu Phe Arg Lys Lys Cys Glu Gln Arg
        435                 440                 445
Arg Gln Lys Arg Gln Glu Arg Met Arg Ser Lys Ser Gln Ser Ala Ala
    450                 455                 460
Gly Ser Pro Arg Phe Ser Trp Arg Thr Val Asp Pro Asp Lys Ile Glu
465                 470                 475                 480
Glu Asn Ala Ser Ser Ser Gly Tyr Leu His Ser His Ala Gly Lys Val
                485                 490                 495
Arg Ser Pro Ser Val Gly Ala Asp Phe Arg Tyr Arg Ser Ser Tyr Trp
            500                 505                 510
Ser
```

<210> 36012
<211> 332
<212> PRT
<213> A.fumigatus

<400> 36012
Arg Ala Ala Tyr Gln Gly Leu Cys Gln Ala Asn Asp Lys Asp Arg Leu
1 5 10 15
Ser Phe Gln Asp Gln Gly Met Glu Pro Leu Ala Arg Ser Ala Tyr Pro
20 25 30
Met Ala Lys Ser Ala Ala Pro Leu Ala Ser Thr Ser Val Asp Ser Leu
35 40 45
Ala Ile Phe Ser Gly Arg Ala Ala Asp Glu Lys Thr Pro Arg Thr Ala
50 55 60
Gly Gly Phe Pro Gly His Gly Pro Lys Ser Ser Pro Leu Lys Pro Ser
65 70 75 80
Pro Leu Thr Thr Ile Gln Ser Ser Gly Asp Trp Thr Pro Ser Ser Thr
85 90 95
Asn Ser Ala Gly Ala Asp Lys Ala Val Glu Ala Gln Asp Met Thr Leu
100 105 110
Gly Asp Lys Pro Arg Gly Asp Arg Thr Thr Asp Glu Gly Trp Gly Lys
115 120 125
Tyr Phe Gln Asn Asn Asn Gly Thr Asn Thr Asn Leu Ala Asn Thr Pro
130 135 140
Ala Ile Ala Ala Pro Arg Ser Asn Ala Glu Asp Arg Ile Ser Ala Trp
145 150 155 160
Pro Gly Ala Pro Leu Pro Gln Leu Asn Phe Gly Phe Leu Glu Glu Pro
165 170 175
Ala Pro Leu Gly Arg Val Val Thr Gly Ser Pro Thr Thr Glu Asp Gly
180 185 190
Pro Lys Ile Asn Gln Met Leu Lys Arg Ala Glu Ser Gln Ser Ala Arg
195 200 205
Ile Ser Thr Ala Ser Ser Leu Ser Ala Ala Ser Asp Thr Asp Asp Asp
210 215 220
His Asp His Asp His Asp Arg Arg Asp Gly Ala Ser Thr Ile Ser Gly
225 230 235 240
Pro Ala Pro Asp Pro Gln Trp Arg Gly Ala Pro His His Ser Trp Ile
245 250 255
Gly Arg Pro Pro Ser Ser Thr Tyr Ser Arg Ser Phe Tyr Asn Pro Ser
260 265 270
Gly Arg Glu Arg Asp Thr Ile Asn Thr Arg Gly Ser Ser Val Leu Ile
275 280 285
Pro Asp Ala Leu Glu Pro Met Pro Met Pro Met Pro Thr Thr Pro Phe
290 295 300
Pro Gly Ala Pro Ala Pro Ala Pro Ala Asn Pro Arg Asn Asn Ala Asn
305 310 315 320
Ser Asp Leu Ser Trp Leu Asn Leu Asn Ala Asp Arg
325 330

<210> 36013
<211> 270
<212> PRT
<213> A.fumigatus

<400> 36013
Ser Val Asn His Leu Ser Gln Pro Phe Thr Ser Ile Ser Thr His Ile
1 5 10 15
Gln Ile Met His Arg Met Thr His Cys Arg Ser Ala Ser Thr Lys Tyr
20 25 30
Leu Asn Pro Leu Lys Asn Arg Pro Leu Thr Ile Asp Thr Val Asn His

```
        35                  40                  45
His Asp Asp Gly Cys Pro Cys Pro Ala Gln Ile Lys His Leu Ala Ser
    50                  55                  60
Thr Leu Pro Thr Lys Gly Pro Phe Asp Phe Ser Phe Leu Pro Thr Leu
65                  70                  75                  80
Pro Gln Pro Leu Ala Asp Leu Cys Arg Ser Ile Glu Ala Cys Gln His
                85                  90                  95
Pro Ser His Lys Ser Asn Pro Asp Leu Ser Pro Pro Leu Val Asp Leu
            100                 105                 110
Ser Asp Ala Val Leu Ser Leu Cys His Ala Ala Cys Thr Thr Tyr His
        115                 120                 125
Leu Leu Asp Asp Glu Leu Gly Ser Thr Thr Ser Asn Gly Asn Gly Asn
    130                 135                 140
Gly Thr Thr Thr Thr Thr Ala Thr Ser Pro Pro Thr Gln Thr Gly Asn
145                 150                 155                 160
Ala Asn Pro Pro Leu Thr Cys Thr Lys Ser Pro Met Ser Leu Gly Lys
                165                 170                 175
Leu Thr Leu Gln Ala Glu Glu Glu Thr Leu Leu Ala Arg Gln Val Val
            180                 185                 190
Tyr Ala Val Leu Glu Arg Leu Ser Thr Leu Leu Arg Gly Val Tyr Ala
        195                 200                 205
Arg Gly Lys Gly Ala Ala Gly Gly Gly Pro Ala Ile Gly Ala Thr Ala
    210                 215                 220
Thr Ala Thr Val Val Met Asp Leu Asp Leu Gly Met Ala Leu Gly Thr
225                 230                 235                 240
Arg Gln Gly Leu Tyr Gly Arg Glu Gly Asp Glu Pro Val Ser Gln Cys
                245                 250                 255
Leu Ser Arg Gly Leu Ala Leu Leu Gly Lys Leu Phe Ser Glu
            260                 265                 270
```

<210> 36014
<211> 197
<212> PRT
<213> A.fumigatus

<400> 36014

```
Gln Gly Tyr Ala Thr Ile Val Gly Gln Asn Gly Ile Lys Leu Ser Gly
1               5                   10                  15
Gly Gln Arg Gln Arg Leu Ala Ile Ala Arg Ser Ile Val Lys Glu Pro
            20                  25                  30
Lys Ile Leu Ile Leu Asp Glu Ala Thr Ser Ala Ile Asp Val Arg Gly
        35                  40                  45
Glu Lys Ile Val Gln Ala Ala Leu Asp Arg Val Ser Arg Asn Arg Thr
    50                  55                  60
Thr Ile Met Ile Ala His Arg Leu Ser Thr Ile Arg Arg Ala Asp His
65                  70                  75                  80
Ile Val Val Met Lys Gly Gly Val Asn Val Glu Glu Gly Thr His Glu
                85                  90                  95
Glu Leu Leu Gln Arg Glu Gly Gly Val Tyr Arg Asp Leu Val Asn Ala
            100                 105                 110
Gln Arg Leu Glu Leu Leu Ala Glu Glu Asp Ser His Thr Gly Asn Ala
        115                 120                 125
Val Leu Glu Leu Gln Asp Glu Ala Gln Ser Pro Thr Met Ser Val Gln
    130                 135                 140
Glu Lys Val Gln Asp Glu Asp Asn Thr Gln Asp Lys Asn Arg Gly Phe
145                 150                 155                 160
```

```
Ile Arg Thr Ile Gly Leu Val Leu Tyr Glu Gln Arg Ala Arg Trp Pro
                165                 170                 175
Leu Tyr Val Ala Val Leu Ile Ser Thr Ala Gly Ala Gly Ser Lys Leu
            180                 185                 190
Ile Ser Asp Ala Ser
        195
```

<210> 36015
<211> 252
<212> PRT
<213> A.fumigatus

<400> 36015

```
Asn Val Ala Asp Gly Tyr Arg Tyr Gly Gly Gln Leu Leu Ala Ser Arg
1               5                   10                  15
Glu Tyr Gln Pro Thr Ser Phe Phe Val Ile Phe Met Ala Ile Ile Gln
            20                  25                  30
Gly Gly Gln Ser Ala Gly Gln Phe Phe Ser Phe Ala Ser Asn Phe Ala
        35                  40                  45
Gln Ala Ala Ala Ser Ala Asn Arg Ile Leu Asn Ser Arg Pro Gln Ser
    50                  55                  60
Asp Glu Leu Gly Ala Ala Ser Ile Glu Lys Gln Gln Leu Val Arg Ser
65                  70                  75                  80
Gly Asp Leu Thr Gly Ala Thr Val Glu Phe His Asp Val Ser Phe Arg
                85                  90                  95
Tyr Ala Ser Gln Asp Val Pro Leu Phe Thr Gly Leu Asn Val Ser Ile
            100                 105                 110
Gln Ser Gly Gln Phe Val Ala Phe Val Gly Pro Ser Gly Cys Gly Lys
        115                 120                 125
Thr Thr Val Ile Ser Leu Leu Glu Arg Phe Tyr Ser Pro Ser Gln Gly
    130                 135                 140
Thr Ile Thr Phe Asn Gly Glu Asp Ile Arg Thr Leu Glu Met Thr Ser
145                 150                 155                 160
Tyr Arg Arg Glu Leu Ser Leu Val Ala Gln Glu Pro Arg Leu Phe Glu
                165                 170                 175
Gly Ser Ile Arg Glu Asn Ile Thr Leu Gly Leu Asp Gln Ser Glu Phe
            180                 185                 190
Thr Glu Glu Glu Leu Ile Gln Ala Cys Lys Asp Ala Glu Ile His Asp
        195                 200                 205
Phe Ile Thr Ser Leu Ser Glu Gly Tyr Ala Thr Glu Leu Gly Ile Lys
    210                 215                 220
Ala Gln Thr Ser Leu Ser Gly Gly Gln Arg Gln Arg Leu Cys Ile Gly
225                 230                 235                 240
Ala Leu His Cys Ser Arg Lys Arg His Ser Tyr Phe
                245                 250
```

<210> 36016
<211> 229
<212> PRT
<213> A.fumigatus

<400> 36016

```
Thr Asp Arg Val Phe Cys Ser Val Met Ile Val Val Ser Val Leu Gly
1               5                   10                  15
Asn Ile Ala Ser Pro Leu Ile Ile Val Ser Lys Ala Ala Ser Ala Ala
            20                  25                  30
```

```
Gly Ser Phe Phe Glu Leu Ile Asp Ser Glu Lys Val Asp Ser Gly Gly
        35                  40                  45
Leu Arg Glu Pro Asp Ala Ser Ala His Val Asp Ile Ile Phe Arg Asp
    50                  55                  60
Val Arg Phe Thr Tyr Pro Thr Arg Pro Asp Val Pro Val Leu Lys Gly
65                  70                  75                  80
Leu Asp Ile Arg Phe Gln Asn Gly Lys Thr Thr Ala Leu Val Gly Pro
                85                  90                  95
Ser Gly Ser Gly Lys Ser Thr Ile Val Ala Leu Ile Glu Arg Trp Tyr
            100                 105                 110
Gln Leu Ala Met Ser Pro Glu Asp Gln Asn Gln Gly Ser Ile Tyr Ala
        115                 120                 125
Gly Pro His Asp Ile Asn Ser Leu Asp Leu Lys Trp Trp Arg Ser Gln
    130                 135                 140
Ile Gly Leu Val Gln Gln Glu Pro Phe Leu Phe Asn Asp Thr Ile Phe
145                 150                 155                 160
Asn Asn Val Ala Phe Gly Leu Ile Gly Thr Gln Trp Glu Lys Glu Pro
                165                 170                 175
Asp Ser Val Lys Lys Glu Leu Ile Glu Lys Ala Cys Arg Glu Ala Phe
            180                 185                 190
Ala Glu Glu Phe Ile Gln Arg Leu Pro Glu Val Cys Leu Ser Val Glu
        195                 200                 205
Tyr Arg Gly Ile Ser Asp Cys Asp Arg Val Met Gln Pro Leu Trp Asp
    210                 215                 220
Arg Thr Val Ser Asn
225
```

<210> 36017
<211> 244
<212> PRT
<213> A.fumigatus

<400> 36017

```
Arg Ile Ser Glu Ala Cys Arg Lys Glu Tyr Phe Gln Asn Ile Leu Ala
1               5                   10                  15
Lys Pro Ile Pro Phe His Asp Leu Ser Glu Asn Ala Ser Gly Ser Ile
            20                  25                  30
Val Ser Arg Leu Ala Thr Asp Pro Lys Gln Val Gln Glu Leu Ile Gly
        35                  40                  45
Leu Asn Gly Ala Phe Pro Leu Ile Ser Thr Phe Ser Met Ile Gly Cys
    50                  55                  60
Ile Ala Ile Ala Phe Ser Phe Gly Trp Lys Leu Ser Leu Val Thr Val
65                  70                  75                  80
Phe Ala Ala Leu Pro Cys Thr Phe Leu Ala Ala Phe Met Arg Ile Arg
                85                  90                  95
Tyr Glu Leu Gln Phe Glu Ala Met Asn Ala Ala Val Tyr Ala Gly Ser
            100                 105                 110
Ser Gln Phe Ala Ala Glu Ala Ile Asp Ala Phe Arg Thr Val Ser Ser
        115                 120                 125
Leu Thr Met Glu Asp Ala Ile Leu Asp Arg Tyr Thr Gln Leu Leu Arg
    130                 135                 140
Glu Gln Gln Lys Lys Ala Phe Arg Lys Ala Arg Tyr Ala Thr Leu Ile
145                 150                 155                 160
Phe Ala Phe Ser Asp Ser Val Glu Leu Cys Ala Met Ala Leu Thr Phe
                165                 170                 175
Trp Phe Val Ser Leu Cys Asp Ser Tyr Thr Arg Met Leu Leu Thr Val
```

```
            180                 185                 190
Thr Gly Met Val Ala Ser Phe Ser Pro Leu Glu Ser Thr Asn Arg Pro
        195                 200                 205
His Ser Ser Leu Tyr Ser Trp Leu Ser Phe Lys Ala Asp Asn Arg Pro
    210                 215                 220
Ala Ser Phe Leu Val Ser His Gln Thr Leu Pro Lys Pro Leu Arg Leu
225                 230                 235                 240
Arg Thr Gly Tyr
```

<210> 36018
<211> 186
<212> PRT
<213> A.fumigatus

<400> 36018

```
Thr Ile Thr Thr Leu Ser Asn Thr Val Gln Gln Ser Ile Ser Asp Lys
1               5                   10                  15
Leu Ala Ile Leu Phe Gln Ser Leu Ala Leu Leu Leu Ala Ala Phe Ile
            20                  25                  30
Ile Ala Phe Lys Tyr Ser Trp Ala Leu Thr Leu Val Thr Ser Ser Ala
        35                  40                  45
Leu Leu Phe Val Val Val Gly Cys Ser Val Thr Leu Pro Phe Met Thr
    50                  55                  60
Lys Ile Gln Gln Lys Ile Asp Lys Ala Asp Glu Lys His Ser Ser Ile
65                  70                  75                  80
Ala Ala Glu Val Phe Gly Ser Ile Arg Thr Val Val Ser Leu Gly Ala
                85                  90                  95
Gln Glu Ser Leu Ser Lys Arg Tyr Thr Thr Trp Val Glu Glu Ala Arg
            100                 105                 110
Lys Arg Gly Asn Gly Leu Ser Leu Ile Phe Gly Ile His Phe Ala Leu
        115                 120                 125
Val Phe Phe Ala Leu Tyr Ala Ser Phe Ser Leu Ala Phe Trp Phe Gly
    130                 135                 140
Leu Lys Leu Tyr Arg Glu Gly His Ile Gly Glu Ile Asn Thr Val Ile
145                 150                 155                 160
Thr Tyr Val Tyr Pro Pro Ala Ser Ile Pro Gln Leu Asp Gln Leu Leu
                165                 170                 175
Ile Lys Pro Thr Glu Cys Ser Ala Arg Ser
            180                 185
```

<210> 36019
<211> 280
<212> PRT
<213> A.fumigatus

<400> 36019

```
Leu Thr Ser Ser Pro Ser Cys Ala Asp Glu Asp Arg His Val Gln Arg
1               5                   10                  15
Pro Pro Arg Thr Leu Phe Ile Gln Tyr Gln Pro Asn Ser Pro Asn Lys
            20                  25                  30
Pro Ser Ile Phe Val Leu Gly Val Ile Phe Ile Leu His Phe Leu Leu
        35                  40                  45
Asn Arg His Gly Gly Arg Leu Gly Leu Ile Leu Gln Leu Glu His Arg
    50                  55                  60
Val Thr Cys Val Ala Val Leu Phe Cys Gln Gln Leu Lys Pro Leu Ser
```

```
65                  70                  75                  80
Ile Asp Lys Val Ser Val Tyr Ser Thr Leu Ser Leu Glu Glu Leu Leu
                85                  90                  95
Val Cys Ser Leu Phe Asp Ile His Ala Ser Phe His Asn Asn Asp Met
            100                 105                 110
Ile Cys Ser Ser Asn Cys Gly Gln Pro Met Ser Asn His Tyr Gly Cys
        115                 120                 125
Ala Val Ser Gly Asn Pro Ile Lys Gly Cys Leu Tyr Asp Leu Leu Ala
    130                 135                 140
Thr Asn Val Asp Ser Thr Arg Arg Leu Val Gln Tyr Gln Asp Leu Trp
145                 150                 155                 160
Phe Phe His Asp Ala Pro Ser Asp Ser Lys Ala Leu Ser Leu Thr Ala
                165                 170                 175
Thr Gln Phe Asp Thr Val Leu Ser His Asn Gly Cys Ile Thr Leu Ser
            180                 185                 190
Gln Ser Asp Met Pro Arg Tyr Ser Thr Asp Lys His Thr Ser Gly Lys
        195                 200                 205
Arg Trp Met Asn Ser Ser Ala Lys Ala Ser Leu Gln Ala Phe Ser Ile
    210                 215                 220
Ser Ser Phe Phe Thr Leu Ser Gly Ser Phe Ser His Cys Val Pro Ile
225                 230                 235                 240
Arg Pro Asn Ala Thr Leu Leu Lys Met Val Ser Leu Lys Arg Lys Gly
                245                 250                 255
Ser Cys Trp Thr Ser Pro Ile Cys Asp Leu His His Phe Arg Ser Arg
            260                 265                 270
Leu Leu Ile Ser Cys Gly Pro Ala
        275                 280

<210> 36020
<211> 86
<212> PRT
<213> A.fumigatus

<400> 36020
Ile Ser Leu Val Gly His Leu Ile Ile Arg Leu Glu Lys Pro Ser Tyr
1               5                   10                  15
Glu Glu His Glu Gly Leu Asn Gly Asn Ala Ser Asn Ala Asp Gln Arg
            20                  25                  30
Arg Gln Asp Leu Gly Gln Tyr Pro Ser Gly Arg Gly Ser Lys Lys Ala
        35                  40                  45
Thr Asp Pro Ala Asp Tyr His Gly Val Glu Thr Leu Gly Met Glu Arg
    50                  55                  60
Ser Glu Val Arg Gln Ile Pro Ala Tyr Phe Ile Asn Arg Glu Phe Ser
65                  70                  75                  80
Met Thr Thr Ala Gly Phe
                85

<210> 36021
<211> 83
<212> PRT
<213> A.fumigatus

<400> 36021
Leu Asp Phe His Arg Cys Arg Asn Gln Gly Arg Glu Gly Gln Gln Thr
1               5                   10                  15
Ala Ala Tyr Val Phe Glu Pro Pro Pro Ala Ser Thr Leu Gly Ile Gly
```

```
            20                  25                  30
Ser Asp Val His Thr Cys Leu Pro Tyr Leu Arg Gly Leu Leu Ile Leu
        35                  40                  45
Ala Ile Ala Asn Leu Ser Ser Gln Ser Ile Gly Lys Gln Arg Lys Asn
    50                  55                  60
Arg Ser Lys Lys Phe Arg Gly Thr Ala Lys Thr Lys Gly Pro Lys Lys
65                  70                  75                  80
Asn Lys Asp
```

<210> 36022
<211> 67
<212> PRT
<213> A.fumigatus

<400> 36022

```
Pro Arg Arg Cys Leu Arg Arg Leu Val Lys Thr Cys Ser Cys Arg His
1               5                   10                  15
Arg Thr Gln Tyr Gly Gly Gly Lys Ser Thr Gly Phe Ala Leu Ile Tyr
            20                  25                  30
Asp Ser His Glu Ala Leu Gln Glu Val Arg Ala Ser Gln Leu Thr Gly
        35                  40                  45
Phe Ser Ser Val Pro Gln Pro Arg Ser Arg Arg Pro Ala Asp Ser Ser
    50                  55                  60
Val Cys Phe
65
```

<210> 36023
<211> 67
<212> PRT
<213> A.fumigatus

<400> 36023

```
Ile Phe Ile Pro Glu Asn Tyr Pro Lys Ser Arg Ile Phe Pro Val Cys
1               5                   10                  15
Ile Ile Met Gly His Asp Lys Gly Arg Asn Ser Met Arg His Arg Asn
            20                  25                  30
His Arg Tyr Tyr His Ile Gln Gln Gly Gln Pro Leu Ala Ala Ser Ser
        35                  40                  45
Ala Pro Arg Ser Glu Ser Thr Ser Asn Ser Phe His Gln Gly Gln Ala
    50                  55                  60
Glu Cys Ile
65
```

<210> 36024
<211> 74
<212> PRT
<213> A.fumigatus

<400> 36024

```
Ser Leu Phe Ile Tyr Gln Pro Tyr His Ile Asn Leu Asn Ile Phe Ile
1               5                   10                  15
Lys Met Arg Phe Phe Ala Thr Val Leu Ala Thr Leu Ala Val Gly Ala
            20                  25                  30
Val Ala Ser Asn Ala Val Ala Asp Glu Glu Tyr Ser Thr Val Val Val
        35                  40                  45
```

```
Thr Glu Tyr Ser Thr Tyr Cys Pro Ser Ala Thr Ser Val Pro Glu Ala
    50                  55                  60
Ser Ser Ser Ala Val Arg Leu Cys Tyr Ile
65                  70
```

<210> 36025
<211> 137
<212> PRT
<213> A.fumigatus

<400> 36025

```
Asn Met Leu Ile Pro Pro Leu Gln Ala Pro Ser Ile Thr Val Ser Asp
1               5                   10                  15
Gly Val Thr Tyr Ser Ile Ser Arg Pro Leu Ile Thr Ser Thr Ile Thr
            20                  25                  30
Lys Cys Asn Lys Trp Tyr Val Leu Ser His Cys Leu Leu Asp Glu Ser
        35                  40                  45
Pro Glu Trp Leu Lys Met Met Ile Leu Thr Thr Ser Ser Pro Ser Ser
    50                  55                  60
Thr Pro Val Ile Tyr Thr Pro Thr Pro Ser Ser Ser Ser Ile Val Val
65                  70                  75                  80
Val Pro Thr Ser Lys Pro Val Ile Pro Ser Gly Ala Ser Pro Glu Thr
                85                  90                  95
Thr Ser Val Pro Pro Ala Ala Ser Thr Pro Val Thr Pro Leu Ala Thr
            100                 105                 110
Gly Ala Ala Ser Arg Ala Ala Val Cys Ala Gly Ala Gly Leu Ala Gly
        115                 120                 125
Val Phe Ala Leu Ala Ala Tyr Leu Leu
    130                 135
```

<210> 36026
<211> 165
<212> PRT
<213> A.fumigatus

<400> 36026

```
Ser Arg Tyr Gly Gly Ser Gly Leu Gly Arg Pro Pro Val Ile Asn His
1               5                   10                  15
His Cys Pro Arg Arg Arg Met Leu Gly Gln Glu Leu Leu Lys His Leu
            20                  25                  30
Asp Asp Ala Arg Phe Ala Ser Leu Ala Ser Lys Lys Gln Ser Phe Gln
        35                  40                  45
Val Pro Gln Ser Pro Ala Ala Cys Asn Leu Gln Glu Ile Leu Val Val
    50                  55                  60
Arg Ile Val Phe Ala Asp Cys Pro Asn Gly Arg Arg Cys Arg Gly Glu
65                  70                  75                  80
His Leu Asp Phe Val Leu Leu Asp Asn Ala Pro Glu Ser Ala Cys Val
                85                  90                  95
Gly Cys Pro His Trp Phe Ser Phe Glu Gln Asp Arg Arg Gly Thr His
            100                 105                 110
Gln Gln Arg Cys Ile Gln Asn Ile Arg Val Thr Asp His Pro Ala Asp
        115                 120                 125
Ile Arg Gly Ala Glu His His Ile Pro Trp Pro Val Asp Val Lys Gln
    130                 135                 140
Ile Leu Asp Gly Gln Met Glu Ser Asp Cys Val Ala Pro Cys Phe Ser
145                 150                 155                 160
```

Glu Asp Ser Phe Arg
165

<210> 36027
<211> 437
<212> PRT
<213> A.fumigatus

<400> 36027
Phe Asn Asp Ala Asp Val Trp Val Gly Thr Thr Gly Leu Pro Lys Gly
1 5 10 15
Val Phe Arg Glu Ala Gly Gly His Ala Val Gly Leu His Leu Ser Ile
20 25 30
Lys Tyr Leu Phe Asp Ile His Gly Pro Gly Asp Val Met Phe Cys Ala
35 40 45
Ser Asp Ile Gly Trp Val Val Gly His Ser Tyr Ile Leu Tyr Ala Pro
50 55 60
Leu Leu Val Gly Ala Thr Thr Val Leu Phe Glu Gly Lys Pro Val Gly
65 70 75 80
Thr Pro Asp Ala Gly Thr Phe Trp Arg Ile Val Glu Glu His Lys Val
85 90 95
Lys Val Leu Ser Thr Ala Pro Thr Ala Ile Arg Ala Ile Arg Lys Asp
100 105 110
Asp Pro Asp Asn Lys Tyr Phe Leu Gln Val Ala Arg Arg Gly Gly Leu
115 120 125
Arg His Leu Lys Ala Leu Phe Leu Ala Gly Glu Arg Ser Glu Pro Ser
130 135 140
Ile Val Gln Met Phe Gln Glu Leu Leu Thr Gln His Ala Ala Pro Gly
145 150 155 160
Ala Met Val Ile Asp Asn Trp Trp Ser Ser Glu Ser Gly Ser Pro Ile
165 170 175
Ser Gly Leu Ala Leu Asn Ser Ala Ala Gly Leu Val Asp Gln Trp Gln
180 185 190
Pro Asn Gln Asp Ser Lys Pro Leu Ala Val Arg Pro Gly Ser Ala Gly
195 200 205
Leu Pro Met Pro Gly Phe Asp Val Arg Val Val Asp Asp Glu Gly Arg
210 215 220
Glu Val Pro Arg Gly Thr Met Gly Asn Ile Val Met Ala Met Pro Leu
225 230 235 240
Ala Pro Thr Ala Phe Thr Ser Leu Phe Lys Asp Asp Glu Arg Phe Tyr
245 250 255
Arg Gly Tyr Val Lys Arg Phe Asn Gly Arg Trp Val Asp Thr Gly Asp
260 265 270
Ala Gly Met Ile Asp Glu Asp Gly Tyr Ile His Ile Met Ser Arg Ser
275 280 285
Asp Asp Ile Ile Asn Val Ala Ala His Arg Phe Ser Thr Gly Ala Ile
290 295 300
Glu Gln Ala Ile Leu Ser His Pro Asp Ile Gly Glu Ala Ser Val Val
305 310 315 320
Gly Met Pro Asp Pro Leu Lys Gly His Leu Pro Phe Ala Phe Ile Gln
325 330 335
Pro Arg Gly Ser Gly Pro Leu Pro Ala Arg Pro Ser Ala Glu Leu Phe
340 345 350
His Ala Val Asn Gln Leu Val Arg Glu Gln Ile Gly Ala Ile Ala Ser
355 360 365
Leu Gly Gly Ile Ile Gln Gly Arg Gly Met Ile Pro Lys Thr Arg Ser

```
    370                 375                 380
Gly Lys Thr Leu Arg Arg Val Leu Arg Glu Leu Val Glu Asn Gly Val
385                 390                 395                 400
Arg Gly Glu Phe Asp Ala Pro Val Asn Val Pro Pro Thr Val Glu Asp
                405                 410                 415
Ala Glu Val Val Glu Val Ala Arg Glu Arg Val Arg Glu Tyr Phe Ala
            420                 425                 430
Ala Lys Ala Arg Leu
        435
```

<210> 36028
<211> 149
<212> PRT
<213> A.fumigatus

<400> 36028

```
Met Pro Leu Ser Ser Arg Ala Gln Gly Ser Thr Asn Ser Tyr Leu Gln
1               5                   10                  15
Gln Val Ser Ser Gln Gly Lys Asn Thr Gly Gln Thr Arg Ala Arg Thr
            20                  25                  30
Asp Gly Ser Ala Arg Gly Gly Thr Gly Arg Gln Gly Ser Asp Gly Gly
        35                  40                  45
Ala Gly Gly Gly Gly Asp Ala Gly Gly Leu Gly Ala Cys Thr Gly Gly
    50                  55                  60
Asp Asp Arg Leu Gly Ser Arg Asp Asp Asp Asp Gly Ala Ala Gly Gly
65                  70                  75                  80
Gly Gly Gly Val Asn Asp Gly Gly Gly Arg Gly Ala Thr Gly Cys Gln
                85                  90                  95
Tyr His His Leu Gln Pro Phe Trp Arg Leu Ile Glu Lys Thr Val Arg
            100                 105                 110
Gln Asp Ile Pro Leu Val Ala Leu Gly Asp Gly Arg Gly Asp Gln Gly
        115                 120                 125
Pro Gly Asp Gly Val Gly His Ala Val Gly Asp Gly Asp Gly Gly Ser
    130                 135                 140
Leu Gln Arg Arg Asp
145
```

<210> 36029
<211> 299
<212> PRT
<213> A.fumigatus

<400> 36029

```
Val Ala Glu Leu Arg Asp Gly Ile Arg His Pro His Pro Leu Glu Ala
1               5                   10                  15
Thr Pro Gly Thr Glu Pro Asn Pro Arg Ala Val Arg Pro Asn Ser Val
            20                  25                  30
His His Arg Ala Gly His Leu Glu Arg Glu Ala Arg Pro Leu Leu Asp
        35                  40                  45
Thr Pro Ala Pro Arg Ile Arg Ala Leu Val Arg Arg Ile Leu Gly Glu
    50                  55                  60
Leu Ile Asn Lys Val Pro Val Arg Ala Met Asp Leu Asn Thr Ile Glu
65                  70                  75                  80
Ala Arg Gly Asp Gly Ile Ala Arg Ser Leu Arg Val Val Ala Asn Gln
                85                  90                  95
Gly Val Asp Leu Leu Leu Gly Glu Ser Ala Arg Arg Arg Arg Leu Leu
```

```
            100                 105                 110
Val Arg Gly Asp Val Ala Ala Arg His Glu Val Glu Ala Ala Phe Ser
        115                 120                 125
Leu Glu Asp Phe Gly Val Gly Asp Pro Ala Gln Thr Pro Gln Leu His
    130                 135                 140
Val Asp Val Gly Pro Leu Arg Val His Gly Val Ser His Leu Ala Pro
145                 150                 155                 160
Leu Ser Asp Leu Arg Leu Ala Pro Asp Pro Arg His Val Gly Val Ala
                165                 170                 175
Ala Cys Ala Arg Arg Asp Glu Arg Arg Phe Gly Asp Glu Lys Gly Ala
            180                 185                 190
Gly Asp Asp Gly Ala Leu Phe Val Val Leu Leu Asp Tyr Gly Glu Gly
        195                 200                 205
Asp Val Val Val Val His Thr Glu Ser Gly His Gly Gly His Gly Gln
    210                 215                 220
Ala Val Ala Glu Pro His Ala Pro Asp Leu Asp Gly Gly Glu Glu Phe
225                 230                 235                 240
Arg His Gly Gly Ser Leu His Leu Asp Leu Gly Ile Thr Pro Arg Arg
                245                 250                 255
Asp Asp Ser Ala Thr Tyr Thr Leu Tyr Gly Thr Asp Trp Gly Glu Ala
            260                 265                 270
Val Arg Gly Gly Arg Pro Leu Ala Phe Tyr Pro Thr Ser Ser Gly Glu
        275                 280                 285
His Cys Ala Leu Lys Thr Thr Leu Gln Arg Leu
    290                 295
```

<210> 36030
<211> 287
<212> PRT
<213> A.fumigatus

<400> 36030

```
Ile Gln Met Gln Arg Thr Thr Met Ser Lys Leu Phe Ser Pro Ile Gln
1               5                   10                  15
Val Gly Arg Met Arg Leu Gly His Arg Leu Ala Met Ala Pro Met Thr
            20                  25                  30
Arg Phe Arg Val Asp Asp Asp His Val Pro Leu Pro Ile Val Lys Glu
        35                  40                  45
His Tyr Glu Gln Arg Ala Val Val Pro Gly Thr Leu Leu Ile Thr Glu
    50                  55                  60
Ala Thr Leu Val Ser Pro Arg Ala Gly Gly Tyr Ala Asn Val Pro Gly
65                  70                  75                  80
Ile Trp Ser Glu Ala Gln Ile Ala Gln Trp Arg Gln Val Thr Asp Ala
                85                  90                  95
Val His Ala Lys Gly Ser Tyr Ile Tyr Met Gln Leu Trp Gly Leu Gly
            100                 105                 110
Arg Val Ala Asn Pro Glu Val Leu Lys Arg Glu Gly Gly Phe Asp Leu
        115                 120                 125
Val Ser Ser Ser Asp Val Pro Thr Asn Glu Lys Ala Pro Ala Pro Arg
    130                 135                 140
Ala Leu Thr Glu Glu Glu Ile His Ala Leu Ile Gly Asp Tyr Ala Gln
145                 150                 155                 160
Ala Ala Arg Asn Ala Ile Ala Ala Gly Phe Asp Gly Val Glu Ile His
                165                 170                 175
Gly Ala Asn Gly Tyr Leu Ile Asp Gln Phe Thr Gln Asp Thr Ala Asn
            180                 185                 190
```

```
Lys Arg Thr Asp Ala Trp Gly Gly Ser Val Glu Lys Arg Ala Arg Phe
        195                 200                 205
Ala Leu Glu Val Thr Arg Ala Val Val Asp Ala Val Gly Ala Asp Arg
    210                 215                 220
Thr Gly Ile Arg Phe Ser Pro Trp Ser Ser Phe Gln Gly Met Arg Met
225                 230                 235                 240
Ala Asp Pro Val Pro Gln Phe Ser Tyr Leu Ala Arg Lys Thr Ala Glu
                245                 250                 255
Met Lys Leu Ala Tyr Val His Val Val Glu Ser Arg Ile Ser Gly Asn
            260                 265                 270
Ala Asp Thr Glu Ser Thr Phe Ser Pro Arg Arg Arg Arg Ser Thr
        275                 280                 285

<210> 36031
<211> 585
<212> PRT
<213> A.fumigatus

<400> 36031
Ala Ser Lys His His Tyr Trp Lys Pro Asp Gln Arg Trp Val Arg Thr
1               5                   10                  15
Arg Arg Phe Met Gly Pro Ala Glu Glu Thr Thr Val Lys Arg Ser Gly
            20                  25                  30
Leu Gln Leu Gln Asn Gly Ser Lys Ser Arg Pro Gln Asp Thr Ile Asn
        35                  40                  45
Ser Glu Arg Ser Arg His Glu Ser Glu Ser His Asp Arg Phe Pro Pro
    50                  55                  60
Glu Ala Ser Leu Met Pro Gln Glu Ala Val Ala Glu Gln Ala Val Glu
65                  70                  75                  80
Glu Gln Val Thr Pro Glu Gln Ala Lys Ala Asp Glu Gly Thr Gln Gln
                85                  90                  95
Pro Thr Arg Thr Pro Glu Val Pro Ser Glu Gln His Ile Ala Ser Glu
            100                 105                 110
Met Lys Glu Leu Gln Pro Gln Arg Gln Lys Arg Ala Arg Gly Arg Pro
        115                 120                 125
Pro Ala Ser Ser Arg Lys Gln Ser Ala Ile Gly Glu Pro Ser Glu Arg
    130                 135                 140
Asn Gly Gly Asp Glu Leu Glu Lys Thr Ala Ala Pro Asp Asp Pro Ser
145                 150                 155                 160
Lys Arg Leu Arg Gly Arg Ser Thr Arg Asn Ala Arg Gly Thr Pro Asn
                165                 170                 175
Ala Pro Asp Thr Glu Asn Ala Val Pro Asn Ser Ser Leu Gly Arg Gly
            180                 185                 190
Gln Asp Thr Ala Gln Pro Asp Met Asp Gly Gly Asp Thr Ala Ala Arg
        195                 200                 205
Ala Gln Asp Val Glu Gln Ser Val Ser Val Lys Gln Asn Glu Lys Lys
    210                 215                 220
Lys Gly Arg Arg Ala Gly Arg Val Gly Met Ala Arg His Val Glu Ala
225                 230                 235                 240
Glu Gln Asp Lys Ser Asp Glu Ser Asn Glu Arg Ile Pro Gln Glu Glu
                245                 250                 255
Gln Leu Gln Pro Gly Arg Glu Gln Glu His Lys Pro Glu Leu Gln Pro
            260                 265                 270
Glu Ala Glu Pro Ala Pro Glu Val Ala Ser Arg Ala Glu Ser Pro Thr
        275                 280                 285
Thr Gln Glu Ala Ser Pro Arg Pro Lys Lys Arg Arg Gly Arg Pro Ser
```

```
    290                 295                 300
Leu Ala Ser Arg Arg Asp Asp Asn Thr Ala Thr Gln Pro Glu Glu Arg
305                 310                 315                 320
Gln Ala Thr Gln Gln Glu Val Asp Ala Glu Asp Ser Lys Pro Thr Arg
                325                 330                 335
Lys Arg Thr Arg Gln Pro Arg Ser Glu Thr Val Pro Val Thr Val His
            340                 345                 350
Arg Leu Val Asn Val Ala Ser Leu Ala Pro Gly Pro Ser Gly Pro Asp
        355                 360                 365
Ser Pro Val Glu Asp Gly Asp Ser Ala Asp Glu Leu Ala Ala Arg Gly
    370                 375                 380
Lys Thr Lys Leu Pro Arg Arg Gly Gly Val Asn Pro Ala Asp Val Leu
385                 390                 395                 400
Ser Gln Ile Cys Arg Glu Thr Leu Glu Lys Thr Leu Thr Thr Leu Lys
                405                 410                 415
Asn Gly Ile Ala Asn Glu Thr Asn Pro Ala Arg Arg Ala Glu Trp Thr
            420                 425                 430
Arg Lys Lys Lys Ala Val Glu Ala Tyr Glu Thr Glu Leu Glu Gly Arg
        435                 440                 445
Leu Phe Glu Leu Ser Glu Met Leu Asp Ser Asn Phe Val Leu Gly Val
    450                 455                 460
Gln Leu Lys Lys Ala Lys Arg Glu Met Met Asp Leu Arg Gly Arg Leu
465                 470                 475                 480
Tyr Gln Ile Arg Lys Glu Arg Glu Ala Val Ala Leu Arg Met Asp Ala
                485                 490                 495
Val Arg Ser Lys His Ala Glu Glu Glu Ser Ala Arg Met Val Ser Phe
            500                 505                 510
Gly Leu Val Pro Lys Ser Ile Ser Thr Phe Ser Met Cys Val Trp Leu
        515                 520                 525
Val Ala Asp Val Ser Arg Pro Ala Phe Leu Ser Thr Ile Pro Cys Ile
    530                 535                 540
Ala Ser Ser Leu Leu Leu Asn Glu Val Arg Ile Ala His Pro Pro Met
545                 550                 555                 560
Leu Thr Thr Gln Asn Arg Gln Met Leu His Pro Gln Leu Ala Trp Ser
                565                 570                 575
Leu Cys Ser Val Ala Leu Gln Lys Gln
            580                 585
```

<210> 36032
<211> 523
<212> PRT
<213> A.fumigatus

<400> 36032

```
Leu Glu Leu Lys Ala Ser Asn Ala Ser Thr Cys Met Ser Cys Ser Thr
1               5                   10                  15
Leu Ile Val Tyr Phe Ile Cys Trp Trp Gln Ser Arg Pro Glu Ala Glu
            20                  25                  30
Ser Ile Ile Leu Thr Tyr Pro Ala Ile Pro Leu His Ala Pro Leu Asn
        35                  40                  45
Val Ile Ser Pro Ser Ser Ser Tyr Tyr Trp Asp Glu Met Thr Ser Glu
    50                  55                  60
Ser Val Gln Pro Gly Leu Thr Pro Leu Ser His Leu Lys Ala Val Pro
65                  70                  75                  80
Thr Thr Ser Ser Ser Lys Pro Leu Ala Phe Lys Asp Ser Ser Val Leu
                85                  90                  95
```

```
Gln Ala Thr Pro Gln Leu Arg His Arg Ser Arg Leu Ser Lys Asn Val
            100                 105                 110
Asn Arg Asp Glu Pro Val Ser Ala Thr Ser Asp Lys Ala Thr Val Ala
        115                 120                 125
Leu Ile Arg Arg Val Leu Cys Ser Gln Ala Gly Asn Gln Ser Gly Gly
    130                 135                 140
Ala Ser Thr Pro Gln Pro Leu Glu Glu Leu Leu Pro Pro Leu Thr Ser
145                 150                 155                 160
Ser Asn Glu Val Asp Leu Gln Leu Tyr Ala Leu Ile Ala Ile Ile Ile
                165                 170                 175
Lys Glu Phe Val Leu Ser Trp Tyr Ser Lys Ile Thr Ser Asp Gln Asn
            180                 185                 190
Leu Val Lys Glu Val Ile Gln Val Ile Ala His Cys Thr Arg Ala Leu
        195                 200                 205
Glu Gln Arg Leu Arg Glu Thr Asp Ile Ala Gln Leu Ile Phe Asp Glu
    210                 215                 220
Ile Pro Gly Leu Ile Glu Ala His Ile Ile Cys Glu Ile Ser Pro Tyr
225                 230                 235                 240
Ser Ser Trp Leu Val Phe Tyr Thr His Ala Arg Asn Leu Ala Tyr Arg
                245                 250                 255
Leu Ala Arg Asp Glu Ser Thr Leu Ser Gly Leu Ser Pro Ser Val Arg
            260                 265                 270
Glu Thr Tyr His Ala Leu His Pro His Pro Ser Leu Ser Pro Ile Pro
        275                 280                 285
Asp Ser Ser Asp Met Arg Thr Ile Glu Lys Gln Arg Glu Asn Glu Ala
    290                 295                 300
Ile Tyr Arg Gln Leu Leu Ala His Gly Met Leu Ala Ile Leu Leu Pro
305                 310                 315                 320
Thr Glu Asp Leu Glu Asn Val Pro Leu Arg Thr Ile Ile Gly Asp Ile
                325                 330                 335
Leu Ala Asp Leu Ile Leu Gly Asn Ala Val Ser Glu Lys Met Cys Gln
            340                 345                 350
Gly Trp Phe Leu Trp Glu Thr Thr Thr Lys Leu Leu Ser Thr Ala Glu
        355                 360                 365
Arg Leu Asp Glu His Glu Glu Asp Thr Ala Asp Ser His Gln Gln Asp
    370                 375                 380
Arg Leu His Lys Phe Gly Leu Leu Thr Val Asn Asp Asp Pro Lys Ser
385                 390                 395                 400
Asp Gln Ser Ser Ser Gln Thr Gln Ser Phe Gly Gln Ala Trp Leu Trp
                405                 410                 415
Asn Ile Leu Gln Tyr Leu Tyr Leu Thr Tyr Ile Val Leu Gln Phe Ile
            420                 425                 430
Val Thr Gly Leu Phe Arg Val Met Thr Asn Ala Lys Ala Asn Val Ser
        435                 440                 445
Ser Ala Ala Ile Thr Pro Glu Ile Ser Glu Thr Glu Lys Ser Ala Pro
    450                 455                 460
Met Gly Gly Thr Ser Thr Lys Arg Pro Ile Leu Asn Tyr Arg Ile Tyr
465                 470                 475                 480
Ser Met Val Leu Gln Met Leu Asp Ile Pro Arg Arg Met Pro Trp Leu
                485                 490                 495
Ala Gly Phe Leu Ser Leu Phe Gln Tyr Leu Thr Leu Ala Gly Pro Gly
            500                 505                 510
Lys Leu Gly Glu Thr Gly Ser Val Leu Asp Arg
        515                 520
```

<210> 36033

<211> 216
<212> PRT
<213> A.fumigatus

<400> 36033
Glu Asn Trp Lys Tyr Asn Thr Leu Gly Arg Val Gln Tyr Leu Cys Ala
1 5 10 15
Tyr Ile Asn Ile Ala Ser Asp Phe Pro Ile Ala Ser Asn Leu Ile Phe
20 25 30
Gly Gln Gln Cys Asp Pro Glu Ala Ser Lys Ser Ile Phe Asn Asn Pro
35 40 45
Thr Leu Ala Pro Lys Thr Thr Met Ile Gly Leu Asp Leu Thr His Gln
50 55 60
Val Leu Ala Ser Arg Ser Val Gln Asn Arg Ile Leu His Gly Ser Ser
65 70 75 80
Asp Ser Thr Lys Thr Pro Ser Val Leu Arg Arg Met Met His Ala Leu
85 90 95
Leu Val Phe Phe Ala Gln Thr Tyr Asp Ser Val Phe Gly Leu Ser Ser
100 105 110
Gly Pro Pro Leu His Asp Pro Leu Ala Val Ala Val Ala Ile Ser Asn
115 120 125
Leu Asn Pro Thr Phe Ala Lys Lys His Pro Asp Gln Ala Leu Lys Phe
130 135 140
Asn Asp Lys Asn Gly Glu Arg Phe Ala Val Asp Val Val Thr Asp Gly
145 150 155 160
Ile His Ser Thr Asn Ala Ser Glu Thr Gly Gln Leu Gly Arg Thr Leu
165 170 175
Ala Thr Pro Met Gly Gly His Gly Val Ala Ile Pro Arg Gly Val Asp
180 185 190
Leu Glu Ala Phe Trp Asn Leu Ile Leu Asp Cys Leu Thr Arg Ala Asp
195 200 205
Glu Cys Asn Ala Thr Arg Lys Ser
210 215

<210> 36034
<211> 169
<212> PRT
<213> A.fumigatus

<400> 36034
Pro Leu Pro Leu His Asn Ser Ala Ser Arg Asn Glu Thr Leu Arg Ala
1 5 10 15
Asn Val Val Ile Asn Thr Gly Asp Ser Gly Leu Asp Gly Thr Asp Leu
20 25 30
Leu Pro Lys Ala Pro Arg Leu Pro Val Ile Asp Lys Asn Pro Ile Val
35 40 45
Ala Met Arg Asp Ala Leu Met Ala Gln Pro Lys Gly Thr Ala Trp Val
50 55 60
Ile Ala Thr Gly Ala Leu Thr Asn Val Gly Leu Leu Phe Ala Thr Phe
65 70 75 80
Pro Glu Val Ala Ala His Ile Gln Gly Leu Ser Ile Met Gly Gly Ala
85 90 95
Ile Gly Gly Gly Phe Thr Asp Ala Pro Met Ser Arg Leu Pro Gly Glu
100 105 110
His Glu Arg Ile Gly Asn Thr Thr Pro Trp Ala Glu Phe Asn Ile Tyr
115 120 125

```
Val Arg Ile Ser Thr Ser Arg Arg Ile Ser Arg Ser Leu Leu Thr Ser
    130                 135                 140
Ser Ser Val Asn Ser Val Ile Leu Arg Leu Pro Asn Leu Phe Ser Thr
145                 150                 155                 160
Ile Leu Pro Trp His Arg Arg Gln Gln
                165
```

<210> 36035
<211> 118
<212> PRT
<213> A.fumigatus

<400> 36035

```
Ser Ala Val Ser Arg Thr Arg Cys Lys Tyr Trp Thr Leu Lys His Asn
1               5                   10                  15
Leu Thr Ile Gly Phe Met Arg Ile Leu Ala Lys Thr Lys Met Ser Gln
            20                  25                  30
Asp Ala Phe Ala Ile Leu Leu Ala Ala His His Pro Ser Leu His Leu
        35                  40                  45
Leu Gly Ile Thr Thr Val His Gly Asn Ser Ser Leu Glu Asn Thr Thr
    50                  55                  60
Thr Asn Ala Leu Arg Val Leu Glu Ala Ile Gly Arg Pro Asp Val Pro
65                  70                  75                  80
Val Tyr Ala Gly Ser Arg Lys Pro Phe Cys Arg Pro Ala Val His Ala
                85                  90                  95
Pro Asp Ile His Gly Thr Ile His Asp Pro Ser Pro Cys Ile Ile Leu
            100                 105                 110
Pro Ala Glu Met Arg Arg
        115
```

<210> 36036
<211> 907
<212> PRT
<213> A.fumigatus

<400> 36036

```
Phe Gln Gly Leu Gly Pro Arg Leu Phe Arg Val Met Leu Glu Arg Ala
1               5                   10                  15
Ala Gly Cys Leu Glu Asn Ala Gly Arg Arg Phe Phe Arg Asp Ser Lys
            20                  25                  30
Gly Ala Leu Arg Ser Arg Arg Ser Trp Tyr Pro His Phe Ala Gln Ser
        35                  40                  45
Asn Gly Thr Ser Ala Asp Thr Val His Leu Ser His Ser Ala Ser Thr
    50                  55                  60
Thr Ser Asp Arg Gln Asp Ser Leu Ile Ser Val Ser Trp Arg Ala Arg
65                  70                  75                  80
Ser Ala Thr Ala Asp Thr Trp Thr Pro Val Leu Asp Phe Leu Tyr Pro
                85                  90                  95
Pro Arg Thr Gln Glu Phe Ala Ala Ser Leu Leu Leu Arg Pro Ser Arg
            100                 105                 110
Arg Leu Ala Val Arg Arg Lys Lys Lys Pro Ile Pro Ala Leu Thr Arg
        115                 120                 125
Ala Tyr Thr Ser Val Ala Ala Ser Leu Tyr Lys Pro Val Ile Pro Asp
    130                 135                 140
Lys Pro Val Val Asp Leu Asp Ala Lys Lys Ala Asp Gln Leu Glu Arg
145                 150                 155                 160
```

```
Phe Arg Ala Lys Glu Glu Leu Arg Ser Ile Leu Asn Gln Ser Lys Pro
                165                 170                 175
Gly Val Tyr Gly Asp Tyr Asp Arg Ala Trp Glu Leu Tyr Glu Thr Ala
            180                 185                 190
Arg Arg Pro Lys Asp Val Thr Pro Ala Phe Leu Ala His Leu Ser Arg
        195                 200                 205
Ser Thr Leu Leu Arg Asn Asn Leu Arg Ala Gln Trp Val Phe Arg Arg
    210                 215                 220
Ile Tyr Pro Arg Asp Arg Ser Pro Glu Asp Tyr Leu His Leu Ala Lys
225                 230                 235                 240
Ser Tyr Leu Ala Val Gly Lys Pro Asp Glu Ile Ile Arg Ile Cys Lys
                245                 250                 255
Asp Ala Lys Gly Gly Gly Gly Asp Val Leu Cys Trp Ala Phe Ala Phe
            260                 265                 270
Ser His Phe Val Asn Lys Ala Asp Trp Asp Ser Ala Glu Lys Phe Trp
        275                 280                 285
Asn Ala Arg Pro Pro Ser Ser Glu Lys Val Leu Leu Asn Ala Val Ala
    290                 295                 300
Ser Glu Leu Asn Asp Ser Asn Leu Pro Thr Lys Leu Phe Asp Leu Ala
305                 310                 315                 320
Glu Val Leu Arg Ser Gln Glu Thr Ser Met Ser Trp Ser Gly Leu Val
                325                 330                 335
His Phe Leu Leu Asp Tyr Ala Phe Ser Asn Ser Arg Ile Ala Ala Asp
            340                 345                 350
Val Ser Thr Glu Asn Ile Leu Leu Leu Leu Lys Glu Tyr Asn Leu Leu
        355                 360                 365
Gly Phe Leu Thr Ala Gln His Tyr Phe Arg Leu Ile Arg Ala Leu Gln
    370                 375                 380
Ser Ser Asp Val Arg Ser Thr Phe Thr Lys Ser Ile Val Val Tyr Arg
385                 390                 395                 400
Asn Leu Arg Trp Gln Met Glu Gln Glu Val Pro Pro Ala Asp Leu Leu
                405                 410                 415
Gly Ala Phe Leu Arg Cys Leu Ala Arg Phe Glu Ile Thr Thr Gly Ile
            420                 425                 430
His Tyr Phe Leu Gly Glu Tyr Ala Arg Phe His Gly Gln Pro Ser Ile
        435                 440                 445
Asp Ala Tyr Lys Asn Ala Leu Ile Ala Phe Ser Arg Ala Gly Asp Val
    450                 455                 460
Glu Asn Thr Asn Thr Val Phe Glu Gln Leu Val Lys His His Gly Lys
465                 470                 475                 480
Pro Ser Ser Arg Arg Leu Leu Thr Pro Leu Leu Tyr Val His Ala Arg
                485                 490                 495
Leu Gly Asp Val Thr Ala Thr Arg Arg Gln Phe Glu Arg Val Ser Lys
            500                 505                 510
Glu Phe Gly Leu Thr Gln Asn Thr Val Cys Trp Asn Ile Leu Leu Thr
        515                 520                 525
Ala Tyr Ala Asn Ala Asp Asp Phe Gly Gly Ala Phe Ala Thr Phe Asp
    530                 535                 540
Lys Met Leu Glu Glu Gly Val Gln Pro Asn Ser His Thr Phe Gly Ala
545                 550                 555                 560
Leu Met Gly Leu Cys Ala Asn Arg Gly Asp Ile Asp Thr Val Arg Gln
                565                 570                 575
Leu Leu Glu Leu Ala Lys Arg Ser Pro Val Arg Ile Thr Thr Pro Leu
            580                 585                 590
Leu Asp Thr Ile Val Glu Ala Tyr Cys Asn Asn Arg Glu Leu Glu Lys
        595                 600                 605
```

```
Ala Glu Ser Val Ala Glu Thr Cys Leu Gly Leu Asp Val Lys Gly Ser
    610                 615                 620
Arg Val Arg Met Trp Asn Val Leu Leu Trp Asn Tyr Ala Phe Arg Met
625                 630                 635                 640
Asp Leu Glu Ser Ile Ser Arg Ile Arg Ser Arg Met Asp Ser Ala Gly
                645                 650                 655
Val Gln Pro Asp Ala Met Thr Tyr Ala Ala Leu Met Leu Ser Leu Val
            660                 665                 670
Leu Arg Gly Gln Thr Asp Pro Ala Arg Arg Ile Leu Arg Thr Leu His
        675                 680                 685
Arg Ser Asn His Met Tyr Ala Thr Glu Phe His Tyr Ala Ile Ile Leu
    690                 695                 700
Tyr Gly Tyr Val Lys Asp Arg Asn Arg Asp Met Val His Ile Ile Phe
705                 710                 715                 720
Arg Glu Ile Lys Glu Arg Phe Lys Arg Pro Gly Phe Thr Ser Arg Leu
                725                 730                 735
Leu Val Leu Arg Asn Gln Leu Gln Arg Asp Leu Glu Leu Ile Lys Thr
            740                 745                 750
Gly Gly Arg Ala Gly Ser Gly Ala Asn Val Arg Leu Glu Asn Ala Glu
        755                 760                 765
Arg Phe Leu Ala Glu Thr Ile Ala Asp Phe Asp Lys Ala Asn Met Ala
    770                 775                 780
Ser Lys Glu Pro Leu Pro Gly Ala Gly Arg Leu Pro Ile Thr Gln Ala
785                 790                 795                 800
Phe Pro Ala Met Tyr Tyr Glu Tyr Leu Ile Thr Ala Tyr Gly Thr Arg
                805                 810                 815
Gly Val Phe His Arg Val Lys Glu Leu Phe Asp Gln Phe Leu Arg Asp
            820                 825                 830
Arg Lys Ser Ser Thr Ser Glu Arg Pro Ala Tyr Asp Val Ala Pro Leu
        835                 840                 845
Arg Leu Val Ser Ala Leu Met Leu Thr Tyr Leu Lys Ser Glu Gln Tyr
    850                 855                 860
Lys Lys Val Glu Glu Cys Trp Gln Ile Thr Phe Pro Arg Val Val Lys
865                 870                 875                 880
Met Ala Tyr Ser Ser Pro Trp Glu Pro Leu Trp Gly Gly Lys Phe Gly
                885                 890                 895
Lys Lys Ile Leu Gly Gly Gly Pro Phe Leu Gly
            900                 905
```

<210> 36037
<211> 109
<212> PRT
<213> A.fumigatus

<400> 36037

```
Arg Cys Pro Pro Thr His Pro His Ser Arg Leu Ser Ile Leu Ile Pro
1               5                   10                  15
Ser Asp His Gly Phe Arg Pro Pro Leu Tyr Phe Cys Gly Gly Leu Leu
            20                  25                  30
Ser Val Asn Met Glu Ile Thr Asp Phe Val Phe Arg Glu Arg Glu Asp
        35                  40                  45
Val Leu Leu Ala Gly Asp Tyr Asn Ala Tyr Arg Ala His Thr Thr Arg
    50                  55                  60
Arg Leu His Lys Leu Arg Lys Lys Leu Gly Gln Thr Thr Pro Lys Gly
65                  70                  75                  80
Arg Lys Tyr Thr Ala Lys Pro Pro Val Ser Ala Glu Asp Ile Ser Asn
```

```
                85                  90                  95
Asn Val Ala Tyr Val Ser Pro Asp Met Leu Gly Cys Gly
            100                 105

<210> 36038
<211> 203
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (24)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36038
Glu Tyr His Leu Glu Val Ala Tyr Cys Cys Ser Gly Arg Cys Thr Ile
1               5                  10                  15
Ser Gln Ala Leu Ala Ser Ala Xaa Ala Ala Glu Ser Arg Leu Lys Ser
            20                  25                  30
Gly Leu Ala Asp Val Glu Arg Glu Ser Val Ser Ser Lys Asp Lys Ala
        35                  40                  45
Ala Ala Tyr Asp Ser Val Ile Ile Ala Ser Gln Asp Ala Val Asp Ala
    50                  55                  60
Thr Lys Thr Ala Ile Asp Asp Leu Ala Asn Glu Gly Val Glu Pro Ser
65                  70                  75                  80
Asp Lys Arg Met Gln Ser Leu Gln Ile Thr Arg Thr Ala Val Asn Tyr
                85                  90                  95
Ala Leu Val Gly Trp Arg Ile Gly Arg Asn Arg Val Leu Cys Gly Thr
            100                 105                 110
Asn Asp Gly Met Ile Phe Glu Thr Asp Lys Ala Glu Cys Leu Lys Arg
        115                 120                 125
Gly Lys Gly Ala Ser Arg Glu Glu Ser Thr Gly Lys Lys Leu Thr Arg
    130                 135                 140
Leu Arg Glu Lys Val Val Leu Tyr Asp Ser Ile Leu Gln Ser Ile Glu
145                 150                 155                 160
Phe Ile Leu Glu Leu Pro Gly Val Ala Ala Asp Thr Thr Phe Val Gln
                165                 170                 175
Glu Leu Glu Ala Lys Arg Cys Tyr Phe Arg Ala Leu Arg Tyr Glu Tyr
            180                 185                 190
Pro Val Leu Leu Ala Ile Thr Ile Gln Ala Asn
        195                 200

<210> 36039
<211> 485
<212> PRT
<213> A.fumigatus

<400> 36039
Asn Trp Thr Tyr Lys Asn Asn Thr Ala Ser Thr Phe Thr Ala Met Pro
1               5                  10                  15
Leu Pro Leu Ser Pro Ser Pro Thr Ile Leu Ile Pro His Leu Pro Ala
            20                  25                  30
Lys Thr Leu Val Gly Ile Asp Leu Val Thr Phe Thr Ser Thr Pro Asn
        35                  40                  45
Phe His Gly Ile Arg Asp Leu Pro Asn Gly Trp His Phe Leu Tyr Thr
    50                  55                  60
```

```
Gly Thr Thr Glu Ser Leu Ser Leu Arg Ser Gly Gly Trp Phe Tyr Val
65                  70                  75                  80
Gly Asp Ile Ser Val Phe Asp Glu Ser His Asn Gly Thr Ile Val Thr
                85                  90                  95
Ala Ser Ser Arg Ser Leu Gly Ser Asp Ile Phe Val Trp Lys Trp Asn
            100                 105                 110
Ser Glu Thr Glu Ser Leu Glu Leu Leu Arg Ala Ser Ser Asp Ala Asp
        115                 120                 125
Arg Gln Glu Ala Met Arg His Lys Ala Asn Leu Gly Ala Val Trp Gln
    130                 135                 140
Arg Gly Gly Leu Phe Arg Tyr Arg Ser Arg Val Ser Ser Ser Arg Thr
145                 150                 155                 160
Ser Gln Ser Gln Ser Gln Ser Gln Glu His Gln Ser Pro Val Gln Glu
                165                 170                 175
Asp Ile Asp Glu Glu Asp Glu Glu Glu Gly Arg Lys Asp Trp Thr Asp
            180                 185                 190
Leu Thr Asn Asn Ile Ser Pro Arg Leu Leu Ser Arg Ile Val Gly Asp
        195                 200                 205
Pro Glu Leu Asp Val Asp Gly Arg Pro Arg Trp Met Val Thr Ser Gly
    210                 215                 220
Ser Thr Ala Glu Arg Asp Ser Asp Lys Ile Pro Gly Leu Pro Asp Ile
225                 230                 235                 240
Asn Ser Glu Asn Leu Ala Lys Val Thr Gly Glu Gln Glu Thr Ala Phe
                245                 250                 255
Ser Phe Leu Pro Val Asp Leu Lys Arg Thr Trp Arg Glu Gly Ala Ile
            260                 265                 270
Gly Arg Glu Arg Thr Glu Ala Ala Gln Asp Arg Ser Trp Ala Leu Gly
        275                 280                 285
Asp Leu Ile Gln Arg His Ser Ser Gly Gly Asp Arg Gly Glu Gln Thr
    290                 295                 300
Gly Glu Ala Gln Ile Leu Gly Glu Leu Gln Phe Thr Phe Leu Met Val
305                 310                 315                 320
Met Thr Leu Met Asn Tyr Ser Cys Leu Gln Gln Trp Lys Arg Leu Leu
                325                 330                 335
Glu Leu Val Leu Thr Cys Gln Asn Ala Ile Lys Asp Arg Glu Pro Phe
            340                 345                 350
Met Val Ser Val Leu Arg Leu Leu Leu Leu Gln Leu Lys Arg Cys Asp
        355                 360                 365
Asp Val Glu Gly Gly Leu Phe Asp Ile Asp Gly Val Asp Gly Gly Glu
    370                 375                 380
Phe Leu Arg Lys Leu Leu Met Lys Phe Arg Arg Thr Leu Tyr Glu Val
385                 390                 395                 400
Val Asp Asn Pro Gly Pro Thr Leu Lys Ala Glu Phe Asp Lys Leu Ala
                405                 410                 415
Thr Trp Val Lys Asp Glu Tyr Asp Trp Glu Leu Asp Arg Glu Ala Phe
            420                 425                 430
Val Arg Arg Gly Ile Ile Gln Leu Glu Asp Gly Glu Glu Val Glu Leu
        435                 440                 445
Glu Met Glu Asp Asp Gly Asp Asp Glu Thr Gly Glu Tyr Ala Pro Leu
    450                 455                 460
Val Val Asp Leu Gly Glu Gly Asn Thr Thr Gln Asp Pro Asp Met Ala
465                 470                 475                 480
Asn Val Asp Thr Pro
                485
```

<210> 36040

<211> 93
<212> PRT
<213> A.fumigatus

<400> 36040
Gly Ser Phe Phe Asp Leu Arg Ser Phe Arg Pro Cys Ala Ile Asp Thr
1 5 10 15
Leu Glu Glu Arg Cys Ala Leu Arg Ser Pro Leu Arg Gln Gly Thr Asn
20 25 30
Met Val Leu Phe Asn Ser Gly Arg Glu Thr Ile Cys Arg Val Thr Gly
35 40 45
Gly Met Lys Val Asn Ala Asp Arg Asn Glu Ser Ser Pro Tyr Ala Ala
50 55 60
Met Leu Ala Ala Gln Asp Val Ala Ala Arg Cys Lys Glu Leu Gly Ile
65 70 75 80
Asn Ala Leu His Ile Lys Ile Arg Ala Thr Gly Gly Met
85 90

<210> 36041
<211> 67
<212> PRT
<213> A.fumigatus

<400> 36041
Cys Pro Ser Ser His Asp Ser Val Leu Leu Leu Leu Lys Thr Asn Tyr
1 5 10 15
Phe Thr Asp Pro Pro Gly Tyr Gly Thr Asp Thr Met Val His Leu Met
20 25 30
Ile Asp Tyr Leu Ser Leu Thr Asp Asn Ser Met Leu Ile Met Ala Asn
35 40 45
Val Gly Val Phe Met Val Tyr Ile Arg Tyr Pro Ser Thr Ile Asp His
50 55 60
Leu Pro His
65

<210> 36042
<211> 64
<212> PRT
<213> A.fumigatus

<400> 36042
Leu Thr Pro Arg Leu Ser Lys Gly Gln Gly Gln Gly Ile Pro Asp Thr
1 5 10 15
Phe Pro Ala Asp Tyr Leu Lys Leu Leu Ser Gln Val Arg Ser Cys Asn
20 25 30
Thr Thr Gln Ala Trp Asp Asp Gly Leu Gln Glu Ala His Tyr Leu Thr
35 40 45
Ala Gly Lys Val Met Pro His Lys Gly Ala Trp Leu Thr Ala Ala His
50 55 60

<210> 36043
<211> 247
<212> PRT
<213> A.fumigatus

<220>

<221> UNSURE
<222> (227)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36043
Val Arg Arg Met Arg Phe Ser Val Thr Ile Leu Leu Thr Phe Arg Glu
1 5 10 15
Gly Leu Asn Lys Asp Val Phe Pro Leu Gly Thr Leu Thr Tyr Pro Ile
20 25 30
Thr Arg Asn Ile Arg Val Glu Leu Ala Val Thr Val Ile Val Ala Ile
35 40 45
Leu Gly Val Val Ser Gln Leu Arg Leu Trp Lys Val Ile Arg Asp Lys
50 55 60
Arg Arg Lys Glu Glu Ala Val Lys Lys Glu Glu Glu Lys Arg Lys Glu
65 70 75 80
Glu Ala Glu Thr Glu Val Ala Arg Arg Leu Glu Glu Asn Asn Met Arg
85 90 95
Glu Arg Gln Ala Trp Glu Ala Gln Tyr Ala Asp Ala Glu Ala Lys Leu
100 105 110
Met Pro Glu Leu Gly Asp Gly Thr Gln Cys Ala Ala Asp Lys Glu Asp
115 120 125
Leu Glu Lys Arg Asp Gly Ala Glu Val Ser Ser Ile Ser Ser Ser Ser
130 135 140
Gln Val Ser Tyr Arg Cys Ser Asp Cys Arg Lys Gln Glu Gly Ser Gly
145 150 155 160
Ala Ser Phe Ser Asp Val Thr Arg Ala Thr Gly Asn Thr Glu Ile Glu
165 170 175
Arg His Gly Asp Ala Thr Glu Lys Thr Ala Asp Gly Ala His Pro Met
180 185 190
Pro Phe Arg Val Phe Asp Gly Ala Gly Ala Ala Ser Leu Met Asp Asp
195 200 205
Lys Glu Ser Asp Val Thr Ala Met Ala Gly Ser Asp Thr Ala Thr Val
210 215 220
Arg Ser Xaa Arg Phe Ser Gly Ile Thr Ile Arg Glu Glu Asn Gly Leu
225 230 235 240
Ser Glu Pro Pro Glu Asp Cys
245

<210> 36044
<211> 92
<212> PRT
<213> A.fumigatus

<400> 36044
Ile Ile Arg Phe Cys Ser Ile Asp Thr Ala Cys Trp Ser Arg Trp Asn
1 5 10 15
Pro Ala Thr Trp Arg Phe Arg Ser Pro Arg Arg Ile Ala Asn Tyr Asp
20 25 30
Asp Ile Arg Glu Ser Ser Ser Lys Arg Phe Ser Asp Ala Cys Ser Lys
35 40 45
Cys Asp Ser Arg Ser Glu Leu Tyr Gly His Val Lys His Gln Arg Ser
50 55 60
Gly Ile Asn Asp Asn Pro Val Ala Gln Gln Ile Asp Ser Phe Gly Lys
65 70 75 80
Trp Val His Thr Pro Ser Leu Arg His Ser Glu Ser
85 90

<210> 36045
<211> 87
<212> PRT
<213> A.fumigatus

<400> 36045
Ser Leu Met Leu Ile Ile Ser Cys Phe Asn Ile Thr Leu Val Tyr Val
1 5 10 15
Glu Gly Asp Ala Pro Met Arg Ser Tyr Glu Asp Ser Asp Gly Lys Lys
20 25 30
Thr His Ala Leu Asn Ile Val Ala Ser Lys Pro Thr Thr Leu Phe Met
35 40 45
His Leu Tyr Val Arg Asp Thr Ile Leu Met His Cys Arg Gly Pro Gly
50 55 60
Lys Leu Asn Val Leu Gln Lys Pro Val Pro Arg Pro Asn Ala Thr Glu
65 70 75 80
Ser Gly Asn Leu Pro Pro His
85

<210> 36046
<211> 156
<212> PRT
<213> A.fumigatus

<400> 36046
Ala Ile His Ala Ile Glu Thr Ser Lys Pro Ser Phe Ala Trp Thr Leu
1 5 10 15
Thr Ser Asn Ala Ala Arg Leu Cys Gln Asn Leu Gly Tyr His Arg Ser
20 25 30
Ser Ser Met Ser Gln Phe Ser Asp Ser Glu Lys Val Lys Ala Leu Ser
35 40 45
Leu Phe Leu Cys Val Tyr Cys Leu Asp Lys Ser Leu Ser Leu Arg Leu
50 55 60
Gly Arg Ala Ser Ser Ile Gln Asp Phe Asp Ile Ile Ile Thr Ile Pro
65 70 75 80
Glu Asp Leu Gly Gly Pro Arg Val Asp Glu Pro Trp Arg Thr Met Tyr
85 90 95
His Leu Trp Val Lys Thr Ala Glu Ile Gln Gly Lys Val Tyr Glu Gln
100 105 110
Leu Tyr Ser Pro Ala Ala Leu Ser Arg Pro Glu Arg Glu Arg Leu Phe
115 120 125
Cys Ala Arg Gln Leu Ala Ser Glu Met Glu Val Ala Val Met Glu Pro
130 135 140
Phe Lys Val Gly Ile Pro Trp Arg Ser Ser Leu Pro
145 150 155

<210> 36047
<211> 237
<212> PRT
<213> A.fumigatus

<400> 36047
Leu Ser Pro Ala Gly Ala Phe Ile Phe His Arg Val Val Lys Thr Cys
1 5 10 15
Glu Cys Asp Gly Val Asp Val Tyr Gln Trp His Ala Ala Asp Gly Ser

```
            20                  25                  30
Glu Trp Arg Arg Gly Ser Ile Cys Pro Val Ala Gly Asp Gly Arg Gly
        35                  40                  45
Leu Asp Cys Gly Phe Ala Asp Cys Gln Gly Ile Arg Arg Glu Arg Phe
    50                  55                  60
Val Val Met Leu Thr Gln Phe Phe Phe Gly Ile Arg Leu Thr Met Ser
65                  70                  75                  80
Val Ile Ile Thr Ser Ser Ser Asp Glu Lys Leu Glu Gln Ala Lys Lys
                85                  90                  95
Leu Gly Ala Asp Tyr Thr Ile Asn Tyr Arg Thr Asn Pro Asn Trp Asn
            100                 105                 110
Glu Glu Val Met Arg Val Thr Asn Asn His Gly Ala Asp Ile Ile Leu
        115                 120                 125
Glu Thr Gly Gly Ser Glu Thr Leu Ser Lys Thr Phe Asp Cys Val Ala
    130                 135                 140
Phe Gly Gly Leu Ile Asp Cys Ile Gly Tyr Thr Ser Gly Lys Gln Gln
145                 150                 155                 160
Asn Pro Asn Asp Thr Leu Asn Met Asn Val Leu Thr Leu Arg Lys Asn
                165                 170                 175
Leu Thr Ile Lys Gly Ile Ile Asn Gly Pro Lys Asp Arg Phe Glu Glu
            180                 185                 190
Met Val Gln Phe Tyr Glu Lys His Gln Ile His Pro Val Val Asn Arg
        195                 200                 205
Ile Phe Pro Phe Glu Glu Ser Lys Glu Ala Phe Lys Phe Leu Ala Ser
    210                 215                 220
Gly Ala His Phe Gly Lys Val Val Ile Lys Val Lys Asp
225                 230                 235
```

<210> 36048
<211> 105
<212> PRT
<213> A.fumigatus

<400> 36048

```
Thr Lys Pro Asp Ile Pro Ser Leu Ala His Gly Met His Phe Glu Met
1               5                   10                  15
Asp Val Ile Glu Phe Ser Lys Ile Lys Arg Gln Leu Ser Ala Gly Gly
            20                  25                  30
Thr Asp Thr Ser Gly Asp Lys Arg Thr Arg Phe Glu Asp Arg His Gly
        35                  40                  45
Ile Gln Gly Trp Thr Ser Arg Ser Ile Ile Gln Gly Thr His Thr Pro
    50                  55                  60
Val Glu Gln Cys Leu Cys Asn Thr Asp Asn Asp Leu Asp Met Leu Gly
65                  70                  75                  80
Ser Glu Thr Ala Gln Cys Asp Val Cys Phe Gly Glu Val Gly Ala Ala
                85                  90                  95
Arg His Pro Ala Val Val Tyr Pro Cys
            100                 105
```

<210> 36049
<211> 79
<212> PRT
<213> A.fumigatus

<400> 36049

```
Gln Gln Leu Ala Trp Ile Tyr Tyr Ser Trp Val Thr Arg Ser Ser Tyr
```

```
1               5                   10                  15
Leu Ser Lys Ala His Ile Ala Leu Arg Gly Phe Gly Thr Glu His Val
            20                  25                  30
Gln Val Ile Val Ser Val Thr Glu Ala Leu Phe Asn Gly Cys Met Gly
        35                  40                  45
Ser Leu Tyr Asp Arg Thr Ala Ser Pro Thr Leu Asp Thr Met Ser Ile
    50                  55                  60
Phe Lys Ala Ser Pro Phe Val Ser Ala Gly Ile Arg Ala Ser Arg
65                  70                  75
```

<210> 36050
<211> 70
<212> PRT
<213> A.fumigatus

<400> 36050

```
Cys Ser Ser Ile Lys Gly Ile Val Thr Leu Ile Asn Arg Tyr Arg Arg
1               5                   10                  15
Leu Ser Ser Pro Arg Met Trp Ile Asp Thr Trp Ala Leu Leu Ser Glu
            20                  25                  30
Asn Glu Ile Lys Lys Leu Asn Asp Tyr Lys Ile Arg Pro Val Arg Val
        35                  40                  45
Pro Trp Tyr Thr Lys Glu Gly Lys Ser Ile Tyr Tyr Phe Gly Asp Glu
    50                  55                  60
Lys Tyr Met Gln Arg Thr
65                  70
```

<210> 36051
<211> 222
<212> PRT
<213> A.fumigatus

<400> 36051

```
Arg Cys Gly Gly Thr Pro Ser Arg Ile Ser Ser Pro Thr Ile His Ser
1               5                   10                  15
Ser Ser Ser Ile Phe Ser Ser Val Glu Thr Leu Phe Thr Val Ser Lys
            20                  25                  30
His Tyr Val Tyr Gln Pro Arg Pro Asn Leu Pro Pro Cys Gly Asn Asn
        35                  40                  45
Pro Val His Ser Pro Pro Thr Thr Pro Arg Ala Lys Pro Ser Ser Thr
    50                  55                  60
Arg Asn Ser Pro Ser Ser Gly Ala Pro Asn Glu Gly Gly Ala Leu Gly
65                  70                  75                  80
Met Gly Phe Ala Tyr Arg Thr Ser Glu Phe Pro Gly Thr Leu Asn Asn
                85                  90                  95
Glu Gly Asp Ile Lys Thr His Gly Lys Leu Met Glu Lys Asn Thr Leu
            100                 105                 110
Gly Leu Val Asn Pro Ala Gly Pro Val Cys Arg Phe Val Asp Phe Lys
        115                 120                 125
Pro Gly Gly Glu Pro Phe Met His Arg Thr Gln Ser Leu Asp Tyr Gly
    130                 135                 140
Ile Val Leu Gln Gly Glu Ile Glu Met Ile Leu Asp Ser Gly Glu Lys
145                 150                 155                 160
Arg Thr Leu Lys Ala Gly Asp Ile Ala Val Gln Arg Gly Thr Lys His
                165                 170                 175
Ala Trp Arg Asn Pro Ser Glu Val Glu Trp Ser Arg Met Val Phe Ile
```

```
            180                 185                 190
Leu Gln Asp Ile Gln Pro Ile Val Ile Gly Gly Val Val Leu Glu Glu
        195                 200                 205
Asp Val Ser Gly Ser Asp Glu Ile Lys Pro Ser Gln Gly Asp
    210                 215                 220
```

<210> 36052
<211> 428
<212> PRT
<213> A.fumigatus

<400> 36052

```
Arg Arg His Thr Ile Gly Gly Met Ile Glu Leu Gly Leu Gly Arg Ile
1               5                   10                  15
Ser Arg Leu Leu Gln Gln Thr Pro Leu Ser Trp Lys Ala Ile His Ile
            20                  25                  30
Ala Gly Thr Asn Gly Lys Gly Ser Ile Ser Ala Tyr Leu Ser His Met
        35                  40                  45
Leu Thr Ala Gly Gly Val Arg Cys Gly Arg Phe Thr Ser Pro His Leu
    50                  55                  60
Ile Asp Arg Trp Asp Cys Ile Thr Ile Gly Glu Ser Val Val Gln Glu
65                  70                  75                  80
Ser Leu Phe Arg Gln Ile Glu Glu Arg Val Arg Leu Arg Asp Gln Ser
                85                  90                  95
Leu Gly Ile Gly Ala Ser Glu Phe Glu Leu Leu Thr Ala Thr Ala Phe
            100                 105                 110
Glu Ile Phe Asn His Glu His Val Glu Val Gly Val Val Glu Val Gly
        115                 120                 125
Met Gly Gly Arg Leu Asp Ala Thr Asn Val Leu Ser Asp Val Leu Val
    130                 135                 140
Ser Val Ile Ala Lys Ile Gly Leu Asp His Gln Ala Phe Leu Gly Asp
145                 150                 155                 160
Thr Leu Glu Leu Ile Thr Arg Glu Lys Ala Gly Ile Met Lys Pro Gly
                165                 170                 175
Val Pro Cys Val Val Asp Gly Thr Asn Ala Pro Glu Val Ile Arg Thr
            180                 185                 190
Leu Glu Asn Arg Val Asn Glu Leu Lys Ile Asp Ala Val Tyr Ala His
        195                 200                 205
Pro Asp Thr Ile Cys Ser Gln Ser Pro Cys Leu Gly Arg Ile Phe Arg
    210                 215                 220
Glu Leu Asp Leu Gln Arg His Gln Arg Ala Asn Met Ser Cys Ala Val
225                 230                 235                 240
Ser Ala Leu Arg Leu Ala Leu Ala Lys Val Arg Pro Gly Leu Glu Val
                245                 250                 255
Asp Met Leu Leu Pro Ser Leu Lys Asn Val Glu Trp Pro Gly Arg Leu
            260                 265                 270
Gln Lys Ile Ser Leu Ser Pro Leu Thr Ala Arg Thr Glu Pro Val Leu
        275                 280                 285
Leu Asp Gly Ala His Asn Ser Gln Ser Ala Glu Val Leu Gly Glu Tyr
    290                 295                 300
Val Asn Lys Asn Leu Arg Pro Gln Gly Lys Ile Thr Trp Val Ile Ala
305                 310                 315                 320
Ala Ser Arg Gly Lys Asp Val Thr Ala Leu Phe His Ser Ile Ile Lys
                325                 330                 335
Ser Gly Asp Lys Val Ala Ile Thr Ala Phe Gly Pro Val Asp Gly Met
            340                 345                 350
```

```
Pro Trp Val Lys Ala Ala Asp Thr Glu Asp Leu Ala Leu Cys Ile Gln
        355                 360                 365
Ser Ile Pro Gly Val Gln Asp Val Arg Thr Phe Asp Gly Asp Val Leu
    370                 375                 380
Ala Ala Ile Asn Trp Ala Cys Thr Glu Ala Gly Asp Cys Pro Leu Val
385                 390                 395                 400
Ile Ala Gly Ser Leu Tyr Leu Val Ser Asp Val His Arg Leu Leu Arg
                405                 410                 415
Glu Ala Arg Lys Ser Ala Glu Ile Tyr Arg Gly His
            420                 425
```

<210> 36053
<211> 75
<212> PRT
<213> A.fumigatus

<400> 36053

```
Val Ala Asn Ala Gly Thr Leu Lys Gln Leu Gly Asp Cys Leu Gly Arg
1               5                   10                  15
Gly Ala Phe Gly Ser Val Tyr Arg Ala Leu Asn Trp Asn Thr Gly Glu
            20                  25                  30
Thr Val Ala Val Lys Gln Ile Lys Leu Ala Asp Leu Pro Lys Ser Glu
        35                  40                  45
Leu Arg Val Ile Met Val Trp His Leu Asp Leu Thr Val Trp Cys Gln
    50                  55                  60
Glu Arg Pro Tyr Trp Pro Phe Thr Gln Trp Ser
65                  70                  75
```

<210> 36054
<211> 152
<212> PRT
<213> A.fumigatus

<400> 36054

```
Arg Gln Pro Gly Tyr His Asp Thr Ile Ala Asp Asp Thr Ala Met Val
1               5                   10                  15
Leu Asp Asp Asp Asp Leu Glu Gly Phe Ile Ala Gln Pro Ala Asn Leu
            20                  25                  30
Asn Asp Leu Asp Glu Phe Ile Asn Ala Ile Gly Gly Asp Asn Ser Asp
        35                  40                  45
Asn Gly Asp Asn Gly Asp Asn Gly Asp Asn Gly Asp Asn Gly Asp Asn
    50                  55                  60
Gly Asp Asn Gly Trp Asn Pro Ile Asp Leu Leu Met Leu Pro Ala Asp
65                  70                  75                  80
Arg Asn Arg Leu Thr Ala Phe Thr Asn Gln Pro Ser Tyr Pro Ser Ala
                85                  90                  95
Ala Asn Thr Ala Asp Pro Ala Thr Asp Pro Phe Thr Ile Asp Pro Ala
            100                 105                 110
Gln Leu Ile Pro Gln Pro Gly Asp Tyr Pro Gln Val Ala Arg Pro Thr
        115                 120                 125
Thr Thr Leu Ala Thr Ala Asp Val Pro Gly Asp Ser Gln Asn Gly Gly
    130                 135                 140
Asp Asn Asp Gly Phe Gln Gln Asn
145                 150
```

<210> 36055

<211> 88
<212> PRT
<213> A.fumigatus

<400> 36055
Ala Asp Gly Thr Ala Ile Tyr Lys Ser Ile Gln Leu Glu Arg Thr Leu
1 5 10 15
Ile Arg Ser Thr Arg Ile Lys His Thr Leu Phe Pro Asp Thr Leu Lys
20 25 30
Tyr Tyr Leu Thr Leu Val Phe Lys Pro Leu Asn Ser Ser His Ser Phe
35 40 45
Phe Ser Leu Gly Leu Lys His Pro Asp Ile Met Arg Phe Thr Phe Phe
50 55 60
Ala Ala Leu Ala Leu Leu Gly Thr Ala Phe Ala Ala Pro Thr Ala Pro
65 70 75 80
Thr Thr Ser Thr Ala Thr Val Cys
85

<210> 36056
<211> 61
<212> PRT
<213> A.fumigatus

<400> 36056
Cys Thr Val Ile Lys Ile Phe Cys Ser Leu Gly Ile Ser Leu Arg Ser
1 5 10 15
Ile Val Glu Gln Ala Thr Ser Ser Gly Phe Ser Asn Phe Phe Ala Val
20 25 30
Tyr Thr Phe Arg His Ser Gln Gly Ile Leu Thr Thr Phe Gly Gly Glu
35 40 45
Met Asn Gln Ser Ile Pro Ser Arg Thr Val Leu Ser Asn
50 55 60

<210> 36057
<211> 61
<212> PRT
<213> A.fumigatus

<400> 36057
Ser Ser Gly Ser Ile Val His Asn Asn Ser Met Lys Thr Ala Leu Pro
1 5 10 15
Leu Thr Tyr Leu Leu Leu Cys Val Arg Lys Val Leu Phe Val Tyr His
20 25 30
Thr Arg Leu Val Phe Thr His Ser Ile Gln Glu Ile Ser Ser Phe Tyr
35 40 45
Leu Trp Leu Ala Ile Phe Trp Leu Arg His Gln Val Gly
50 55 60

<210> 36058
<211> 1117
<212> PRT
<213> A.fumigatus

<400> 36058
Leu Arg Arg Lys Arg Asn Gln Leu Asn Pro Glu Ser Phe Pro Val Phe
1 5 10 15

```
Ser Ser Gln Leu Lys Arg Arg Leu Thr Thr His Glu Asn Leu Lys Ser
            20                  25                  30
Glu Leu Ser Val Pro Asn Thr Arg Gly Arg Ser Leu Arg Phe Val Cys
        35                  40                  45
Ser Leu Arg Thr Asn Lys Ser Arg Ala Thr Asn Ala Thr Val Ala Asp
    50                  55                  60
Leu Leu Lys Glu Leu Ala Ala Asp Glu Val Lys Tyr Met Arg Glu Leu
65                  70                  75                  80
Lys Thr Leu Val Gly Gly Val Ile Pro Val Leu Leu Thr Cys Val Leu
                85                  90                  95
Ser Arg Ser Asp Ser Ala Ile Ala Ala Gly Leu Phe Arg Pro Ser Thr
            100                 105                 110
Asp Pro Lys Asp Glu Leu Asn Phe Thr Lys Pro Ile Val Asp Met Gly
        115                 120                 125
Val Ala Ile Glu Arg Leu Lys Thr Leu His Lys Arg Ile Pro Gln Asp
    130                 135                 140
Asn Ser Asp Ser Leu Leu Thr Trp Ala Gln Gly Ala Gln Arg Val Tyr
145                 150                 155                 160
Arg Glu Tyr Leu Arg Ala Trp Arg Leu Gly Phe Arg Asp Val Ile Val
                165                 170                 175
Asn Leu Ala Pro Leu Glu Glu Gly Glu Val Ala Gln Asn Ala Asp Thr
            180                 185                 190
Lys Ser Leu Asp Glu Gly Met Ala Arg Asp Glu Asn Gly Asp Val Val
        195                 200                 205
Asn Ser Glu Gly Glu Lys Val Asp Val Ala Tyr Leu Leu Lys Arg Pro
    210                 215                 220
Leu Val Arg Leu Lys Tyr Leu Ala Lys Thr Phe Lys Gly Ile Asn Met
225                 230                 235                 240
Leu Ala Pro Ser Ala Lys Ala Glu Glu Ile Ala Leu Ile Tyr Gln Asn
                245                 250                 255
Leu Val Thr Glu Ala Arg Arg Arg Ala Arg Glu Glu Arg Ala Arg Leu
            260                 265                 270
Glu Asp Glu Ser Ala Ala Ser Ile Asp Ser Thr Arg Ala Arg Asp Pro
        275                 280                 285
Ala Thr Leu Glu Ala Leu Thr Asp Val Thr Ile Asp Lys Thr Arg Arg
    290                 295                 300
Val Arg Ala Arg Asp Phe Phe Asn Leu Ser Leu Tyr His Ser Thr Gly
305                 310                 315                 320
Gln Val Val Asp Cys Arg Ala Glu Leu Leu Leu Arg Asp Asn Gly Pro
                325                 330                 335
Gly Asn Gly Ala Gly Gly Asp Leu Leu Ile Cys Glu Ile Asp His Ala
            340                 345                 350
Asp Arg Trp Leu Leu Phe Pro Pro Met Asp Val Ala Cys Val Ser Ala
        355                 360                 365
Arg Asn Gly Asp Leu Lys Gly Glu Ile Val Val Met Leu Arg Ser Pro
    370                 375                 380
Pro Gly Gln Thr Lys Ala Trp Gln Glu Leu Leu Ser Leu Arg Ile Asp
385                 390                 395                 400
Glu Glu Asp Ile Ala Phe Glu Trp Val Gln Leu Leu Gly Val Asn Pro
                405                 410                 415
Pro Pro Pro Ala Leu Cys Arg Thr Gln Ser Phe Ile Glu Arg Ala Lys
            420                 425                 430
Gln Arg Gln Arg Ala Gln Ala Thr Pro Ser Ser Asp Val Pro Pro Ala
        435                 440                 445
Gln Lys Gly Pro Pro Ser Pro Thr Ser Val Asp Ile Pro Ile Gly Glu
    450                 455                 460
```

```
Arg Ala Thr Phe Arg Thr Ala Arg Arg Ser Ser Thr Pro Lys Gly Ser
465                 470                 475                 480
Leu Ser Glu Pro Ser Thr Val Cys Glu Thr Thr Ser Ala Ile Glu Ser
                485                 490                 495
Ser Val Tyr Ser Ala Ile Thr Arg Glu Ser Asp Tyr Ala Ser Thr Ser
            500                 505                 510
Gln Ser Pro Pro Ser Ile Leu His Ala Arg Glu Ser Arg Lys Thr Pro
        515                 520                 525
Leu Val Asp Glu Arg Thr Ser Ala Gly Leu Lys Arg Ser Lys Ala Asn
    530                 535                 540
Arg Val His Leu Pro Val Glu Ser Ser Pro Ser Ser Leu Gln Lys Asp
545                 550                 555                 560
Ala Leu Ser Asp Arg Glu Gln Ala Ser Ala Thr Ser His Arg Asp Arg
                565                 570                 575
Gln Glu Asp Gln Lys Pro Val Gln Ser Pro Val Val Val His Glu Lys
            580                 585                 590
Lys Pro Asp Thr Glu Gln Arg Ser Pro Lys Thr Pro Ile Arg Asp Thr
        595                 600                 605
Val Asp Gln Gly Ser Pro Arg Ile Ser Ser Val Pro Ser Met Asp Leu
    610                 615                 620
Pro Ser Ile Pro Lys Ile Arg Lys Gly Ser Ser Gln Ser Tyr Ile Thr
625                 630                 635                 640
Glu Ser Leu Ala Ala Val Ser Asp Asp Glu Glu Tyr Ala Pro Val Asp
                645                 650                 655
Ser Tyr Ser Leu Pro Gly Ser Pro Ser Lys Ser Lys Ser His Ser Arg
            660                 665                 670
Ser Asn Ser Asp Ser Ser Gln Thr Asn Asp Glu Gln Pro Pro Pro Pro
        675                 680                 685
Pro Pro His Ser Arg Ser Pro Ser Ser Thr Gly Pro Ser Leu Ser Asn
    690                 695                 700
Thr Pro Val Leu Ser Pro Thr Asn Val Arg Gln Arg Arg Arg Gly Ser
705                 710                 715                 720
Ser Pro Leu Lys His Glu Tyr Glu Pro Ser Thr Ala Ser Asp Thr Tyr
                725                 730                 735
Ser Asp Ser Asp Thr Ser Thr Val Arg Arg Tyr Asp Met Asp Trp Asp
            740                 745                 750
Ser Asp Asp Tyr Thr Ala Ser Asp Thr Ser Asp Gly Asp Ser Asp Asp
        755                 760                 765
Glu Leu Ala Ser Ser Leu Pro Pro Ala Asp Ala Gln Asn Leu Ala Asn
    770                 775                 780
Ser Thr Leu Ala Ala Ser Ser Asn Ser Ser Leu Ser Pro Ser Asn Ser
785                 790                 795                 800
Ala Ser Gln Gly Gly Tyr Arg Ser Val Pro Ser Gln Pro Thr Lys Ser
                805                 810                 815
Ser Thr Ala Val Ala Ser Val Phe Ala Trp Ser Glu Lys Gly Thr Trp
            820                 825                 830
Glu Ala Ile Ala Pro Thr Asp Cys Lys Ile Val Val Ser Pro Gly Leu
        835                 840                 845
Ile Glu Ala Tyr Glu Ile Ser Ser Lys Ala Met Pro Asp Met Asp Asp
    850                 855                 860
Glu Glu His Arg Gly Gln Gly Leu Leu Leu Val Ala Leu Glu Leu Thr
865                 870                 875                 880
Pro Leu Val Pro Ile Arg Arg Gly Thr Ala Ile Asp Ile Ser Val Arg
                885                 890                 895
Ser Pro Pro Thr Glu Lys Ser Lys Ile Asp Trp Ser Asn Asn Ile Met
            900                 905                 910
```

```
Phe Arg Ser Arg Asn Ala Asp Glu Cys Glu Ala Leu Tyr Gly Leu Ile
        915                 920                 925
Asn Gln Ala Arg Ile Asn Asn Pro Thr Tyr Ile Ala Leu Gln Asn Ala
    930                 935                 940
Arg Gly Pro Phe Ala Asn Gln Pro Val Pro Met Glu Arg Ser Thr Lys
945                 950                 955                 960
Thr Gly Arg Trp Phe Gly Trp Pro Gln Arg Arg Lys Ser Tyr Arg Ala
                965                 970                 975
Ser Asn Ser Pro Arg Ser Leu Ala Asp His Ser Glu Ser Ser Val Gly
            980                 985                 990
Thr Met Ser Ser Ala Phe Ser Ala Leu Lys Lys Phe Gly Ser Gly Ser
        995                 1000                1005
Lys Met Phe Asn Leu Ser Arg Ser Ser Ile Thr Ser Arg Ser Ala Lys
    1010                1015                1020
Asp Asp Ser Leu His Ser Ser Ser Ala Gly Ser Gly Ser His His Ser
1025                1030                1035                1040
Ser Ser Gly Ile Gly Arg Ile Ala Ala Ala Met Lys Asp Ala Asp Gly
                1045                1050                1055
Ile Gly Leu Ser Asn Ala Lys Ile Arg Leu Tyr Val Arg Glu Thr Gln
            1060                1065                1070
Ser Lys Trp Arg Asp Met Gly Ala Ala Arg Leu Thr Ile Met Pro Ala
        1075                1080                1085
Arg Pro Ala Pro Arg Arg Pro Gly Thr Ser Ser Ser Arg Arg Ser Asp
    1090                1095                1100
Thr Ser Val Gly Ala Asp Glu Arg Ser Pro Pro Thr Ser
1105                1110                1115

<210> 36059
<211> 90
<212> PRT
<213> A.fumigatus

<400> 36059
Ser His Cys Leu Ser Lys Gln Lys Lys Asp Ala Thr Ala Val Arg Leu
1               5                   10                  15
Pro Leu Ser Thr Met Phe Pro Gln Arg Asn Ile Leu Arg Ala Ala Gln
            20                  25                  30
Gln Leu Arg Ser Ala Pro Ala Arg Ala Ala Phe Gln Arg Arg Leu Asn
        35                  40                  45
Ser Thr Asp Asn Lys Leu Pro Trp Met Val Asp Asn Ala Phe Asn Arg
    50                  55                  60
Glu Arg Ala Ala Val Lys His His Ala Ala Ala Thr Ser Gly Ser Tyr
65                  70                  75                  80
Thr Pro Ile Gly Pro Lys Lys Phe Phe Gly
                85                  90

<210> 36060
<211> 76
<212> PRT
<213> A.fumigatus

<400> 36060
Arg Ser Arg Leu Arg Phe Pro Arg Ile Tyr Arg Thr Leu Tyr Ser Pro
1               5                   10                  15
Met Pro Ser Ala Val Ile Pro Cys Leu Ile Leu Gly Ser Ile Asn Ala
            20                  25                  30
```

```
Tyr Asn Leu Trp Asn Glu His Trp Glu His Trp Glu His Met Pro Pro
        35                  40                  45
Leu Glu Glu Arg Thr Glu Tyr Pro Tyr Gln Asn Val Arg Val Lys Asn
    50                  55                  60
Phe Pro Phe Gly Asp Gly Asp Lys Val Ser Phe Ile
65                  70                  75
```

<210> 36061
<211> 213
<212> PRT
<213> A.fumigatus

<400> 36061

```
Lys Gly Phe Val His Tyr Arg Leu Pro Thr Tyr Arg Val Trp Ser Lys
1               5                   10                  15
Lys Asn Pro Ser Thr Glu Arg Asp Pro Val Asp Ile Asn Leu Leu Glu
            20                  25                  30
Leu Asn Leu Asp Ser Thr Ser His Leu Ala Gln Val Ala Tyr Gly Asn
        35                  40                  45
Ile Glu Met Gln Glu Glu Gly Gly Ile Tyr Val Ser Thr Lys Asp Val
    50                  55                  60
Glu Arg Leu Leu Glu Phe Gln Ile Gly Glu Leu Gln Ser Thr Gln Thr
65                  70                  75                  80
Ser Pro Leu Asn Val Arg Ile His Asp Ala His Leu Leu Thr Glu Cys
                85                  90                  95
Arg Thr Trp Arg Lys Ser Pro Arg Arg His Glu Gly Ala Ala Arg Thr
            100                 105                 110
Tyr His Gly Val Trp Arg Arg Asn Thr Gln Pro Asp Leu Leu Pro Lys
        115                 120                 125
Val Arg Trp Ser Ser Arg Thr Asn Pro Pro Ser Leu Thr Ile Ser Asp
    130                 135                 140
Ser Ser Met His Gly Glu Leu Glu Thr Thr Leu His Pro Ser Thr Ile
145                 150                 155                 160
Phe Thr Asp Ile Leu Thr Ile Gln Cys Ile Val Val Thr Gly Ala His
                165                 170                 175
Ile Asn Met Arg Cys Ser Thr Ser Gln Ser Phe Arg Leu Ile Ser Asp
            180                 185                 190
Ala Met Glu Lys Leu Phe Leu Gln Cys Lys Lys Leu Ser Pro Leu Pro
        195                 200                 205
Glu Ser Pro Thr Ile
    210
```

<210> 36062
<211> 167
<212> PRT
<213> A.fumigatus

<400> 36062

```
Gly Glu Met Glu Leu Ala Asn Lys Pro Ala Val Ala Asn Asp Leu Arg
1               5                   10                  15
Phe Leu Asp Ala Trp Arg Ala Gly Asp Tyr Pro Ser Ser Phe Asp Asn
            20                  25                  30
Leu His Arg Tyr Phe Asp Tyr Thr Met His Ser Arg Asp Arg Ser Ser
        35                  40                  45
Tyr Gln Tyr Ala Leu Leu Asn Leu Ala Ile Leu Gln Ala Asp Phe Gly
    50                  55                  60
```

```
Cys Tyr Gly Glu Ala Val Ser Ala Met Gln Glu Ala Val Ser Ile Ala
65                  70                  75                  80
Arg Glu Ser His Asp Met Asn Cys Leu Asn Phe Cys Met Ser Trp Leu
                85                  90                  95
Tyr His Phe Gly Lys Ala Phe Pro Glu Gln Met Lys Asp Val Gln Asn
            100                 105                 110
Thr Gly Met Leu Gly Asn Glu Lys Glu Gly Leu Ala Phe Leu Lys Ala
        115                 120                 125
Lys Ala Lys Glu Thr Glu Met Trp Ser Leu Leu Ser Thr Thr Leu Leu
    130                 135                 140
Ser Glu Ala Lys Leu Glu Leu Gln Asn Val Ser Ile Pro Thr His Arg
145                 150                 155                 160
Cys Ser Phe Cys Ile Gln Ser
                165
```

<210> 36063
<211> 260
<212> PRT
<213> A.fumigatus

<400> 36063

```
Gly Gly Thr Ser Val Gly Met Phe Pro Leu Gly Ala Met Lys Lys Trp
1               5                   10                  15
Leu Leu Ile Met His Arg Asp Asp Lys Val Ala Ala Asp Tyr Leu Leu
            20                  25                  30
Ser Gln Leu Gln Ala Ile Gln Leu Pro Asp Asn Asp Ala Ser Leu Leu
        35                  40                  45
Leu Ser Phe Leu Ser Ile Glu Tyr Lys Ile Arg Gln Gly Asp Tyr Gly
    50                  55                  60
Arg Ala Leu Glu Ile Val Glu Gln Thr Ala Gln Ser Met His Gln Asp
65                  70                  75                  80
Asn Phe Asp Ile His Ser Gln Val Lys Leu Leu Cys Phe Lys Ala Arg
                85                  90                  95
Ile Phe Glu Lys Thr Gly His Pro Gln Arg Gly Phe Ser Leu Ala Met
            100                 105                 110
Arg Ala Ala Ser Leu Ala His Arg Ser Arg Leu Leu Pro Gly Leu Trp
        115                 120                 125
Glu Ala Ile Cys Val Leu Gly Gly Val Leu Leu Ser Leu His Glu Phe
    130                 135                 140
Glu Ala Val Asn Glu Met Val Glu Ser Ile Met Pro Gln Val Leu Glu
145                 150                 155                 160
Thr Asp Asp Cys Asp Leu Ala Ala Arg Ala Tyr Ser Leu Leu Val Asp
                165                 170                 175
Ala Asn Met Gly Met Ala Gly Lys Ala Trp Ser Gln Gly Gln Asp Thr
            180                 185                 190
Pro Ala Lys Lys Glu His Met Asn Arg Ala Leu Gly Tyr Leu Asp Cys
        195                 200                 205
Ala Tyr Asp Gln Tyr Glu Glu Ile Glu Asp Ile Lys Gly Gln Cys Glu
    210                 215                 220
Met Met Ala Lys Lys Ala Thr Val Met His Leu Thr Gly Asp Leu Val
225                 230                 235                 240
Leu Ala Asn Asp Tyr Ala Ala Lys Tyr Leu Asp Leu Gln Lys Leu Ser
                245                 250                 255
Glu Lys Gly Val
            260
```

<210> 36064
<211> 73
<212> PRT
<213> A.fumigatus

<400> 36064
Val Leu Thr Ala Phe His Gly Asp Thr Arg Asn Ile Thr Lys Gly Gly
1 5 10 15
Ser Ser Phe Gln Leu Leu Asp Lys Tyr Phe Ser Thr Pro Ile Ile Lys
20 25 30
Gln Tyr Cys Arg Pro Val Ser Thr Ser Ala His Ile Tyr Ile Ile Ser
35 40 45
Asp Gln Asn Ala Ser Ile His Met Ile Arg His Thr Leu Met Ser His
50 55 60
Val Val Ala Ala Val Val Leu Asp Arg
65 70

<210> 36065
<211> 60
<212> PRT
<213> A.fumigatus

<400> 36065
Glu Leu Ile Gln Leu Ser Ser Ile Thr Leu Ala Thr Gly Gly Arg Gln
1 5 10 15
Glu Val Ile Leu Ile Gln Tyr Ser Ala Asp Ser Gly Phe Cys Leu Phe
20 25 30
Ser Asn Lys Ala Thr Asp Val Tyr Gln Ser Thr Leu Ala Thr Asn Val
35 40 45
Thr Ala Lys Leu His Lys Ser Ser Gly Val Thr Phe
50 55 60

<210> 36066
<211> 457
<212> PRT
<213> A.fumigatus

<400> 36066
Asn Thr His Arg Glu Met Leu Lys Leu His Val Ala Asn Ser Leu Asp
1 5 10 15
Arg Ile Gly Ile Val Phe His Phe Gln Asn Gln Val Glu Arg Leu Leu
20 25 30
Ser Trp Arg Lys Ser Ser His Thr Phe Ser Phe Leu Phe Ile Tyr Ser
35 40 45
Phe Ile Cys Leu Asp Pro Asn Leu Leu Val Val Leu Pro Ile Thr Val
50 55 60
Ile Leu Leu Phe Ile Met Val Pro Ala Phe Ala Ala Arg His Pro Pro
65 70 75 80
Pro Pro Ser Met Ser Thr Ser Ser Thr Thr Pro Tyr Tyr Ser Tyr Gln
85 90 95
Gly Pro Ala Leu Ala Pro Ala Lys Thr Ile Lys Pro Ala Ser Glu Thr
100 105 110
Ser Lys Asp Phe Phe Arg Asn Met Arg Asp Leu Gln Asn Val Met Ala
115 120 125
Asp Phe Ser Asp Val His Asp Ala Thr Val Ser Leu Phe Ala Pro Ile
130 135 140

```
Thr Asn Phe Ser Asn Glu Lys Leu Ser Ser Ile Val Phe Leu Val Leu
145                 150                 155                 160
Thr Ile Thr Ala Ala Leu Leu Phe Leu Thr Ala His Leu Leu Pro Trp
                165                 170                 175
Arg Phe Ile Leu Leu Leu Gly Gly Asn Ala Ala Val Leu Ser Asn His
            180                 185                 190
Pro Gly Leu Gln Glu Phe Leu Gln Asn Leu Leu Gly Asp Ser Ser Gly
        195                 200                 205
Ala Val Lys Ala Asp Leu Gln Ala Glu Arg Ala Glu Lys Lys Lys Thr
    210                 215                 220
Leu Asp Met Tyr Gly Leu Ser Met Gln Ser Asn Pro Ser Ala Ala Val
225                 230                 235                 240
Ser Leu Leu Asp Ser Leu Ala Asp Ile Ser Leu Asp Ser Tyr Pro Glu
                245                 250                 255
Glu Arg Glu Val Glu Ile Phe Glu Ile Gln Asn Arg Ser Leu Ala Pro
            260                 265                 270
Tyr Ser Glu Ser Glu Trp Asp His Phe Ile Phe Ser Pro Val Pro Tyr
        275                 280                 285
Asp Pro Leu Ser Pro Ser Arg Ile Ala Gly Asp Arg Pro Arg Gly Cys
    290                 295                 300
Arg Phe Phe Glu Asp Val Gln Pro Pro Pro Gly Trp Ala Trp Lys Thr
305                 310                 315                 320
Lys Lys Trp Lys Leu Asp Leu Asp Cys Arg Glu Trp Val Val Glu Arg
                325                 330                 335
Met Ile Thr Gly Val Gly Phe Glu Ile Pro Gly Ala Gly Pro Glu Gly
            340                 345                 350
Ser Met Ala Asn Glu Glu Ile Gly Gly Trp Val Trp Asp Leu Pro Ser
        355                 360                 365
Gln Ser Ala Ser Arg Asp Glu Asp Ala Val Ala Thr Ala Leu Gly Tyr
    370                 375                 380
Gln Asp Tyr Gly Ser Ser Ser Lys Pro Ala Ser Ile Gln Glu Lys Lys
385                 390                 395                 400
Lys Thr Gln Lys Gly Lys Gln Lys Ser Ser Ser Arg Asp Trp Glu Glu
                405                 410                 415
Gln Gly His Ser Gly Phe Asn Gly Met Gly Glu Trp Arg Arg Arg Arg
            420                 425                 430
Trp Val Arg Val Val Gln Arg Ala Ser Val Ser Ser Glu Thr Asp Lys
        435                 440                 445
Glu Lys Pro Ser Asn Gln Gly Lys Thr
    450                 455
```

<210> 36067
<211> 60
<212> PRT
<213> A.fumigatus

<400> 36067

```
Ser Asp Leu Leu Ile Leu Gly Gly Arg Leu Asn Cys Ala Gln Leu Arg
1               5                   10                  15
Ser Thr Val Trp Ser Ala Tyr Ile Glu Gly Leu Ser Asn His Ser Gly
            20                  25                  30
Thr Ser Ile Leu Phe Trp Pro Ser Tyr Ser Lys Trp Gly Leu Asn Arg
        35                  40                  45
Asp Ile Ile Val Asn Cys Met Asn Trp Cys Arg Asn
    50                  55                  60
```

<210> 36068
<211> 155
<212> PRT
<213> A.fumigatus

<400> 36068
Tyr Asp Ile Ser Leu Ala Ala Gln Val Arg Arg Val Ile Ile Lys Gly
1 5 10 15
Leu Pro Ser Ala Trp Ser Thr Pro Ala Lys Val Leu Ser Leu Ile His
20 25 30
Gly Gly Met Val Glu Ser Ile His Ile Thr Pro Thr Gly Asn Gln Ala
35 40 45
His Ile Leu Phe Cys Asp His Glu Ala Cys Lys Thr Phe Phe Asp Lys
50 55 60
Tyr Pro Asn Gly Ile Asp Ile Asp Lys Glu Lys Arg Lys Thr Val Phe
65 70 75 80
Val Glu Met Gly Lys Glu Val Asp Val Ile Ser Ser Gln Leu Ser Phe
85 90 95
Asn Leu Ser Ile Gly Ser Thr Arg Val Val Arg Ala Val Gly Val Ser
100 105 110
Met Asn Ile Asn Met Gly Glu Leu Leu Lys Leu Ala Gly Ala Asn Asn
115 120 125
Arg Lys Val Glu Lys Ile Val Asp Ser Cys Val Pro Gly Glu Val Ser
130 135 140
Trp Cys Gly His Pro Gln Glu Gly Leu Val Cys
145 150 155

<210> 36069
<211> 143
<212> PRT
<213> A.fumigatus

<400> 36069
Ala Val Ser Met Phe Ser Trp Leu Ala Asn Val Phe Asp Thr Ala Leu
1 5 10 15
Arg Leu Pro Glu Thr Met Asp Leu Lys Gln Val Ser Asp Met Ile Ile
20 25 30
Asn Ala Phe Asp Asn Val Met Gly Lys Asp Ser Gln Gly Leu Gln Glu
35 40 45
Ser Arg His Ala Pro Lys Lys Glu Asp Lys Ala Lys Glu Leu Lys Tyr
50 55 60
Ser Gln Gln Val Gly Pro Pro Phe Val His Phe Ser Val Leu Gly Ser
65 70 75 80
Val Arg Phe Gly Ile Val Phe Cys Ala Pro Gly His Ile Gly Val Phe
85 90 95
Ala Gln Ala Gly His Ala His Ile Val Arg Val Lys Leu Ile Ala Phe
100 105 110
Phe Gln His Gln Thr Val Leu Pro Gly Cys Pro Arg Gln Gln Asn Leu
115 120 125
Thr Tyr Leu Trp Trp Thr Phe Phe Ser Phe Gln His Pro Pro Pro
130 135 140

<210> 36070
<211> 114
<212> PRT
<213> A.fumigatus

<400> 36070
His Arg Ser Asp Tyr Glu Glu Ala Pro His Ser Arg Asn Ala Glu Gly
1 5 10 15
Phe Gly Asp Phe Glu Thr Asn Thr Asp Asn Asn Asn Ala Ser Leu Met
20 25 30
Pro Gly Ile Glu Glu Asp Ala Gly Ala Ser Lys Ala Phe Ala Ser Gly
35 40 45
Phe Arg Asp Asp Ala Thr Glu Phe Ile Met Gln Asp Thr Pro Val Ala
50 55 60
Ala Ser Asp Asn Ala Val Val Glu Glu Gly Arg Gly Asn Leu Thr Thr
65 70 75 80
Phe Lys Ser Trp Gly Thr Pro Val Thr Arg Asp Lys Pro Gly Met Lys
85 90 95
Ser Ile Phe Leu Ile Pro Leu Gly Gly Leu Val Tyr Ala Asn Met Thr
100 105 110
Ser His

<210> 36071
<211> 69
<212> PRT
<213> A.fumigatus

<400> 36071
Ile Ile Pro Ala Gln Thr Leu Gln Lys Leu Gln Ala Gln Val Ser Phe
1 5 10 15
Ser Gly Val Glu Asp Tyr Val Tyr Met Gln Ala Ala Pro Gln Leu Ser
20 25 30
Val Asp Val Leu Thr Met Pro Leu Thr Ala His Phe Leu Leu Val Leu
35 40 45
Arg Arg Tyr Arg Arg Asn Val Leu Pro Pro Gly Ile Ile Pro Leu Leu
50 55 60
Gly Ile Ala His Phe
65

<210> 36072
<211> 132
<212> PRT
<213> A.fumigatus

<400> 36072
Arg Ser Leu Phe Cys Gln His Arg Gly Asp Gln Phe Ala Gln Arg Ala
1 5 10 15
Lys Ala Ile Tyr Glu Ala Ser Leu Pro Arg Leu Lys Ala Pro Thr Leu
20 25 30
Val Tyr Leu Gln Gly Leu Ile Thr Leu Ala Phe Tyr Leu Tyr Ala Thr
35 40 45
Glu Pro Asp Ser Gln Gly Trp Leu Leu Ile Gly Thr Cys Ala Arg Leu
50 55 60
Ala Tyr Ala Leu Glu Leu Asp Lys Leu Asp Glu Asp Ser Glu Ala Val
65 70 75 80
Gln Ala Gln Met Gly Leu Pro Glu Glu Trp Ser Met Gln Glu Glu Arg
85 90 95
Arg Arg Ala Trp Trp Cys Ile Trp Glu Leu Asp Ala Phe Ala Ala Ala
100 105 110

```
Ile Ala Cys Arg Arg Pro Thr Ile Asp Lys Lys Lys His Ala Ser His
        115                 120                 125
Ala Ala Ser Ile
    130

<210> 36073
<211> 77
<212> PRT
<213> A.fumigatus

<400> 36073
Asn His Val Ser Lys Lys Gln Leu Gly Gly Leu Asp Thr Tyr Tyr Val
1               5                   10                  15
Ala Gly Val Arg Ser Leu Thr Gln Cys Lys Ser Val Cys Thr Leu Ala
            20                  25                  30
Ser Asp Ile Asn Thr Ser Ile Gly His Ser Ser Phe Ala Asp Ser Ser
        35                  40                  45
Met Leu Glu Arg His Val Asp His Tyr Gln Thr Leu Ser Thr Ala Phe
    50                  55                  60
Ser Pro Phe Trp Leu Arg Asp Leu Asn Phe Lys Leu Ala
65                  70                  75

<210> 36074
<211> 77
<212> PRT
<213> A.fumigatus

<400> 36074
Gly Ala Pro Asn Val Asn Lys Ala Ala His Glu Tyr Leu Phe Pro Ser
1               5                   10                  15
Cys Ser Ala Lys Asp Asp Tyr Ala Arg Glu Glu Asp Lys Gly Gly Val
            20                  25                  30
Arg Gly Gly Gly Gly Gly Gly Gly Gln Val Phe Ala Thr Ala Ser Asp
        35                  40                  45
Met Gln Asp Thr Tyr Cys Pro Ser Thr Thr Leu Asp Tyr Asn Ala Leu
    50                  55                  60
Leu Tyr Gly Ile Ser Ser Ala Val Phe Pro Gly Thr Cys
65                  70                  75

<210> 36075
<211> 172
<212> PRT
<213> A.fumigatus

<400> 36075
Val Phe Leu Phe Met Ala His Thr Ile Pro His Pro Arg Met Ser Leu
1               5                   10                  15
Arg Pro Leu Leu Ser Arg Leu Ile Pro Leu Pro Arg Pro Val Pro Pro
            20                  25                  30
Leu Ala Asp Thr Pro Arg Pro Pro Arg Gly Ser Arg Lys Asp Val Gly
        35                  40                  45
Pro Pro Arg Cys Arg Pro Cys Arg Thr Arg Glu Gly Gly Ser Arg Thr
    50                  55                  60
Asp Pro Arg Ser Lys Asn Pro Asp Pro Asp Pro Pro Arg Leu Pro Ser
65                  70                  75                  80
Asn Tyr Ser His Pro Gly Pro Tyr Pro Pro His Pro Arg Pro Ala Ala
```

```
                85                  90                  95
Lys Thr Pro Gln Thr Ser Gln Pro Gln Ala Pro Arg His Leu Leu Gln
            100                 105                 110
Gly Arg Pro Arg Pro His Arg Pro Arg Arg Leu Pro His Gly Leu Pro
        115                 120                 125
Ala Ala Leu Arg His Arg Arg Arg Pro Leu Leu Arg Pro Ala Pro Leu
    130                 135                 140
Arg Thr Ser Arg Pro His Leu Leu Asp Arg His Phe Leu Arg Leu Gly
145                 150                 155                 160
Leu His His Gly Ala Gly Arg Ala Ala Pro Leu Lys
                165                 170
```

<210> 36076
<211> 123
<212> PRT
<213> A.fumigatus

<400> 36076

```
Tyr Thr Val Leu Phe Glu Lys Thr Ile Asp Lys Leu Asn Arg Met Asp
1               5                   10                  15
Thr Gly Val Ile Gly Pro Val Thr Val Met Asp Ser Phe Val Ser Lys
            20                  25                  30
Phe Gly Ser Gln Ser Ala Thr Val His Gly Leu Ile Val Ser Ser Ile
        35                  40                  45
Leu Ile Pro Ala Ala Ile Ser Ser Phe Phe Ala Gly Tyr Leu Ala Asp
    50                  55                  60
Lys Leu Gly Arg Pro Thr Gly Ile Ser Ile Gly Ala Leu Ile Phe Gly
65                  70                  75                  80
Ile Gly Ala Ala Ile Glu Ser Ala Ala Ala Arg Leu Ala Met Phe Ile
                85                  90                  95
Val Gly Arg Cys Ile Glu Gly Ile Gly Glu Gly Leu Tyr Leu Gly Thr
            100                 105                 110
Leu Val Val Tyr Val Gln Phe Pro Asp His Lys
        115                 120
```

<210> 36077
<211> 212
<212> PRT
<213> A.fumigatus

<400> 36077

```
Asn Arg Tyr Ile Cys Glu Ile Ser Pro Thr Ser Val Arg Gly Ala Leu
1               5                   10                  15
Ala Thr Gly Pro Gln Leu Leu Ile Thr Leu Gly Leu Val Val Gly Phe
            20                  25                  30
Phe Thr Cys Tyr Gly Thr Ala Arg Leu Glu Ser Ser Phe Ser Trp Arg
        35                  40                  45
Thr Pro Tyr Leu Ile Leu Ala Cys Leu Ser Val Leu Phe Ser Ala Ala
    50                  55                  60
Ser Phe Leu Phe Leu Val Pro Ser Pro Arg Trp Leu Thr Leu His Gly
65                  70                  75                  80
Arg His Glu Glu Ala Ala Arg Thr Trp Asp Leu Leu Gly Val Gly His
                85                  90                  95
Ala Glu Arg Glu Lys Val Glu Val Glu Gln Thr Arg Glu Ala Arg Thr
            100                 105                 110
Gln Ile Gln Ile Leu Pro Ala Cys Pro Ala Thr Thr Leu Thr Pro Asp
```

```
        115                 120                 125
Leu Thr Pro His Thr Pro Ala Pro Pro Gln Arg Pro Leu Lys Leu Ala
    130                 135                 140
Ser His Lys Leu Leu Asp Ile Phe Ser Lys Asp Val Arg Ala Arg Thr
145                 150                 155                 160
Ala Leu Ala Val Phe Leu Met Gly Phe Gln Gln Leu Ser Gly Ile Asp
                165                 170                 175
Gly Val Leu Tyr Tyr Ala Pro Leu Leu Phe Glu Gln Ala Gly Leu Thr
            180                 185                 190
Ser Ser Thr Ala Thr Phe Phe Ala Ser Val Phe Thr Thr Gly Leu Glu
        195                 200                 205
Gly Pro Arg His
    210
```

<210> 36078
<211> 61
<212> PRT
<213> A.fumigatus

<400> 36078

```
Gln Thr Arg Phe Lys Glu Thr Phe Pro Lys Glu Asp Asn Glu Val Ala
1               5                   10                  15
Met Pro Phe Leu Asn Phe Asn Lys Ile Phe Leu Ile Gln Ala Leu Ala
            20                  25                  30
Leu Arg Val Phe Trp Ile Glu Met Pro Asn Thr Asp Ala Leu Thr Asp
        35                  40                  45
Pro Leu Ser Leu Ile Asn His Cys Met Glu Leu Leu Arg
    50                  55                  60
```

<210> 36079
<211> 91
<212> PRT
<213> A.fumigatus

<400> 36079

```
Cys Arg Leu Ser Ala Arg Tyr Leu Asp Glu Arg Val Ile Ile Gln Ala
1               5                   10                  15
Ser Ile Leu Cys Pro Ser Phe Ile Phe Leu Phe Leu Leu Asp Leu Gln
            20                  25                  30
Ser Ser Ser Ser Lys Leu Asn Ser Phe Met Lys His Ile Ser Lys Ser
        35                  40                  45
Ile Ser Phe Leu Arg Ser Phe Ser Tyr Leu Ser Ala Phe Thr Pro Ser
    50                  55                  60
Ala Arg Thr Ser Asn Phe Thr Pro Ala Ser Gln Gly Asp Ser Tyr Asn
65                  70                  75                  80
Thr His Asn Gly Asn Arg Asn Gly Lys Ala Pro
                85                  90
```

<210> 36080
<211> 135
<212> PRT
<213> A.fumigatus

<400> 36080

```
Ala Ser Ser Asp Leu Phe Leu Ile Cys Pro His Ser Pro Leu Arg Leu
1               5                   10                  15
```

```
Glu Arg Ala Ile Ser Pro Leu His Leu Arg Ala Thr Leu Ile Ile Arg
            20                  25                  30
Thr Met Ala Thr Ala Met Ala Lys Arg Leu Glu Gly Lys Thr Ile Val
        35                  40                  45
Ile Thr Gly Ala Ser Ser Gly Ile Gly Arg Ser Thr Ala Lys Glu Phe
    50                  55                  60
Ala Arg Thr Ser Pro Lys Ala Leu Lys Leu Ile Val Thr Ala Arg Arg
65                  70                  75                  80
Leu Asp Ser Leu Lys Gln Leu Ala Glu Glu Ile Lys Glu Glu Val Gly
                85                  90                  95
Asp Gly Val Lys Val Leu Pro Val Lys Leu Asp Val Ser Asn Pro Glu
            100                 105                 110
Glu Val Lys Asn Phe Val Pro Ser Leu Pro Ala Glu Phe Gln Asp Ile
        115                 120                 125
Asp Val Leu Val Asn Asn Ala
    130                 135

<210> 36081
<211> 81
<212> PRT
<213> A.fumigatus

<400> 36081
Leu Leu Tyr Ser Glu Leu Glu Asn Thr Ala Pro Arg Ile Gln Ser Asp
1               5                   10                  15
Tyr Lys Pro Glu His Gly Asp Leu Ile Glu Ala Gln Lys Arg Lys Arg
            20                  25                  30
Leu Arg Lys Glu Arg Arg Ile Lys Arg Ile Val Thr Val Ile Ala Gly
        35                  40                  45
Tyr Ala Ile Met Ala Trp Met Ala Tyr Leu Ile Val Val Thr Ala Arg
    50                  55                  60
Thr Ala Pro Lys Ile Trp Asp Pro Tyr Glu Ile Leu Gly Ile Ser Arg
65                  70                  75                  80
Val


<210> 36082
<211> 942
<212> PRT
<213> A.fumigatus

<400> 36082
Met Ala Lys Met Ala Asp Asn Asn Ala Gly Tyr Asn Leu Phe Glu Gln
1               5                   10                  15
Ser Asn Asn Phe Thr Ser Ser Glu Ser Ser Pro Asp Ala Glu Met Glu
            20                  25                  30
Asp Glu Ser Tyr His Ser Gly Ser Pro Asp Ala Glu Gly Val Gly Gly
        35                  40                  45
Tyr Ser Ala Thr Asp Ser Ser Glu Lys Gly Ser Ser Pro Ser Ser Ile
    50                  55                  60
Gly Asn Ser Ser Ser Ser Glu Ile Lys Arg Gly Ile Lys Arg Lys Ser
65                  70                  75                  80
Ser Ser Leu Ser Glu Ser Asp Phe Ile Arg Gln Asn Pro Asp Leu Tyr
                85                  90                  95
Gly Leu Arg Arg Ser Gly Arg Ala Arg Thr Thr Arg Gln Val Val Gln
            100                 105                 110
```

```
Ser Thr Ser Ser Glu Ser Glu Ser Val Val Arg Val Ser Arg Thr Lys
        115                 120                 125
Arg Arg Arg Pro Val Ala Ser Gln Arg Ser Ser Lys Arg Pro Ser Pro
    130                 135                 140
Pro Ala Ser Gln Ser Ser Tyr Ser Ala Glu Ser Asp Asp Asp Glu Tyr
145                 150                 155                 160
Gly Gly Pro Ser Arg Thr Ser Lys Ala Lys Arg Arg Arg Met Leu Gln
                165                 170                 175
Pro Ala Ser Asn Lys Glu Pro Ser His Ala Glu Ile Arg Phe Ser Thr
            180                 185                 190
Arg Thr Ala Ser Arg Arg Val Ser Asn Tyr Asn Glu Asp Asp Asp Asp
        195                 200                 205
Asp Met Phe Leu Asp Glu Ala Asp Glu Val Met Asp Asn Tyr Gln Ala
    210                 215                 220
Asn Thr Val Glu Asp Asp Arg Pro Ala Val Asp Val Val Leu Asn His
225                 230                 235                 240
Arg Pro Lys Glu Gly Val Ser Pro Gly Asp Ser Asp Val Asn Glu His
                245                 250                 255
Ser Phe Glu Phe Tyr Ile Lys Trp Gln Glu Lys Ser His Tyr His Ala
            260                 265                 270
Thr Trp Glu Thr Tyr Lys Phe Leu Ile Asp Asn Cys Arg Gly Thr Arg
        275                 280                 285
Arg Val Asp Asn Tyr Ile Arg Lys Val Leu Tyr Glu Glu Leu Arg Met
    290                 295                 300
Asn His Asp Gly Asp Ala Pro Pro Glu Glu Arg Glu Lys Trp Asn Leu
305                 310                 315                 320
Asp Arg Glu Arg Asp Val Glu Ala Ile Glu Asp Tyr Lys Gln Val Glu
                325                 330                 335
Arg Val Ile Ala Met Arg Asp Gly Asp Glu Gly Thr Glu Tyr Leu Val
            340                 345                 350
Lys Trp Lys Arg Leu Phe Tyr Asp Ser Cys Thr Trp Glu Ser Glu Ser
        355                 360                 365
Leu Val Ser Glu Ile Ala Gln Arg Glu Val Asp Arg Phe Leu Asp Arg
    370                 375                 380
Ser Ser His Pro Pro Leu Ser Asp Lys Thr Glu Met Asn Pro Ala Thr
385                 390                 395                 400
Arg Lys Pro Phe Glu Pro Ile Lys Gly Thr Pro Ser Phe Leu Gln Asn
                405                 410                 415
Gly Glu Leu Lys Asp Phe Gln Val Lys Gly Val Asn Phe Met Ala Phe
            420                 425                 430
Asn Trp Val Lys Asn Arg Asn Val Val Leu Ala Asp Glu Met Gly Leu
        435                 440                 445
Gly Lys Thr Val Gln Thr Val Ala Phe Ile Ala Trp Leu Arg His Val
    450                 455                 460
Arg Arg Gln Gln Gly Pro Phe Ile Val Val Val Pro Leu Ser Thr Met
465                 470                 475                 480
Pro Ser Trp Ala Glu Thr Phe Asp Asn Trp Thr Pro Asp Leu Asn Tyr
                485                 490                 495
Val Val Tyr Asn Gly Asn Glu Ala Ala Arg Thr Met Leu Lys Asp Tyr
            500                 505                 510
Glu Leu Met Ile Asp Gly Asn Pro Arg Arg Ala Lys Phe Asn Val Leu
        515                 520                 525
Leu Thr Thr Tyr Glu Tyr Val Leu Gln Asp Ser Thr Phe Leu Ser Gln
    530                 535                 540
Phe Lys Trp Gln Phe Met Ala Val Asp Glu Ala His Arg Leu Lys Asn
545                 550                 555                 560
```

```
Arg Asp Ser Gln Leu Tyr Gln Lys Leu Leu Glu Phe Lys Ser Pro Ala
                565                 570                 575
Arg Leu Leu Ile Thr Gly Thr Pro Ile Gln Asn Asn Leu Ala Glu Leu
            580                 585                 590
Ser Ala Leu Met Asp Phe Leu Asn Pro Gly Val Ile Asp Val Asp Val
        595                 600                 605
Asp Met Asp Leu Asn Ala Glu Ala Ala Ser Gln Lys Leu Ala Ala Leu
    610                 615                 620
Thr Asn Ala Ile Gln Pro Tyr Met Leu Arg Arg Thr Lys Ser Lys Val
625                 630                 635                 640
Glu Ser Asp Leu Pro Pro Lys Thr Glu Lys Ile Ile Arg Val Glu Leu
                645                 650                 655
Ser Asp Val Gln Leu Glu Tyr Tyr Lys Asn Ile Leu Thr Lys Asn Tyr
            660                 665                 670
Ala Ala Leu Asn Asp Gly Ala Gln Gly Gln Lys Gln Ser Leu Leu Asn
        675                 680                 685
Ile Met Met Glu Leu Lys Lys Ala Ser Asn His Pro Phe Met Phe Pro
    690                 695                 700
Asn Ala Glu Ala Lys Ile Leu Glu Gly Ser Thr Arg Arg Glu Asp Val
705                 710                 715                 720
Leu Arg Ala Leu Ile Thr Ser Ser Gly Lys Met Met Leu Leu Asp Gln
                725                 730                 735
Leu Leu Ala Lys Leu Lys Arg Asp Gly His Arg Val Leu Ile Phe Ser
            740                 745                 750
Gln Met Val Lys Met Leu Asp Leu Leu Gly Asp Tyr Met Glu Ser Arg
        755                 760                 765
Gly Tyr Ser Tyr Gln Arg Leu Asp Gly Thr Ile Pro Ala Ala Ser Arg
    770                 775                 780
Arg Leu Ala Ile Glu His Phe Asn Ala Pro Gly Ser Ser Asp Phe Cys
785                 790                 795                 800
Phe Leu Leu Ser Thr Arg Ala Gly Gly Leu Gly Ile Asn Leu Met Thr
                805                 810                 815
Ala Asp Thr Val Ile Leu Phe Asp Ser Asp Trp Asn Pro Gln Ala Asp
            820                 825                 830
Leu Gln Ala Met Ala Arg Ala His Arg Ile Gly Gln Thr Arg Pro Val
        835                 840                 845
Ser Val Tyr Arg Leu Val Ser Lys Asp Thr Val Glu Glu Glu Val Ile
    850                 855                 860
Glu Arg Ala Arg Asn Lys Leu Leu Leu Glu Phe Ile Thr Ile Gln Arg
865                 870                 875                 880
Gly Val Thr Asp Lys Glu Ala Ser Glu Ile Gln Asn Lys Met Ala Arg
                885                 890                 895
Ser Gly Ile Ser Val Ser Glu Pro Asn Ser Thr Glu Asp Ile Ser Arg
            900                 905                 910
Ile Leu Lys Arg Arg Gly Gln Lys Met Phe Glu Gln Thr Gly Asn Gln
        915                 920                 925
Gln Lys Val Phe Thr Thr Gly Val Glu Gly Gln Arg Trp Ser
    930                 935                 940
```

<210> 36083
<211> 77
<212> PRT
<213> A.fumigatus

<400> 36083
Ser Ile Glu Leu Ile Asp Gln Leu Pro Phe Thr Asn Tyr Thr His Lys

```
1               5                   10                  15
His Leu Phe Thr Tyr Gln Thr Asp Cys Lys Thr Gly Leu Pro Glu Glu
            20                  25                  30
Cys Ala Tyr Leu Leu Cys Pro Leu Pro Ser Cys Val Arg Ala Leu Pro
        35                  40                  45
Gly Pro Leu Asp Ile Ala His Ser Arg Ser Thr Phe His Ile Leu Ile
    50                  55                  60
Tyr Pro Ile Ala Leu Trp Val Leu Val Ile Leu Gln Ala
65                  70                  75
```

<210> 36084
<211> 677
<212> PRT
<213> A.fumigatus

<400> 36084

```
Tyr Ser Thr Arg Ser Gly Thr Leu Lys Leu Asn Ser Thr Ser Arg Ile
1               5                   10                  15
Asn Phe Val Ser Leu Thr Gly Gly Cys Pro Leu Leu Ser His Gly Glu
            20                  25                  30
Thr Glu Arg Gly Thr Lys Gly Gly His Arg Thr Ala Gln Gln Gln Ala
        35                  40                  45
Gly Gly His Leu Asn Asn Ser Gly Phe Pro Asp Ser Thr Ser Ser Ile
    50                  55                  60
His Arg Ser Gln Thr Ile Tyr Ile Pro Gln Pro Thr Thr Phe Val Ser
65                  70                  75                  80
Pro Val Pro Pro Phe Tyr Ser Ser Ser Cys Asp Thr Arg Pro Gly Arg
                85                  90                  95
Ser Pro Arg Gly Leu Val Ser Met His Ala Val Phe Pro Ser Ser Thr
            100                 105                 110
Ala Ser Thr Ala Thr Ser Gln Leu Ala Asp Pro Thr Pro Asn Pro Asp
        115                 120                 125
Ser Asn Asn Ser Asn Asp Pro Phe Ala Ser Gln Val Ser Ser Pro Pro
    130                 135                 140
Pro Pro Pro Pro Pro Arg Pro Ala Val Ser Val Ser Leu Pro Glu Asn
145                 150                 155                 160
Glu Pro Leu Pro Arg Arg Ile Lys Ser Lys Ser Ser Leu Arg Ser Ile
                165                 170                 175
Arg Ser Leu Gly Ser Ser His Gln Glu Asp Glu Gly Tyr Asp Ser Gln
            180                 185                 190
Asp Gln Ser Gly Leu Asp Lys Ser Leu Val Arg Pro Ser Ile Leu Arg
        195                 200                 205
Arg Leu Ser Pro Gly Leu Ala Ala Arg Val Lys Leu Leu Asp Gly Ser
    210                 215                 220
Ser Arg Val Ser Thr Pro Ser Arg Ser Pro Gly Asn Val Gly Arg Ile
225                 230                 235                 240
Pro Glu Glu Gln Ile Lys Glu Leu Asp Asn Leu His His Gln Asn Leu
                245                 250                 255
Ser Ile Lys Val Glu Arg Lys Gly Arg Ser Trp Asn Ala Leu Gln Ile
            260                 265                 270
Ala Gly Lys Lys Gln Asp Thr Gln Gln Thr Pro Ser Glu Ala Ser Glu
        275                 280                 285
Ile Leu Gln His Gly Ser Val Glu Arg Ser Gly Thr Pro Thr Asp Pro
    290                 295                 300
Gln Pro Ala Ala Pro Val Val Glu Asn Pro Lys Ser His Thr Ser Gly
305                 310                 315                 320
```

```
Pro Leu Glu Asn Ile Asp Pro Asp His Leu Pro Ala Ala Ala Val Ala
                325                 330                 335
Ser Pro Gln Glu Asp Ser Gln Glu Asp Ser Leu Asn Glu Glu Ala Val
            340                 345                 350
Asp Gln Thr Pro Ala Met Ser Ala Val Glu Gln Ser Gln Met Pro Leu
        355                 360                 365
Ala Ile Gly Ser Ala Thr Ala Ser Glu Thr Pro Asp Gln Thr Asp Phe
    370                 375                 380
Glu Arg Tyr Ile Gln Ser Thr Ser Asp Asn Glu Ala Gln Ser Pro Arg
385                 390                 395                 400
Pro Ser Pro Pro Pro Lys Asp Ser Pro Pro Leu Ser Ser Ser Ser Ser
                405                 410                 415
Asn Val Gln Ser Tyr Phe Asn Pro Lys Gly Leu Gln Arg Thr Glu Ser
            420                 425                 430
Ile Tyr Ser Phe Ser Arg Ala Ser Phe Ser Asn Gln Leu Ser Gln Leu
        435                 440                 445
Thr Ser Ile Thr Leu Pro Gln Pro Ser Ser Leu Ala Ala Ser Ile Ala
    450                 455                 460
Gly Ile Ser Asn Ala Pro Ala Ala Val Lys Ala Leu Thr Gly Ala Ala
465                 470                 475                 480
Glu Gln Ile Gln Ile Trp Ile Lys Lys Ala Ser Asp Val Leu Ser Gly
                485                 490                 495
Leu Asp Ala Glu Asp Asp Val Glu Trp Ala Ala Ala Gly Gly Arg Glu
            500                 505                 510
Gly Leu Glu Gly Val Asp Lys Ala Ile Thr Arg Phe Glu Ser Leu Val
        515                 520                 525
His Val Tyr Val Asn Ala Ile Glu Gln Val Gln Leu Arg Gln Asp Ile
    530                 535                 540
Gly Asn Val Ser Pro Asp Ser Leu Lys Thr Ile Val Val Gln Met Asp
545                 550                 555                 560
Ser Ile Ile Gln Ser Trp Ala Gln Ile Lys Gly Arg Leu Lys Gly Val
                565                 570                 575
Lys Glu Gln Val Glu Leu Ala Met Glu Trp Glu Glu Leu Trp Ala Asn
            580                 585                 590
Val Leu Gly Asp Val Gly Met Glu Ile Glu Ser Leu Ser Arg Leu Ile
        595                 600                 605
Phe Glu Met Glu Glu Lys Arg His Phe Thr Met Ala Asn Glu Gln Glu
    610                 615                 620
Gly Thr Ser Asn Gly Leu Asp Ile Asn Glu Leu Glu Thr Ile Val Glu
625                 630                 635                 640
Glu Thr Pro Ser Asn Gly Asp Met Ala Ser Lys Arg Phe Ser Met Gly
                645                 650                 655
Pro Phe Phe Ser Glu Ala Pro Pro Leu Gly Met Pro Ile Ile Gln Thr
            660                 665                 670
Ser Ser Pro Arg Gly
        675
```

<210> 36085
<211> 192
<212> PRT
<213> A.fumigatus

<400> 36085

```
Ser Ser Leu Ser Ile Pro Glu Leu Asn Leu Asp Leu Ser Asp Leu Ser
1               5                   10                  15
Ser Leu Phe Asn Trp Asn Thr Lys Gln Ile Phe Val Tyr Val Tyr Ala
```

```
            20                  25                  30
Ser Tyr Ser Ser Ser Asp Lys Lys Ser Ser Leu Ile Pro Asn Ser Glu
        35                  40                  45
Ser Ile Ile Trp Asp Thr Ile Ile Ser Ala Pro Glu Ser Pro Tyr Ser
    50                  55                  60
Phe Asn Ala Leu Leu Gln Arg Phe Phe Pro Thr Lys Ser Ser Ser Ser
65                  70                  75                  80
Pro Arg Lys Asn Gln Lys Arg Ser Val Ser Ala Ser Lys Lys Thr Ser
                85                  90                  95
Ala Ser Lys Lys Glu Thr Pro Ala Pro Gly Val Leu Arg Leu Ser Asn
            100                 105                 110
Gln Arg Ala Lys Tyr Gln Ile Ser Asp Ile Thr Gly Lys Leu Ala Glu
        115                 120                 125
Arg Lys Asn Val Thr Leu Ser Val Gly Trp Asn Val Gln Pro Trp Val
    130                 135                 140
Gly Ala Leu Trp Trp Ser Pro Gly Ser Gly Ala Val Pro Arg Thr Ala
145                 150                 155                 160
Gly Thr Val Val Ser Ser Glu Ala Phe Asp Phe Pro Pro Val Lys Gly
                165                 170                 175
Ser Lys Ala Ser Ala Thr Lys Ala Ala Ala Ser Gly Ala Gln Thr Ala
            180                 185                 190
```

<210> 36086
<211> 88
<212> PRT
<213> A.fumigatus

<400> 36086

```
Asp Lys Met Ala Ser Thr Ala Ser Met Leu Cys Leu Ile Leu Val Thr
1               5                   10                  15
Leu Phe Ser Lys Ser Pro Val Ala Leu His Tyr Thr Asp Glu Phe Pro
            20                  25                  30
Ser Ile Arg Arg Ser Leu Val Cys Leu Ile Asp Phe Leu Gln Ala Val
        35                  40                  45
Ser Ala Arg Lys Ile Thr Pro Leu Thr Trp Ile Trp Phe Gln Val Pro
    50                  55                  60
Pro Leu Gly Val Leu Met Ile Ser Gly Cys Ser Val Asp Phe Phe Ile
65                  70                  75                  80
Asn Ile Leu Leu Thr Ile Leu Gly
                85
```

<210> 36087
<211> 263
<212> PRT
<213> A.fumigatus

<400> 36087

```
Arg Ile Ser Arg Arg Val Ile Ala Glu Gln His Leu Ala Leu Thr Glu
1               5                   10                  15
Thr Phe Ser Ser Pro Trp His Phe Pro Gly Ser Gln Asp Arg Thr Asp
            20                  25                  30
Met Asn Ala Asp Phe Val Gly Glu Val Phe Leu Lys Cys Asn Ala Lys
        35                  40                  45
Glu Val Ile Glu Arg Cys Gly Lys Leu Ala Gln Asp Met Met Arg Gln
    50                  55                  60
Ser Ser Gly Thr Asp Lys Ile Pro Glu Ile Leu Val Gln Gly His Leu
```

65 70 75 80
Asp Ala Thr Phe Pro Tyr Ile Leu Ser His Leu Glu Tyr Ile Ile Gly
85 90 95
Glu Phe Leu Arg Asn Ser Ile Gln Ala Val Ile Glu Lys Tyr Lys Glu
100 105 110
Ser Phe Glu Lys Pro Pro Pro Ile Glu Val Leu Ile Cys Glu Ala Pro
115 120 125
Gln His Val Ile Met Arg Val Ser Asp Gln Gly Gly Gly Ile Pro Arg
130 135 140
Glu Val Met Pro Tyr Leu Trp Ser Phe Asp Lys Gly Pro Leu Ser Lys
145 150 155 160
Ser Arg Leu Gln Asn Leu Lys Gln Val Pro Ala Met Ala Ala Thr Met
165 170 175
Gln Glu Leu Thr Val Ser Lys Glu Arg Lys His Ala Asp Arg Glu Thr
180 185 190
Tyr Arg Glu Gly Ser Leu Asp Ser Leu Thr Ser Arg Pro Pro Asn Leu
195 200 205
Arg Leu Gly Ile Gly Leu Pro Met Ser Arg Val Tyr Ala Glu Tyr Trp
210 215 220
Ala Gly Ser Leu Glu Leu His Ser Leu Glu Gly Tyr Gly Val Asp Ala
225 230 235 240
Phe Leu Gln Ile Ser Lys Leu Gly Asn Lys Asn Glu Gln Val Thr Thr
245 250 255
Arg Ala Ser Ile Asp Ala Val
260

<210> 36088
<211> 290
<212> PRT
<213> A.fumigatus

<400> 36088
Arg Pro Pro Ser Leu Pro Val Asp Cys Arg Glu Leu Cys Cys Ile His
1 5 10 15
Leu Ala Met Ala Ser Gln Ser Pro Asn Tyr Leu Gly Leu Ser Gly Arg
20 25 30
Ala Leu His Trp Ala Gln Val Ala Leu Val Gly Ala Pro Ala Phe Ile
35 40 45
Val Phe Gly Tyr Asn Gln Ala Gly Val Gly Pro Leu Ala Thr Leu Gln
50 55 60
Ser Trp Val Lys Thr Phe Pro Gln Ile Asp Thr Ile Asn Thr Thr Gly
65 70 75 80
Ser Leu Glu Ala His Asn Ser Thr Ser Lys Gly Ala Val Ile Ala Ser
85 90 95
Phe Gln Ile Gly Ala Leu Ile Gly Ala Leu Ser Cys Thr Leu Ile Ser
100 105 110
Asp Arg Leu Gly Arg Arg Lys Thr Ile Phe Leu Gly Ser Ile Leu Thr
115 120 125
Ile Ile Gly Glu Val Leu Gln Val Ala Ser Tyr Gly Leu Val Gln Phe
130 135 140
Val Ile Gly Arg Ile Ile Leu Gly Met Gly Val Gly Gln Tyr Ser Val
145 150 155 160
Ala Val Pro Val Trp Gln Ser Glu Cys Ser Ser Ala Lys Asn Arg Gly
165 170 175
Gln His Val Ile Ile Asp Gly Ile Phe Met Cys Leu Gly Tyr Ser Leu
180 185 190

```
Cys Asn Trp Ile Asp Phe Gly Leu Ser Arg Ile Pro Gln Ser Thr Thr
        195                 200                 205
Gln Trp Arg Val Pro Leu Ala Leu Ser Leu Leu Pro Ala Leu Val Ile
    210                 215                 220
Leu Leu Ser Val Phe Leu Leu Pro Glu Ser Pro Arg Trp Leu Val Gln
225                 230                 235                 240
Val Asn Arg Ala Glu Glu Ala Thr His Ser Leu Ala Ser Leu Lys Gly
                245                 250                 255
Leu Pro Ala Asn Asp Glu Ala Ile Arg Ala Glu Ile Ser Gly Ile Glu
            260                 265                 270
Ser Ser Leu Glu Leu Thr Ala Ser Ser Thr Thr Gly Ala Gly Arg Thr
        275                 280                 285
Arg Ala
    290
```

<210> 36089
<211> 161
<212> PRT
<213> A.fumigatus

```
<400> 36089
Ala Gln Ser Arg Met Leu Pro Ala Arg Gly Glu Asn Cys Ile Phe Arg
1               5                   10                  15
Gly Thr Glu Ser Pro Leu Arg Arg Cys Lys Thr Gly Asp Leu Asp Trp
            20                  25                  30
Val Ile Ile Arg Glu Asn Ser Glu Gly Glu Tyr Ala Gly Gln Gly Gly
        35                  40                  45
Arg Ser His Arg Gly Lys Ala Trp Glu Val Ala Thr Glu Thr Ala Ile
    50                  55                  60
Phe Ser Arg His Gly Val Glu Arg Ile Met Arg Phe Ala Phe Glu Thr
65                  70                  75                  80
Ala Gln Lys Arg Pro Arg Lys Leu Leu Thr Val Val Thr Lys Ser Asn
                85                  90                  95
Ala Gln Arg Asn Gly Met Val Leu Trp Asp Glu Val Ala Ala Glu Val
            100                 105                 110
Ala Arg Asp Phe Pro Asp Val Thr Val Asp Lys Met Leu Val Asp Ala
        115                 120                 125
Met Thr Thr Arg Met Val Leu Lys Pro Glu Thr Leu Asp Thr Ile Val
    130                 135                 140
Ala Thr Asn Leu Val Ser Asp Leu Pro Asp Ser Asp Ser Ala Ile Leu
145                 150                 155                 160
Pro
```

<210> 36090
<211> 122
<212> PRT
<213> A.fumigatus

```
<400> 36090
Arg Trp Asp Asn Leu Gln His Ala Asp Ile Leu Ser Asp Leu Ala Ala
1               5                   10                  15
Ala Leu Ala Gly Ser Ile Gly Ile Ala Pro Thr Ser Asn Leu Asp Pro
            20                  25                  30
Thr Arg Glu Asn Pro Ser Met Phe Glu Pro Ile His Gly Ser Ala Phe
        35                  40                  45
```

```
Asp Ile Thr Gly Lys Gly Ile Ala Asn Pro Val Ala Thr Phe Trp Thr
    50                  55                  60
Ala Ala Glu Met Leu Ala Trp Leu Gly Glu Glu Asp Ala Ala Lys Lys
65                  70                  75                  80
Leu Leu Asn Cys Val Glu Asp Val Cys Glu Met Gly Ile Leu Thr Pro
                85                  90                  95
Asp Leu Gly Gly Asn Ala Thr Thr Arg Glu Val Thr Glu Ala Val Val
            100                 105                 110
Gly Gln Ile Arg Lys Leu Ala Ala Ala Gln
        115                 120
```

<210> 36091
<211> 136
<212> PRT
<213> A.fumigatus

<400> 36091

```
Leu Pro Ser Leu Asn Leu Phe Ser Ser Asp Arg Ile Leu Asn Ile Ile
1               5                   10                  15
Pro Ser Leu Leu Cys Ser Gly Gln Leu Pro Asn Leu Pro His His Gly
            20                  25                  30
Leu Gly Asp Leu Pro Cys Gly Gly Ile Ser Pro Gln Ile Gly Ser Glu
        35                  40                  45
Asn Pro His Leu Thr His Ile Leu Asp Ala Val Gln Lys Leu Leu Arg
    50                  55                  60
Cys Ile Phe Leu Ser Gln Pro Gly Gln His Phe Arg Ser Arg Pro Lys
65                  70                  75                  80
Arg Arg Asp Gly Val Arg Asn Ala Leu Thr Arg Asp Val Lys Cys Arg
                85                  90                  95
Pro Val Asp Arg Leu Glu His Ala Gly Ile Leu Pro Arg Gly Val Gln
            100                 105                 110
Val Arg Gly Arg Gly Asn Pro Asp Gly Pro Ser Gln Arg Cys Ser Glu
        115                 120                 125
Val Gly Glu Asp Val Cys Met Leu
    130                 135
```

<210> 36092
<211> 137
<212> PRT
<213> A.fumigatus

<400> 36092

```
Ile Cys Phe Arg Gln Thr Ala Phe Ser Thr Ser Ser Pro Ala Tyr Cys
1               5                   10                  15
Ala Ala Ala Asn Phe Arg Ile Cys Pro Thr Thr Ala Ser Val Thr Ser
            20                  25                  30
Leu Val Val Ala Phe Pro Pro Arg Ser Gly Val Arg Ile Pro Ile Ser
        35                  40                  45
His Thr Ser Ser Thr Gln Phe Arg Ser Phe Phe Ala Ala Ser Ser Ser
    50                  55                  60
Pro Ser Gln Ala Ser Ile Ser Ala Ala Val Gln Asn Val Ala Thr Gly
65                  70                  75                  80
Phe Ala Met Pro Leu Pro Val Met Ser Asn Ala Asp Pro Trp Ile Gly
                85                  90                  95
Ser Asn Met Leu Gly Phe Ser Arg Val Gly Ser Arg Phe Glu Val Gly
            100                 105                 110
```

```
Ala Ile Pro Met Asp Pro Ala Ser Ala Ala Ala Arg Ser Glu Arg Met
        115                 120                 125
Ser Ala Cys Cys Arg Leu Ser His Arg
    130                 135

<210> 36093
<211> 375
<212> PRT
<213> A.fumigatus

<400> 36093
Gly Leu Gln His Ala Arg Glu Thr Val Asn Thr Phe Gly Val Phe Gln
1               5                   10                  15
Thr Phe Tyr Glu Ile Glu Leu Leu Lys Asp Gln Ser Ser Ser Asn Val
            20                  25                  30
Ser Trp Val Gly Ala Ile Gln Ala Phe Leu Leu Leu Val Val Gly Val
        35                  40                  45
Val Thr Gly Pro Leu Tyr Asn Ala Gly Tyr Phe Tyr Val Leu Gly Thr
    50                  55                  60
Thr Gly Ser Val Leu Ile Val Val Gly Phe Met Ala Leu Ser Val Cys
65                  70                  75                  80
Thr Glu Tyr Trp Gln Val Leu Leu Ala Gln Ala Phe Cys Val Gly Val
                85                  90                  95
Gly Asn Gly Cys Leu Tyr Ile Pro Ser Val Ala Ile Ile Pro Gln Tyr
            100                 105                 110
Phe Ser Ser Arg Lys Ala Ile Ala Thr Ala Val Ala Ala Ser Gly Ser
        115                 120                 125
Thr Leu Gly Gly Val Leu Tyr Pro Ile Met Phe Arg Gln Leu Gln Pro
    130                 135                 140
Gln Thr Gly Phe Gly Trp Ala Ala Arg Val Leu Gly Phe Leu Val Leu
145                 150                 155                 160
Gly Thr Thr Leu Phe Ser Pro Ser Val Met Ser Val Arg Gln Val Pro
                165                 170                 175
Lys Gln Arg Arg Thr Leu Ile Glu Phe Ser Ala Phe Lys Lys Val Pro
            180                 185                 190
Cys Thr Leu Phe Cys Val Ala Met Phe Phe Gly Tyr Ile Gly Phe Phe
        195                 200                 205
Asn Pro Ile Phe Tyr Ile Glu Ala Phe Ala Ile Gln Lys His Ala Met
    210                 215                 220
Gly Glu Thr Leu Ala Phe His Leu Ile Ser Ile Leu Asn Ala Thr Ser
225                 230                 235                 240
Val Pro Gly Arg Ile Val Pro Gly Leu Leu Gly Leu Arg Phe Gly Pro
                245                 250                 255
Leu Asn Ile Leu Leu Gly Ser Ala Ile Ile Ser Gly Ile Leu Ser Leu
            260                 265                 270
Cys Trp Ile Ala Ile Tyr Asn Ala Gly Ala Leu Ile Val Leu Ala Val
        275                 280                 285
Leu Tyr Gly Phe Ser Gly Ala Phe Val Ser Leu Leu Ala Val Ala Leu
    290                 295                 300
Thr Thr Leu Asn Pro Asn Leu Gln Thr Leu Arg Thr Arg Met Gly Met
305                 310                 315                 320
Cys Ser Leu Leu Cys Gly Phe Gly Ser Leu Cys Arg Ala Pro Val Ala
                325                 330                 335
Gly Ala Ile Leu Asp Asn Thr Arg Ser Tyr Leu Gly Val Gln Leu Tyr
            340                 345                 350
Ser Gly Leu Thr Ile Gly Thr Thr Gly Val Leu Leu Phe Phe Ala Asn
```

```
        355                 360                 365
His Leu Lys Arg Arg Thr Asn
    370                 375

<210> 36094
<211> 178
<212> PRT
<213> A.fumigatus

<400> 36094
Cys Phe Glu Arg Lys Pro Ala Thr Ala Ser Tyr Tyr Asp Trp Tyr Asn
1               5                  10                  15
Thr Asn Pro Gly Pro Val Gly Tyr Leu His Ile Cys Ser Pro Phe Ala
            20                  25                  30
Leu Gly Thr Phe Ser Arg Phe Thr Arg Gln Asn Ile Lys Leu Thr Asn
        35                  40                  45
Gly Thr Glu Ile Pro Thr Gly Thr Pro Val Met Val Thr Asn Asp Val
    50                  55                  60
Ala Gly Asp Ala Ala Ile Tyr Pro Asp Pro Glu Val Phe Asp Gly Tyr
65                  70                  75                  80
Arg Tyr Leu Arg Met Arg Glu Gly Ala Asp Lys Ala Arg Ala Pro Phe
                85                  90                  95
Thr Thr Thr Gly Gln Asn His Leu Gly Phe Gly Tyr Gly Lys Tyr Ala
            100                 105                 110
Cys Pro Gly Arg Phe Phe Ala Ala Thr Glu Ile Lys Ile Ala Leu Cys
        115                 120                 125
His Met Leu Leu Lys Tyr Glu Trp Arg Leu Val Lys Asp Ser Pro His
    130                 135                 140
Asp Met Leu Thr Ser Gly Phe Ala Ser Phe Arg Asp Pro Arg Ala Arg
145                 150                 155                 160
Ile Glu Val Arg Ser Arg Ala Pro Asp Pro Gln Glu Val Val Leu Thr
                165                 170                 175
Ile Lys


<210> 36095
<211> 212
<212> PRT
<213> A.fumigatus

<400> 36095
Pro Ile Ile Ile Gln Asn Leu Leu His Phe Ile Ser Ile Pro His Pro
1               5                  10                  15
Phe Lys Asp Lys Thr Ala Ala Ala Met Asp Gly Trp Ser Asp Leu Ser
            20                  25                  30
Ser Ala Pro Pro Gln Tyr Arg Glu Val Ala Gly Ile Ala Asp Trp Ala
        35                  40                  45
Leu Leu Ala Gln Gly Leu Gly Trp Ser Ile Asn Tyr Leu Ala Met Ile
    50                  55                  60
Tyr His Ser Tyr Lys Asp Arg Thr Tyr Gly Met Ala Ile Leu Pro Leu
65                  70                  75                  80
Cys Cys Asn Phe Ala Trp Glu Phe Val Tyr Ser Val Ile Tyr Pro Ser
                85                  90                  95
His Asn Ser Ala Glu Arg Ala Val Leu Thr Thr Trp Met Ile Leu Asn
            100                 105                 110
Leu Phe Val Met Tyr Thr Ala Ile Lys Phe Ala Pro Asn Glu Trp Gln
```

```
        115                 120                 125
His Ala Pro Leu Val Arg Gln Cys Leu Pro Trp Ile Phe Pro Val Ala
    130                 135                 140
Ile Ala Ala Phe Thr Ala Gly His Leu Ala Leu Ala Ala Thr Val Gly
145                 150                 155                 160
Val Ser Lys Ala Ala Asn Trp Gly Ala Phe Leu Cys Phe Glu Leu Leu
                165                 170                 175
Thr Ser Gly Ala Val Cys Gln Leu Met Ser Arg Gly Ser Ser Arg Gly
            180                 185                 190
Ala Ser Tyr Thr Ile Trp Ser Val Leu Phe Ala Leu Leu Ile Leu Arg
        195                 200                 205
Gln Pro Ser Asn
    210
```

<210> 36096
<211> 216
<212> PRT
<213> A.fumigatus

<400> 36096

```
Pro Gly Ser Phe Leu Asp Trp Thr Glu Val Thr Leu Leu Pro Ser Met
1               5                   10                  15
Leu Gly Leu Ile Ala Arg Val Ser Ser Leu Ile Phe Val Gly Glu Pro
            20                  25                  30
Leu Cys Arg Asp Pro Ala Trp Leu Glu Thr Val Val Asn Phe Thr Ile
        35                  40                  45
Val Arg His Gln Ala Ile Leu Ala Leu His Met Cys Pro Ala Val Leu
    50                  55                  60
Arg Pro Val Leu His Trp Phe Leu Pro Pro Cys Gln Lys Leu Arg Arg
65                  70                  75                  80
Glu Ile Lys Thr Ala Arg Ser Leu Ile Asn Ser Ala Leu Glu Glu Leu
                85                  90                  95
Arg Lys Asn Pro Pro Thr Asp Arg Phe Ser Ser Leu Ala Trp Val Asp
            100                 105                 110
Ala Phe Ala Ser Gly Lys Lys Tyr Asp Ala Thr Met Val Gln Leu Arg
        115                 120                 125
Leu Ala Asn Ala Ser Ile His Ser Ser Ala Asp Leu Leu Ala Lys Val
    130                 135                 140
Leu Ile Asn Leu Cys Glu Gln Pro Gly Leu Ile Gln Asp Leu Arg Asp
145                 150                 155                 160
Glu Val Ile Ser Val Leu Glu Glu Asn Gly Trp Arg Ala Ser Thr Leu
                165                 170                 175
Asn Gln Leu Lys Leu Leu Asp Ser Val Leu Lys Glu Ser Gln Arg Leu
            180                 185                 190
His Pro Ile Thr Thr Gly Thr Ile Gln Ile Leu Gly Pro Ser Asp Thr
        195                 200                 205
Cys Thr Phe Ala His Arg Leu Leu
    210                 215
```

<210> 36097
<211> 81
<212> PRT
<213> A.fumigatus

<400> 36097

```
Arg Ala Ser Gln Ser Pro Val Phe Gly Val Val Thr Asp Leu Gly Pro
```

```
1               5                   10                  15
Lys Leu Val Val Ser Gly Ala Phe Ile Glu Asp Phe Lys Asp Glu Lys
            20                  25                  30
Leu Leu Asp His Tyr Arg Ala Met Val Glu Asp Phe Met Ala Glu Val
        35                  40                  45
Pro Gly Phe Glu Ser Met Phe Leu Gly Asn Leu His Asn Thr Val Leu
    50                  55                  60
Arg Asp Val Ile Ser Val Ile Thr Arg Glu Leu Gly Asp Cys Ser Pro
65                  70                  75                  80
Leu
```

<210> 36098
<211> 965
<212> PRT
<213> A.fumigatus

<400> 36098

```
Pro Leu Arg Arg Met Asn Gln Met His Leu Ala Met Thr Thr Leu Ser
1               5                   10                  15
Thr Leu Leu Leu Ser Leu Glu Leu Leu Val Asn Ser Pro Val Gln Arg
            20                  25                  30
Leu Cys Ser Asn Ser Gly Ser Ser Ser Glu Gln Glu Ala Gln Trp Trp
        35                  40                  45
Gly Glu Leu Leu Glu Gly Arg Ile Ala Leu Asp Lys Lys Ser Leu Arg
    50                  55                  60
Lys Pro Pro Arg Glu Glu Pro Leu Arg Gly Asn Phe Leu Ser Arg Ala
65                  70                  75                  80
Gly His Phe Asp His Gly Leu Phe Gly Leu Ser Gln Arg Glu Ala Arg
                85                  90                  95
Tyr Met Asp Pro Gln Gln Arg Ile Ala Leu Gln Val Ala Tyr His Ala
            100                 105                 110
Val Glu Ser Ser Glu Tyr Phe Arg Ser Gly Ile Lys Asp Lys Asn Val
        115                 120                 125
Gly Cys Tyr Val Gly Val Gly Gly Ser Asp Tyr Asp His Asn Val Cys
    130                 135                 140
Ser His Ala Pro Thr Ala Phe Ser Phe Thr Gly Thr Ala Arg Ala Phe
145                 150                 155                 160
Val Ser Gly Arg Ile Ser His His Phe Gly Trp Thr Gly Pro Ser Met
                165                 170                 175
Thr Ile Asp Thr Ala Cys Ser Ser Ser Ala Val Ala Ile His Gln Ala
            180                 185                 190
Cys Lys Asp Ile Arg Met Gly Glu Cys Arg Met Ala Leu Ala Gly Gly
        195                 200                 205
Val Asn Ile Ile Ser Cys Pro Asn Met Gln Gln Asn Leu Ala Ala Ala
    210                 215                 220
Arg Phe Leu Ser Pro Thr Gly Gly Pro Cys Arg Pro Phe Asp Ala Phe
225                 230                 235                 240
Ala Asp Gly Tyr Cys Arg Gly Glu Gly Cys Gly Phe Val Met Leu Lys
                245                 250                 255
Lys Leu Ser Cys Ala Val Ala Asp Lys Asp Glu Ile Leu Gly Val Ile
            260                 265                 270
Val Gly Ser Ala Ala Asn His Cys Asp Gly Asn Asp Ala Ile Thr Val
        275                 280                 285
Pro Lys Ser His Ser Gln Ile Asp Leu Tyr Arg Lys Ala Leu Ser Leu
    290                 295                 300
```

```
Ala Ala Met Gln Pro Lys Asp Ile Thr Tyr Val Glu Ala His Gly Thr
305                 310                 315                 320
Gly Thr Ser Arg Gly Asp Pro Val Glu Cys Arg Ser Ile Arg Gln Val
                325                 330                 335
Phe Gly Gly Glu Arg Pro Thr Leu His Phe Gly Ser Val Lys Ala Asn
            340                 345                 350
Val Gly His Thr Glu Ala Ala Ser Gly Ile Ala Gly Leu Leu Lys Val
        355                 360                 365
Leu Leu Met Ile Arg Asn Gln Arg Ile Pro Pro Gln Ala Asn Phe Thr
    370                 375                 380
Gln Leu Asn Ser Ser Ile Pro Pro Leu Glu Pro Asp Asn Leu Ser Ile
385                 390                 395                 400
Thr Thr Asn Glu Leu Glu Trp Lys Ala Thr Phe Arg Ala Ala Cys Val
                405                 410                 415
Asn Asn Tyr Gly Ala Ala Gly Asn Asn Thr Ala Val Ile Val Cys Glu
            420                 425                 430
Pro Pro Arg Leu Lys Pro Ser Ala Gly Asn Asn His Ile Leu Ser Gly
        435                 440                 445
Tyr Pro Phe Leu Ile Thr Gly Gln Ser Gly Arg Ser Leu Lys Met Tyr
    450                 455                 460
Cys Thr Ala Leu Gly Glu Trp Leu Glu Asn Thr Asp Ala Pro Leu Ser
465                 470                 475                 480
Asp Ile Ala Phe Ser Val Thr Arg Arg Gln Asn Arg Thr Leu Arg Arg
                485                 490                 495
Arg Ile Thr Phe Ala Ala Arg Ser Leu Lys Asp Met Lys Asn Ile Leu
            500                 505                 510
Gly Gln Gln Ala Arg Leu Asp Gln Gln Ser Ser Pro Ser Pro Lys Pro
        515                 520                 525
Lys Pro Val Val Leu Val Phe Ala Gly Gln Thr Gly Asn Val Val Tyr
    530                 535                 540
Leu His Lys Asp Ala Tyr Glu Gly Ser Ser Leu Leu Arg Ser His Ile
545                 550                 555                 560
Asp Glu Cys Asp Lys Ile Leu Arg Glu Met Gly Leu Arg Gly Leu Ile
                565                 570                 575
Ala Phe Leu Phe Asp Gln Gln Pro Ile Glu Asp Val Val Leu Leu His
            580                 585                 590
Cys Leu Phe Phe Ser Leu Gln Tyr Ala Cys Ala Ala Ala Trp Leu Asp
        595                 600                 605
Ala Gly Leu Pro Val Gln Arg Val Ile Gly His Ser Ile Gly Gln Phe
    610                 615                 620
Thr Ala Met Cys Ile Ser Gly Val Thr Thr Leu Ala Asp Thr Leu Lys
625                 630                 635                 640
Ile Val Ala Gly Arg Ala Arg Leu Ile Gln Gln Lys Trp Ala Lys Glu
                645                 650                 655
Arg Gly Cys Met Leu Ala Ile Glu Ala Asp Arg Gln Gly Ala Leu Glu
            660                 665                 670
Leu Ala Arg Ser Val Pro Gly His Lys Ile Glu Val Ala Cys Phe Asn
        675                 680                 685
Gly Ala Arg Asn His Val Leu Val Gly Thr Glu Val Ala Ile Gln Thr
    690                 695                 700
Leu Glu Ala Lys Thr Ser Cys Lys Thr Arg Arg Leu Lys Thr Thr His
705                 710                 715                 720
Gly Phe His Ser Glu Leu Val Asp His Trp Leu Asp Asp Tyr Met Ala
                725                 730                 735
Leu Ala Gln Ser Ile Thr Tyr Ala Thr Pro Ile Ile Pro Ile Glu Thr
            740                 745                 750
```

```
Cys Ser Glu Gly Gly Ser Trp Lys Glu Phe Thr Pro Glu Met Leu Pro
        755                 760                 765
Arg His Ser Arg Glu Ala Val Tyr Phe Phe Asp Ala Ile Ser Arg Val
    770                 775                 780
Asp Lys Glu Leu Gly Pro Cys Thr Trp Val Glu Gly Gly Val Gly Ser
785                 790                 795                 800
Lys Gly Ile Ala Leu Val Lys Cys Ala Leu Gly Thr Asn Thr Ser Gly
                805                 810                 815
His Ser Phe His Arg Leu Gln Leu Asp Ser Ser Glu Pro Leu Ala Ser
            820                 825                 830
Leu Thr Asp Thr Thr Ile Gln Met Trp Asp Glu Gly Val Asp Val Gln
        835                 840                 845
Phe Trp Leu Tyr His Asp Thr Glu Lys Ile Thr Phe Asp Ser Cys Asp
    850                 855                 860
Val Pro Ala Tyr Gln Phe Asp Glu Thr Glu Phe Trp Leu Leu Arg Ser
865                 870                 875                 880
Asp Gln Ala Arg Gln Ser Asp Leu Gln Arg Gly Arg Val Ile Ser Asp
                885                 890                 895
Arg Tyr Lys Pro Leu Val Tyr Leu Leu Arg Asp Glu Gly Phe Arg Gly
            900                 905                 910
Glu Pro Arg Lys Leu His Phe Gly Val Asn Gln Tyr His Pro Asp Phe
        915                 920                 925
Asp Arg Tyr Leu His Gly Arg Glu Val Leu Gly Glu Val Leu Cys Pro
    930                 935                 940
Val Ser Val Phe Val Glu Leu Ala Ala Thr Phe Ser Pro Ser Gly Lys
945                 950                 955                 960
Ala Pro His Cys Ile
                965

<210> 36099
<211> 211
<212> PRT
<213> A.fumigatus

<400> 36099
Val Tyr Ile Ser Val Glu Leu Asp Asn Arg Ser Ile Thr Val Thr Ala
1               5                   10                  15
Lys Gln Ser Gln Val Ser Leu Leu Arg Gly Asp Leu Ala Ala Arg Gly
            20                  25                  30
Ala Lys Leu Thr Arg Ile Pro Ile Tyr Gly Arg Tyr His Ser Arg Thr
        35                  40                  45
His Ala Glu Ile Leu Gln Asp Leu Leu Glu Ile Cys Ser Asn Asp Glu
    50                  55                  60
Ser Leu Arg Phe Pro Ile Ile Ser Ala Pro Ile Val Pro Leu Arg Asn
65                  70                  75                  80
Asn Thr Thr Gly Gly Leu Ile Thr Ser Ala Glu Lys Leu His Glu Leu
                85                  90                  95
Ala Leu Lys Cys Met Leu Thr Glu Pro Ala Asp Trp Tyr Ser Thr Met
            100                 105                 110
Ser Glu Thr Val Ser Ser Leu Met Leu Gln Pro Val Ile Asn Glu His
        115                 120                 125
Pro Leu Ile Leu Glu Leu Gly His Val Ser Cys Leu Pro Arg Ser Leu
    130                 135                 140
Thr Ala Ser Ala Asn Ile Arg Ala Phe Thr Pro Leu Leu Thr Leu Thr
145                 150                 155                 160
Ala Ser Pro Asn Glu Pro Asp Ala Ser Arg Tyr Asp Tyr Pro Glu His
```

```
                165                 170                 175
Ser Ile Ala Val Ile Gly Ala Ala Cys Lys Phe Thr Gly Ala Glu Thr
            180                 185                 190
Met Gln Gln Phe Trp Glu Leu Ile Arg Ala Gly Gly Thr Met Val Gly
        195                 200                 205
Gly Thr Ser
    210
```

<210> 36100
<211> 78
<212> PRT
<213> A.fumigatus

<400> 36100

```
Met Gly Phe Gly Pro Asp Lys Thr Arg Val Asn Asp Ser Asp Leu Val
1               5                   10                  15
Gln Pro Pro Lys Phe Ala Gln Thr Gln Arg Gln Lys Leu Phe Arg Phe
            20                  25                  30
Lys Cys Ser Ala Asp Pro Thr Thr Trp Arg Leu Lys Pro Ser Leu Thr
        35                  40                  45
Ile Ser Ala Glu Met Lys Asp Thr Phe Ala Arg Asn Thr Leu Ala Asp
    50                  55                  60
Ile Asp Cys Gln Ser Asn Thr Ile Leu Thr Glu Ser Ala Arg
65                  70                  75
```

<210> 36101
<211> 236
<212> PRT
<213> A.fumigatus

<400> 36101

```
His Leu Trp Phe Leu Ala Asn Phe Val Ser Ser Ser Val Gln Val Arg
1               5                   10                  15
Gln Lys Val Pro His Lys Arg Thr Phe Leu Tyr Leu Glu Gln Leu Ile
            20                  25                  30
Leu Lys His Asn Ala His Gln Asp Thr Val Asn Ile Lys Glu Ala Lys
        35                  40                  45
Asp Gly Leu Asp Phe Phe Phe Ala Gln Arg Asn His Ala Glu Lys Met
    50                  55                  60
Val Asp Phe Leu Ser Ser Val Ala Pro Ile Lys Val Lys Lys Ser Gln
65                  70                  75                  80
Glu Leu Ile Ser Met Asp Ile His Thr Ser Thr Lys Ser Tyr Lys Phe
                85                  90                  95
Thr Phe Ser Val Glu Leu Val Pro Ile Cys Lys Asp Asp Leu Val Ala
            100                 105                 110
Leu Pro Ile Lys Leu Ala Arg Ser Leu Gly Asn Ile Ser Pro Leu Ala
        115                 120                 125
Leu Cys His Arg Val Ser Thr Ser Val Asn Leu Ile Asp Pro Asn Thr
    130                 135                 140
Leu Gln Thr Ala Glu Val Pro Thr Ala Val Tyr Trp Arg Ala Pro Phe
145                 150                 155                 160
Lys Asn Leu Ala Asp Val Thr Glu Leu Val Glu Phe Ile Ile Met Asp
                165                 170                 175
Ile Glu Pro Val Gly Arg Ser Asn Gly Arg Phe His Leu Ala Glu Ala
            180                 185                 190
Thr Val Ala Arg Ala Ser Asp Leu Gly Ser Asn Asn Gln Thr Tyr Phe
```

```
        195                 200                 205
Thr Arg Thr His Leu Gly Gly Ile Leu His Val Gly Asp Ser Ala Ser
    210                 215                 220
Ser Thr Thr Gly Ser Arg Arg Tyr Ala His Ala Leu
225                 230                 235

<210> 36102
<211> 151
<212> PRT
<213> A.fumigatus

<400> 36102
Thr Ser Ala Asp Ser Cys Val Ser Arg Ile Leu Cys Cys Asn Cys Gly
1               5                   10                  15
Ala Pro Ile Asp Gly Thr Thr Ser Ala Gly Ala Leu Cys Gln Asp Cys
            20                  25                  30
Val Arg Leu Thr Val Asp Ile Ser Gln Gly Ile Pro Arg Glu Gly Val
        35                  40                  45
Leu His Phe Cys Arg Asp Cys Glu Arg Trp Leu Gln Pro Pro Ser Gly
    50                  55                  60
Trp Val Ser Ala Ala Leu Glu Ser Lys Glu Leu Leu Ala Leu Cys Leu
65                  70                  75                  80
Arg Lys Leu Arg Gly Leu Asn Lys Val Arg Ile Ile Asp Ala Ser Phe
                85                  90                  95
Ile Trp Thr Glu Pro His Ser Arg Arg Ile Lys Val Lys Ile Thr Ile
            100                 105                 110
Gln Gln Glu Ala Phe Gln Gly Thr Ile Val Gln Gln Ala Phe Glu Val
        115                 120                 125
Glu Tyr Val Val His Thr Gln Gln Cys Pro Asp Cys Ala Lys Ser Tyr
    130                 135                 140
Thr His Asn Thr Trp Arg Ala
145                 150

<210> 36103
<211> 209
<212> PRT
<213> A.fumigatus

<400> 36103
Arg Arg Phe Lys Met Glu Pro Tyr Leu Val Asp Leu Leu Val Gly Ala
1               5                   10                  15
Gly Gly Thr Glu Ala Val Glu Thr Lys Leu Leu Val Arg Val Ala Leu
            20                  25                  30
Pro Thr His Gly Gly Gln Ser Leu Asn Gly Gln Asp Gly Asn Ala Val
        35                  40                  45
Gly Lys Asp Leu Glu Ser Val Val Leu Gly Leu Ser Ile Glu Asp Leu
    50                  55                  60
Glu Ala Arg Asp Gly Asp Asn Thr Ser Asp Asp Val Val Leu Leu Leu
65                  70                  75                  80
Glu Val Cys Ser Gly Leu Asp Thr Asp Ala Asp Leu Gly Thr Gly Gly
                85                  90                  95
Asp Glu Gly Asp Gly Gly Val Gly Gly Leu Asp Asp Gly Val Gly Thr
            100                 105                 110
Leu Gln Ser Ser Leu Asn Gly Arg Val Leu Glu Leu Arg Gln Val Leu
        115                 120                 125
Thr Ser Glu Gly Lys Asp Ala Arg Ser Val Leu Gly Gly Asp Cys Gly
```

```
    130                 135                 140
Val Val Gly Ser Ala Gly Leu Val Ala Val Gly Gly Thr Pro Asn His
145                 150                 155                 160
Ala Val Arg Glu Gly Thr Glu Val Gly Gln Ser Phe Asp Arg Leu Val
                165                 170                 175
Gly Gly Thr Val Leu Thr Gln Thr Asp Gly Val Val Gly Ser Asp Val
            180                 185                 190
Asp Asp Ala Asp Ala Gly Glu Gly Gly Gln Thr Glu Ser Thr Gly Gly
        195                 200                 205
Ile
```

<210> 36104
<211> 104
<212> PRT
<213> A.fumigatus

<400> 36104

```
Gln Leu Asp Ser Ile Thr Pro Gly His Pro Glu Ala His Asp Thr Pro
1               5                   10                  15
Gly Val Glu Val Thr Thr Gly Pro Leu Gly Gln Gly Phe Ala Asn Ala
            20                  25                  30
Val Gly Leu Ala Ile Ala Gln Ala His Thr Ala Ala Val Phe Asn Lys
        35                  40                  45
Pro Gly Tyr Asp Leu Ile Asn Asn Tyr Thr Tyr Cys Phe Phe Gly Asp
    50                  55                  60
Gly Cys Ala Met Glu Gly Ile Ala Ser Glu Ala Ala Ser Met Ala Gly
65                  70                  75                  80
His Leu Lys Leu Gly Asn Leu Ile Ala Ile Tyr Asp Asp Asn His Ile
                85                  90                  95
Ser Ile Gly Glu Phe Leu Gln Asn
            100
```

<210> 36105
<211> 470
<212> PRT
<213> A.fumigatus

<400> 36105

```
Leu Ala Tyr Phe Tyr Leu Asp Gly Asp Thr Lys Cys Ala Phe Thr Glu
1               5                   10                  15
Asp Val Met Lys Arg Phe Glu Ala Tyr Gly Trp His Thr Val Trp Val
            20                  25                  30
Lys Asp Gly Asp Asn Asp Leu Glu Gly Ile Glu Ala Ala Ile His Glu
        35                  40                  45
Ala Lys Lys Val Thr Asp Lys Pro Thr Val Ile Arg Leu Thr Thr Thr
    50                  55                  60
Ile Gly Phe Gly Ser Lys Leu Gln Gly Thr Gly Gly Val His Gly Asn
65                  70                  75                  80
Pro Leu Lys Ala Asp Asp Cys Glu Ser Val Lys Gln Lys Phe Gly Phe
                85                  90                  95
Asp Pro Lys Gln Ser Phe Val Val Pro Gln Gln Val Tyr Asp Leu Tyr
            100                 105                 110
His Lys His Ala Ala Glu Gly Ala Ala Lys Glu Gln Ala Trp Asn Gln
        115                 120                 125
Leu Leu Glu Lys Tyr Ala Thr Glu Tyr Lys Ala Glu His Ala Asp Leu
```

```
    130                 135                 140
Val Arg Arg Leu Ser Gly Lys Leu Pro Glu Gly Trp Glu Lys Ser Leu
145                 150                 155                 160
Pro Thr Tyr Lys Pro Thr Asp Ala Ala Val Ala Ser Arg Lys Leu Ser
                165                 170                 175
Glu Ala Val Leu Glu Lys Ile His Ala Val Val Pro Glu Leu Met Ser
            180                 185                 190
Gly Ser Ala Asp Leu Thr Gly Ser Asn Asn Thr Arg Trp Lys Asn Ala
        195                 200                 205
Val Asp Phe Gln Pro Pro Glu Tyr Gly Ile Gly Glu Trp Ser Gly Arg
    210                 215                 220
Tyr Ile Arg Tyr Gly Val Arg Glu His Ala Met Ala Ala Val Met Asn
225                 230                 235                 240
Gly Leu Ala Ala Tyr Gly Thr Ile Ile Pro Ala Gly Gly Thr Phe Leu
                245                 250                 255
Asn Phe Val Ser Tyr Ala Ala Gly Ala Leu Arg Leu Ser Ala Leu Ser
            260                 265                 270
Arg Val Arg Val Ile His Ile Ala Thr His Asp Ser Ile Gly Leu Gly
        275                 280                 285
Glu Asp Gly Pro Thr His Gln Pro Ile Glu Thr Leu Ala His Phe Arg
    290                 295                 300
Ala Leu Pro Asn Cys Met Val Trp Arg Pro Ala Asp Gly Asn Glu Thr
305                 310                 315                 320
Ser Ala Ala Tyr Tyr Ser Ala Ile Thr Ala Lys His Thr Pro Ser Val
                325                 330                 335
Leu Ala Leu Thr Arg Gln Asn Leu Pro Gln Leu Glu Asn Ser Thr Ile
            340                 345                 350
Glu Ala Ala Leu Lys Gly Ala Tyr Pro Val Val Glu Ala Pro Asn Ala
        355                 360                 365
Ala Ile Thr Leu Ile Ser Thr Gly Ser Glu Val Ser Ile Cys Ile Glu
    370                 375                 380
Ala Ala Thr Tyr Leu Lys Glu Lys His Asn Ile Val Ala Arg Val Val
385                 390                 395                 400
Ser Val Pro Cys Phe Glu Val Phe Asp Ala Gln Pro Lys Asp Tyr Arg
                405                 410                 415
Leu Lys Val Leu Pro Asp Gly Ile Pro Val Leu Ser Val Glu Ala Leu
            420                 425                 430
Ser Thr Met Gly Trp Glu Arg Tyr Ser His Glu Gln Phe Gly Leu Asn
        435                 440                 445
Arg Phe Gly Ala Ser Gly Pro Tyr Lys Glu Val Tyr Lys Val Arg Leu
    450                 455                 460
His Phe Lys Ser Ser Ser
465                 470

<210> 36106
<211> 61
<212> PRT
<213> A.fumigatus

<400> 36106
Ser Asp Leu Ser Glu Gln Arg Ala Asn His Ile Ile Gln Val Asp Ala
1               5                   10                  15
Thr Phe Lys Ala Asn Ser Gly His Pro Gly Ala Pro Met Gly Met Ala
            20                  25                  30
Pro Val Ala His Val Leu Phe Asn Lys Phe Met Asn Phe Asn Pro Lys
        35                  40                  45
```

```
Asn Pro Asn Trp Leu Asn Arg Asp Arg Phe Val Leu Ser
    50                  55                  60

<210> 36107
<211> 356
<212> PRT
<213> A.fumigatus

<400> 36107
Ser Asn Leu Thr Leu Gly Ala Gln Ala Glu Lys Lys Gln Ile Asn Glu
1               5                  10                  15
Leu Asn Gln Leu Leu Arg Asp Gln Asn Arg Ser His Glu Ser Ala Arg
            20                  25                  30
Asn Glu Asn Tyr Ser Asp Glu Val Val Thr Thr Pro Asp Arg Gln Trp
        35                  40                  45
Lys Ser Ser Ile Ser Ala Glu Ser Pro Asp Ala Ile Val Gly Asp Arg
    50                  55                  60
Val Ser Arg Gly Glu Thr Phe Gln Lys Ser Ile Leu Phe Pro Ser Ser
65                  70                  75                  80
Glu Ser Pro Ser Ala Lys Asp Lys Val Val Glu Pro Asp Met Leu Asp
                85                  90                  95
His Met Pro Thr Lys Arg Gln Ser His Ile Leu Tyr Lys Gly Phe Met
            100                 105                 110
Ser Gly Val His Ala Ile Ser Pro Val Ile His Pro Pro Thr Ile Leu
        115                 120                 125
Lys Leu Tyr Asn Ala Phe Trp Asp Trp Tyr Asp Tyr Ser Ser Tyr Ser
    130                 135                 140
Gly Glu Pro Cys Pro Asp Pro Ser Phe Ile Pro Leu Leu Tyr Ala Ile
145                 150                 155                 160
Trp Tyr Gly Gly Ser Val Thr Ile Ser Ile Arg Met Ile Lys Ala Glu
                165                 170                 175
Phe Asn Val Ser Ser Arg Ser Ala Leu Ser Lys Thr Tyr His Asp Glu
            180                 185                 190
Val Thr Arg Trp Leu Thr Glu Ile Ser Phe Pro Arg Ser Pro Ser Leu
        195                 200                 205
Gln Gly Leu Ala Ala Tyr Leu Leu Val Gln Thr Ile Leu Ser Arg Glu
    210                 215                 220
Glu Glu Pro Leu Thr Ser Ser Leu Phe Ile Ser Leu Ser Met Arg Val
225                 230                 235                 240
Ala Gln Thr Met Gly Leu His Arg Asp Pro Ala Asn Phe Gly Ile Glu
                245                 250                 255
Pro Cys Glu Ala Glu Tyr Arg Arg Arg Ile Trp Trp His Ile Val His
            260                 265                 270
Met Asp Gly Val Val Ala Met Ser Ser Gly Leu Pro Pro Leu Val Ser
        275                 280                 285
Asp Glu Lys Tyr Trp Asp Val Gln Glu Thr Ser Glu Val Lys Asp Thr
    290                 295                 300
Leu Leu Gly Thr Ala Glu Ala Glu Gln Tyr Glu Arg Leu Val Thr Ala
305                 310                 315                 320
Gly Leu Arg Pro Arg Asp Asn Pro Asp Asp Pro Thr Ile Cys Gly Gly
                325                 330                 335
Pro Ser Met Val Asn Val Tyr Tyr Leu Ser Ala Arg Gly Lys Tyr Ile
            340                 345                 350
Met Ala Arg Lys
        355
```

<210> 36108
<211> 353
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (83),(98)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36108
Lys Thr Leu Ile Glu Gly Ser Ala Leu Arg His Cys His Gly Phe Met
1 5 10 15
Glu Lys Phe Ile Ser Leu Ala Thr Asp Pro Asp Phe Gln Pro Phe Gln
20 25 30
Trp Ser Trp Pro Gly Asn His Gln Pro Met His Ala Thr Met Ile Met
35 40 45
Leu Ile Asp Leu Tyr Glu Arg Pro Tyr Ser Ser Glu Ala Ser Lys Ser
50 55 60
Arg Ala Phe Ile Asp Lys Ile Phe Ser Leu Ser Gly Pro Asp Gly Gly
65 70 75 80
Cys Arg Xaa Arg Arg Gly Trp His His Asp Ser Ala Thr Phe Lys Asp
85 90 95
Gly Xaa Arg Glu Ala Trp Asp Met Ile Arg Arg Leu Arg Gln Lys Ala
100 105 110
Trp Gln Lys Ala Gly Leu Asp Pro Gln Arg Leu Trp Thr Glu Gln Ala
115 120 125
Gln Ile Arg Ala Gly Val Pro Ser Thr Pro Pro Glu Tyr Ser Pro Val
130 135 140
Ser Asn Ala Tyr Pro Thr Gln Ala Ser Gly Asn Pro Ser Thr Ile Pro
145 150 155 160
Pro Leu Thr Ser Arg Lys Gln Leu Thr Asp Phe Ser Lys Leu Phe Tyr
165 170 175
Asn Met Thr Arg Ser His Leu Ala Pro Arg Pro Ser Pro Leu Arg Tyr
180 185 190
Gln Leu Pro Pro Pro Val Pro Ser Ala Val Pro Ala Ser Pro Arg Val
195 200 205
Val Ser Asp Leu Arg Phe Ser Thr Ser Pro Ala Thr Ser Ile Pro Thr
210 215 220
Ile Glu Pro Thr Phe Thr Gly Ser Thr Ile Ser Pro Pro Ala Ser Ile
225 230 235 240
Pro Pro Leu Ser Ser Thr Lys Pro Phe Ala Gln Pro Thr Phe Thr Ser
245 250 255
Ser Ser Ala Thr Leu Pro Tyr Ile Asp Thr Ser Leu Pro Ala Ser Gln
260 265 270
Pro Gly Ala Ala Pro Thr Pro Pro Ser Met Val Asp Pro Asn Leu Asn
275 280 285
Phe Asp Trp Ala Glu Trp Asp Ala Val Phe Gly Gln His Leu Pro Val
290 295 300
Ala Asp Glu Leu Met Glu Leu Asp Pro Val Ser Gly Phe Glu Phe Ala
305 310 315 320
Asp Leu Ala Asn Thr Arg Asp Val Gly Asp His Thr Ala Ala Gly Lys
325 330 335
Thr Asp Thr Gly Met Ser Asp Val Arg Asp Pro Glu Trp Phe Ser Tyr
340 345 350
Cys

<210> 36109
<211> 364
<212> PRT
<213> A.fumigatus

<400> 36109
Tyr Ser Ile Thr Pro Leu Lys Ser Ala Ser Pro Ser Val Asp Met Asp
1 5 10 15
Pro Arg Arg Arg Arg Asp Ser Thr Val Asp Asp Arg His Arg Pro Tyr
20 25 30
Arg Arg Asp Gly Ser Arg Glu Arg Ser Arg Ser Arg Arg Arg Tyr Thr
35 40 45
Pro Arg Phe Asp Asp Asp Arg Arg Arg Glu Arg Ser Arg Asp Ala Ser
50 55 60
Ser Arg Pro Arg Asp Arg Asn Pro Asp Asp Arg Val Ala Ile Arg Asp
65 70 75 80
Phe Arg Ala Asn Arg Tyr Gly Asp Arg Ser Tyr Arg Pro Asn Arg Arg
85 90 95
Ser Arg Ser Arg Ser Thr Gly Arg Gly Tyr Asp Arg Asp Arg Asp Arg
100 105 110
Ser Arg Gly Arg Asp Arg Ser Ala Ser Arg Glu Lys Asp Arg Ala Arg
115 120 125
Asp Arg Ser Arg Leu Thr Asp Glu Arg Glu Arg Asp Arg Asp His Arg
130 135 140
Thr Arg Asp Arg Ser Arg Asp Arg Asp Arg Glu Arg Glu Arg Asp Arg
145 150 155 160
Asp Arg Asp Arg Glu Arg Glu Arg Asp Pro Asn Arg Asp Tyr Arg Pro
165 170 175
Arg Ser Tyr Tyr Ser Arg Ser Arg Ser Arg Ala Arg Arg Gly Arg Ser
180 185 190
Arg Ser Val Ser Arg Ala Arg Asp Gln Asn Gln Asp Leu Thr Arg Ala
195 200 205
Ala Arg Asp Arg Asp Arg Glu Arg Asp Arg Glu Arg Asn Arg Asp Gln
210 215 220
Glu Arg Tyr Arg Asp Gly Asp Lys Glu Gln Asp Arg Leu Arg Glu Gly
225 230 235 240
Asp Arg Lys Asp Glu Arg Gly Arg Ser Arg Ser Arg Ile Pro Asn Pro
245 250 255
Ser Arg Arg Pro Ser Arg Ser Arg Arg Arg Ser Pro Ser Thr Leu Asp
260 265 270
Ile Asp His Tyr Val Pro Pro Thr Ser His Arg Ser Arg Ser Pro Arg
275 280 285
Arg Arg Val Arg Ser Pro His Arg Pro Glu Arg Asp Asp Arg Arg Gly
290 295 300
Phe Val Glu Ile Asp Arg Tyr Ile Pro Gly Ser Glu Arg Glu Arg Glu
305 310 315 320
Lys Ala Arg Asp Gly Glu Lys Glu Lys Glu Asn Glu Glu Arg Lys Asp
325 330 335
Lys Gly Ala Glu Leu Pro Asp Arg Glu Ala Asp Asp Arg Gly Ile Arg
340 345 350
Lys Leu Ser Ala Ser Gln Arg Arg Ser Arg Ser Arg
355 360

<210> 36110

<211> 209
<212> PRT
<213> A.fumigatus

<400> 36110
Ala Gly Arg Asn Leu Gly Lys Ile Ser Ala Glu Pro Thr Asn Asp Asp
1 5 10 15
Arg Thr Thr Ile Glu Arg His Gly Met Glu Asp Gly Val Arg Lys Arg
20 25 30
Leu Arg Ala Asp Gly Thr Leu Ser Leu Ser Ser Phe Asp Glu Thr Ser
35 40 45
Pro Ser Arg Arg Ala Lys Ala Arg Ile Val Pro Thr Tyr Arg Asn Asp
50 55 60
Asp Lys Gly Leu Pro Thr Tyr Ser Ser Ala Ala Glu His Tyr Ser Thr
65 70 75 80
Glu Pro Glu Asn Pro Ser Lys Val Ala Ser Thr Ser Ser Glu Ser Glu
85 90 95
Asp Asp Asp Asp Asp Asp Asp Asp Tyr Thr Ser Ser Ser Gly Ser Asp
100 105 110
Asp Asp Ser Asp Ser Ala Gly Asp Gly Glu Asp Glu Asp Gln Asn Ala
115 120 125
Asp Tyr Ser Ser Glu Arg Ala Ser Arg Ala Gly Ser Ser Leu Pro Arg
130 135 140
Val Ser Ala Gln Gln Lys Pro Arg Ile His Arg Met Thr Lys Glu Pro
145 150 155 160
Asp Leu Leu Ser Arg Leu Ser Ala Phe Leu Pro Lys Leu Lys Ser Ala
165 170 175
Tyr Glu Asp Leu Pro Arg Glu Ile Ala Ala Gly Arg Gly Lys Asp Leu
180 185 190
Gln Leu Asp Glu Val Asp Gln Glu Glu Gly Gln Tyr Ile Glu Met Val
195 200 205
Gly

<210> 36111
<211> 202
<212> PRT
<213> A.fumigatus

<400> 36111
Arg His Glu Tyr Ala Ser Trp Ile Thr Ala Pro Ile Ser Gln Pro Phe
1 5 10 15
Ala Thr His Pro Lys Leu Gln Gln His Lys Met Ser Ala Pro Lys Leu
20 25 30
His Phe Asn Asn Asp Gln Ser Pro Ile Lys Asp Glu Ser Ser Pro Thr
35 40 45
Gln Lys Ala Met Glu Cys Pro Ser Ser Ser Thr Arg Lys Ser Leu His
50 55 60
Gln Asn Ile Leu Gly Lys Leu Arg Pro Leu Pro Leu Gln Tyr His Trp
65 70 75 80
Thr Val Trp Tyr Asp Arg Tyr Ser Glu Ser Thr Asp Tyr Asp Asn Arg
85 90 95
Leu Tyr Val Leu His Glu Asp Val Ala Asp Ile Ala Thr Phe Tyr Arg
100 105 110
Val Tyr Asn Asn Tyr Pro Trp Asp Lys Ile Arg Leu Arg Asp Ser Val
115 120 125

```
His Ile Phe Arg Lys Gly Val Arg Pro Val Trp Glu Asp Pro Glu Asn
    130                 135                 140
Leu Arg Gly Gly Cys Trp Lys Phe Arg Val Pro Lys Ser Lys Ala Gln
145                 150                 155                 160
Glu Phe Phe His Glu Ile Ala Ile Leu Cys Met Ala Asn Glu Phe Gln
                165                 170                 175
Ala Ala Leu Glu Lys Gly Val Arg Ile Arg Ser Ser Ala Ser Ala Ser
            180                 185                 190
Ile Arg Val Leu Arg Ala Asp Cys Phe Pro
        195                 200
```

<210> 36112
<211> 82
<212> PRT
<213> A.fumigatus

<400> 36112

```
Leu Leu Pro Leu Glu His Asp His Val Leu Gly Val Ser Thr Ser Val
1               5                   10                  15
Arg Phe Asn Ser His Met Ile Ser Val Trp Asn Lys Met Gly Thr Asn
            20                  25                  30
Glu Arg Ser Ile Lys Ile Leu Glu Gln Thr Ile Ile Asp Arg Leu Ser
        35                  40                  45
Pro Glu Leu Arg Pro Thr Ser Ser Gly Ser His Ser Tyr Phe Tyr Lys
    50                  55                  60
Arg His Asp Glu Asn Asp Gly Tyr Gln Glu Ala Val Ala Ala Ser Ser
65                  70                  75                  80
Ser His
```

<210> 36113
<211> 369
<212> PRT
<213> A.fumigatus

<400> 36113

```
Leu Ile Thr Phe Ile Cys Arg Ile Phe Thr Gln Phe Arg Leu Ala Ser
1               5                   10                  15
Tyr Pro Lys Ile Ile Asp Phe Phe Phe Phe Cys Phe Thr Leu His Phe
            20                  25                  30
Ala Cys Val Tyr Leu Lys Met Glu Glu Leu Leu Ala Lys His Arg Lys
        35                  40                  45
Glu Gln Lys Asp Leu Gln Ala Arg Ile Thr Gln Lys Lys Lys Ala Ala
    50                  55                  60
Thr Lys Lys Thr Arg Arg Gly Val Asn Glu Glu Cys Glu Arg Leu Gln
65                  70                  75                  80
Arg Glu Leu Ser Asp Arg His Gln Ala Glu Ile Ala Ala Leu Ser Gly
                85                  90                  95
Glu Pro Ile Gln Pro Val Asp Gly Phe Glu Glu Leu Ser Leu Arg Asp
            100                 105                 110
Pro Asp Val Gly Asp Ala Asp Thr Gly Glu Lys Ser Thr Ser Asp Asp
        115                 120                 125
Met Gln Gly Thr Asp Ser Leu Pro Glu Pro Ser Lys Thr Asp Ser Thr
    130                 135                 140
Pro Thr Ser Pro Pro Ala Ser Ala Pro Arg Thr Lys Lys Pro Asn Arg
145                 150                 155                 160
```

```
Gln Lys Ala Arg Leu Ala Arg Arg Ala Ala Glu Gln Ala Ala Gln Ser
                165                 170                 175
Ala Leu Ala Ala Glu Glu Ala Ala Lys Gln Val Asp His Arg Gly Asn
            180                 185                 190
Glu Lys Gly Val Met Glu Ala Val Phe Lys Arg Leu Gly Leu Lys Glu
        195                 200                 205
Val Glu Ile Asn Pro Asp Gly His Cys Leu Tyr Ser Ala Ile Ala His
    210                 215                 220
Gln Leu Glu Glu Ser Gly Leu Gly Leu Arg Pro Asp Pro Gln Arg Val
225                 230                 235                 240
Val Ile Gln Pro Gln Thr Gln Ser Arg Leu Asp Thr Val Ala Ser Pro
                245                 250                 255
Lys His Asp Gly Tyr Arg Ala Val Arg Ala Val Ala Ala Asp Phe Ile
            260                 265                 270
Val Glu His Lys Asp Asp Phe Glu Pro Phe Met Glu Glu Pro Phe Asp
        275                 280                 285
Ser Tyr Thr Arg Lys Ile Lys Leu Thr Ala Glu Trp Gly Gly Gln Leu
    290                 295                 300
Glu Leu Gln Ala Ile Ala Arg Ala Tyr Gly Val Asn Ile Asn Val Ile
305                 310                 315                 320
Gln Gly Asp Gly Arg Ile Glu Lys Ile Glu Ala Gly Asp Met Asp Gly
                325                 330                 335
Ile Asp Glu Glu Glu Arg Asn Arg Arg Val Ile Trp Leu Ala Tyr Tyr
            340                 345                 350
Arg His Thr Tyr Gly Leu Gly Glu His Tyr Asn Ala Leu Thr Lys Gln
        355                 360                 365
Ser
```

<210> 36114
<211> 85
<212> PRT
<213> A.fumigatus

<400> 36114

```
Lys Tyr Pro Val Arg Asp Ala Glu Ile Gly Gln Gly Lys Ile Thr Tyr
1               5                   10                  15
Val Gln Gly Asp Phe Phe Lys Asp Thr Trp Leu Glu Lys Leu Gln Leu
            20                  25                  30
Pro Arg Asn Ser Phe Asp Leu Ile Tyr Asp Tyr Thr Val Cys Gly Ser
        35                  40                  45
Gln Lys Ser Phe Val Gln Ser Thr Arg Pro Gly Phe Cys Leu Leu Ser
    50                  55                  60
Gln Glu Lys Ser Pro Val Ser Pro His Arg Ser Thr Val Arg Leu Ser
65                  70                  75                  80
Leu Asn Ser Cys Gly
                85
```

<210> 36115
<211> 115
<212> PRT
<213> A.fumigatus

<400> 36115

```
Gly Lys Val Val Leu Val Thr Gly Gly Ala Lys Gly Ile Gly Arg Met
1               5                   10                  15
```

```
Ile Ser Glu Gly Tyr Val Thr Asn Gly Ala Thr Val Tyr Ile Ser Ser
            20                  25                  30
Arg Asp Ala Lys Ala Cys Glu Lys Ala Val Gln Glu Leu Asn Ala Ile
        35                  40                  45
Gly Arg Gly Lys Ala Tyr Ala Ile Pro Ala Asn Phe Tyr Lys Glu Glu
    50                  55                  60
Glu Cys Gln Lys Leu Ala Glu Glu Ile Ala Lys Arg Glu Ser Ser Lys
65                  70                  75                  80
Leu Val Leu Gly Gly Pro Cys Ser Gly Gly Arg Leu Ile Ser Cys Ser
                85                  90                  95
Ile Arg Ala Ser Cys Pro Arg Glu Gln Leu Arg Val Lys Leu Gly Cys
            100                 105                 110
Ser Leu Arg
        115
```

<210> 36116
<211> 117
<212> PRT
<213> A.fumigatus

```
<400> 36116
Ser His Ala Leu Ser Glu Leu His Val Leu Val Asn Asn Ser Gly Ser
1               5                   10                  15
Asn Trp Gly Ala Pro Tyr Asp Glu Tyr Pro Ser Ser Ala Trp Thr Arg
            20                  25                  30
Val Leu Thr Leu Asn Leu His Arg Val Phe Asp Leu Thr Lys Leu Leu
        35                  40                  45
Thr Pro Leu Leu Glu Lys Ala Gly Ala Pro Asn Asp Pro Ala Arg Ile
    50                  55                  60
Ile Asn Ile Gly Ser Ile Asp Gly Leu Arg Val Pro Ala Leu Glu Thr
65                  70                  75                  80
Phe Ala Tyr Ser Ala Ser Lys Ala Gly Leu His His Leu Ser Arg Val
                85                  90                  95
Leu Ala His His Leu Gly Lys Arg Asn Ile Thr Ser Val His Leu Met
            100                 105                 110
Leu Val Thr Cys Leu
        115
```

<210> 36117
<211> 72
<212> PRT
<213> A.fumigatus

```
<400> 36117
Asp Gln Asp Glu Phe Asp Val Pro Ser Phe Trp Ser Val Phe Trp Val
1               5                   10                  15
Leu Arg Trp Val Ser Trp Ser Ala Ser Ser Arg Lys Gly Ser Asn Ala
            20                  25                  30
Ser Ser Val Glu Thr Lys Phe Ala Asn Leu Gln Thr Arg Asn Asn Ala
        35                  40                  45
Pro Ser Ala Pro Ser Pro Gly Ala Gly Ser Ala Val Thr Val Glu Ala
    50                  55                  60
Leu Gln Phe Trp Ser His Ser Thr
65                  70
```

<210> 36118

<211> 298
<212> PRT
<213> A.fumigatus

<400> 36118
Met Ile Ile Leu Ile Arg His Ala Gln Ser Glu Gly Asn Lys Asn Arg
1 5 10 15
Glu Ile His Gln Thr Ile Pro Asp His Arg Val Gln Leu Thr Pro Glu
20 25 30
Gly His Arg Gln Ala Arg Glu Ala Gly Ser Lys Leu Arg Ala Leu Leu
35 40 45
Arg Pro Asp Asp Thr Ile His Phe Phe Thr Ser Pro Tyr Arg Arg Thr
50 55 60
Arg Glu Thr Thr Glu Gly Ile Leu Glu Ser Leu Thr Ser Asp Ser Pro
65 70 75 80
Ser Pro Ser Pro Phe Pro Arg His Thr Ile Lys Val Tyr Glu Glu Pro
85 90 95
Arg Leu Arg Glu Gln Asp Phe Gly Asn Phe Gln Pro Cys Ser Ala Glu
100 105 110
Met Glu Arg Met Trp Leu Glu Arg Ala Asp Tyr Gly His Phe Phe Tyr
115 120 125
Arg Ile Pro Asn Gly Glu Ser Ala Ala Asp Ala Tyr Asp Arg Ile Ser
130 135 140
Gly Phe Asn Glu Ser Leu Trp Arg Leu Phe Gly Glu Asp Asp Phe Ala
145 150 155 160
Ser Val Cys Val Leu Val Thr His Gly Leu Met Thr Arg Val Phe Leu
165 170 175
Met Lys Trp Tyr His Trp Ser Val Glu Tyr Phe Glu Asp Leu Arg Asn
180 185 190
Ile Asn His Cys Glu Phe Val Ile Met Lys Leu Asn Pro Asp Asn Gly
195 200 205
Lys Tyr Val Leu Gln Asn Lys Leu Arg Thr Trp Ser Glu Leu Arg Lys
210 215 220
Glu Lys Glu Asn Glu Arg Gln Arg Glu Arg Thr Ser Lys Asp Leu Gly
225 230 235 240
Ser Ala Thr Ser Leu Thr Pro Ala Ser Thr Pro Val Val Ile Arg Arg
245 250 255
Lys Trp Gly Gly Cys Pro Asp Ala Val Thr Thr Ala Ser Thr Glu Asn
260 265 270
Gly Pro Tyr Gly Leu His Gly Arg Leu Glu Val Thr Pro Pro Val Leu
275 280 285
Gly Val Glu Thr Gln Ser Ser Thr Lys Lys
290 295

<210> 36119
<211> 243
<212> PRT
<213> A.fumigatus

<400> 36119
Ala Gly Tyr Val Glu Trp Leu Gln Asn Trp Arg Ala Ser Thr Val Thr
1 5 10 15
Ala Glu Pro Ala Pro Gly Glu Gly Ala Leu Gly Ala Leu Phe Leu Val
20 25 30
Cys Arg Leu Ala Asn Leu Val Ser Thr Leu Glu Ala Leu Asp Pro Leu
35 40 45

```
Arg Glu Leu Ala Asp Gln Glu Thr Gln Arg Arg Thr Gln Asn Thr Asp
    50                  55                  60
Gln Lys Glu Gly Thr Ser Asn Ser Ser Trp Ser His Gly His Gln Thr
65                  70                  75                  80
Glu Lys Phe Leu Lys Arg Tyr Ile Glu Ile Phe Arg Glu Gln Ser Phe
                85                  90                  95
Ala Ile Val Ser Leu Tyr Lys Asn Ile Phe Thr Pro Asp Gln Ala Glu
            100                 105                 110
Ser Glu Ser Val Ile Ala Gly Leu Arg Gly Ile Asp Ser Arg Val Lys
        115                 120                 125
Thr Asn Leu Ser Gln Pro Thr Arg Pro Asp Asp Pro Leu Gln Cys Leu
    130                 135                 140
Pro Pro Ala Leu Ala Thr Phe Pro Met His Leu Val Gln Leu Leu Thr
145                 150                 155                 160
Asp Thr Leu Arg Thr Tyr Leu Pro Asn Val Gln Asp Lys Ser Ser Arg
                165                 170                 175
Glu Ser Leu Leu Thr Gln Val Leu Tyr Cys Ala Ala Ser Leu Gly Arg
            180                 185                 190
Leu Gly Gly Asp Phe Ser Met Ile Leu Thr Glu Met Ser Ala Ala Tyr
        195                 200                 205
Glu Trp Glu Glu Val Thr Arg Lys His Arg Ala Leu Ala Gly Arg Leu
    210                 215                 220
Asp Gln Leu Thr Gly Thr Ala Ser Arg Val Thr Pro Arg Val Thr Ser
225                 230                 235                 240
Pro Leu His
```

<210> 36120
<211> 78
<212> PRT
<213> A.fumigatus

<400> 36120

```
Leu Ser Leu Arg Leu Val Ser Ser Ser Phe Leu Ser Ser Arg Cys Tyr
1               5                   10                  15
Leu Asn Thr Val Gly Ser Arg Ser Arg His Asn Asn Gly Ser Val Leu
            20                  25                  30
Lys Pro Thr Leu Asn Ala Val Pro Gly Gly Phe Arg Asn Ile Arg Thr
        35                  40                  45
Ala Ile Ser Gly Ala Ile Ile Ala Phe Tyr Leu Pro Val Ser Pro Gly
    50                  55                  60
Leu Ile Glu Ser Leu Ala Gln Gly Phe His His Phe Cys Arg
65                  70                  75
```

<210> 36121
<211> 328
<212> PRT
<213> A.fumigatus

<400> 36121

```
Thr Ile Asn Arg Met Leu Arg Met Met Ile Pro Glu Asn Thr Leu Arg
1               5                   10                  15
Gly Ser Arg Arg Ser Ile Leu Lys Gly Arg Arg Asp Arg Ser Arg Gly
            20                  25                  30
Ser Ser Lys Arg Ser Trp Arg Pro Ser Gln Gly Pro Thr Gly Thr Asp
        35                  40                  45
```

```
Glu Gln Lys Thr Ala Thr Asp Ser Glu Ala Arg Asp Asn Pro Lys Pro
    50                  55                  60
Glu Thr Lys Pro Lys Val Thr Leu Arg Leu Phe Ala Phe Leu Ser Cys
65                  70                  75                  80
Cys Ser Ser Ser Gly Val Asp Pro Asp Asp Ser Ala Ile Pro Pro Lys
                85                  90                  95
Lys Thr Thr Arg Arg Pro Ser Ala Pro Ala Thr Gln Pro Thr Pro Glu
            100                 105                 110
Lys Ala Asp Leu Asn Ala Asn His Ser Asn Arg Thr Glu Ser Glu Glu
        115                 120                 125
Ala Lys Leu Phe Gly Glu Glu Lys Pro Asn Leu Thr Val Thr Ser His
    130                 135                 140
Gln Pro Ser Arg Glu Glu Glu Lys Pro Ala Arg Thr Ser Glu Glu Gly
145                 150                 155                 160
Ala Gln Leu Asp Ala Asn Leu Ser Ser Ser Asp Lys Val Glu Ser Ser
                165                 170                 175
His Glu Pro Ala Ser Gln Tyr Gly Gln Val Asp Thr Thr Arg Thr Gly
            180                 185                 190
Ala Pro Gln Asn Ala Gln Ile Pro Val Ile Val Ala Thr Glu Thr Glu
        195                 200                 205
Lys Ala Asn Asp Leu Glu Ile Lys Pro Glu Glu Pro Met Gly Ser Leu
    210                 215                 220
Pro Leu Pro Ala Ile Glu Asp Ser Ser Thr Ser Thr Glu Ala Gln Pro
225                 230                 235                 240
Thr Ser Ser Ala Val Glu His Asn Asp Val Lys Ser Ser His Glu Glu
                245                 250                 255
Glu Thr Thr Leu Pro Ala Lys Ile Pro Pro Pro Pro Pro Pro Gln Val
            260                 265                 270
Pro Met Gly Lys Gln Ile Gln Ile Ala Thr Pro Glu Arg Pro Gln Gln
        275                 280                 285
Trp Leu Leu Pro Pro Pro Leu Pro His Leu Arg Asn Arg Lys Cys Leu
    290                 295                 300
Val Leu Asp Leu Asp Glu Thr Leu Val His Ser Ser Phe Lys Val Thr
305                 310                 315                 320
Arg Gln Pro Leu Ser Pro Phe Met
                325
```

<210> 36122
<211> 70
<212> PRT
<213> A.fumigatus

<400> 36122

```
Asp Leu Ser Gln Val Gly Arg Asp Leu Arg Glu Thr Ile Ile Ile Asp
1               5                   10                  15
Asn Ser Pro Thr Ser Tyr Ile Phe His Pro Gln His Ala Ile Pro Ile
            20                  25                  30
Ser Ser Trp Phe Ser Asp Ala His Asp Asn Glu Leu Leu Asp Leu Ile
        35                  40                  45
Pro Val Leu Glu Asp Leu Ala Gly Ala Gln Val Lys Asp Val Ser Leu
    50                  55                  60
Val Leu Asp Val Thr Met
65                  70
```

<210> 36123
<211> 82

<212> PRT
<213> A.fumigatus

<400> 36123
Ala Asp Ser Arg Asn Gln Pro Thr Tyr Ser Arg Arg Ala Val Glu Trp
1 5 10 15
Tyr Leu Phe Ile Leu Arg Ala Ser Val Ala Ser Ser Pro Asn Thr Thr
20 25 30
Leu Val Trp Cys Cys His Val Thr Ser Pro Ala Ser Phe Met Arg Leu
35 40 45
Asn Phe Ile His His Pro Ser Thr Ser Ile Leu Ser Tyr His Pro Thr
50 55 60
Leu Asn Leu Glu Arg Val Ser Leu Phe Leu His Ile Ala Gly Cys Val
65 70 75 80
Val Phe

<210> 36124
<211> 92
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (80)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36124
Ala Leu Ser Cys Lys Glu Leu His Val Ser Asp Ile Pro Pro Gln Val
1 5 10 15
Leu Glu Arg Ala Asp Phe Thr Ile Pro Val Glu Ile Glu Gly Gln Tyr
20 25 30
His Asn Ile Tyr Val Ile Lys Arg Pro Gly Val Asp Gln Phe Met Lys
35 40 45
Arg Val Gly Glu Leu Tyr Glu Val Val Val Phe Thr Ala Ser Val Ser
50 55 60
Lys Val Ser Ser Pro Ile Pro Ile Ala Leu Tyr Gly Leu Ser Leu Xaa
65 70 75 80
Trp Thr Lys Val Arg Arg Ser Ser Thr Arg Ser Thr
85 90

<210> 36125
<211> 388
<212> PRT
<213> A.fumigatus

<400> 36125
Ala Ser Ile Ile Leu Thr Gly Ser His Pro Arg Cys Ser Ser Ser Leu
1 5 10 15
Trp Tyr Val Asp Pro Gly Cys Lys Asp Asp Ser Asp Ser Pro Pro Gln
20 25 30
Phe Lys Pro Glu Ala Ala Val Trp Trp Asn Ile Pro Glu Phe Asp Leu
35 40 45
Leu Ala His Asn Val Thr Val Pro Gly Ala Ser Pro Val Tyr Pro Asp
50 55 60
Val Tyr Cys Thr Ala Asp Tyr Ser Ile Cys Gln Leu Ile Thr Gly Glu

65 70 75 80
Gly Glu Ile Asn Ala Ala Val Thr Val Ser Ser Ile Ala Phe Ser Ser
85 90 95
Leu Phe Asp Leu Thr His Thr Tyr Phe Leu Ile Ala Gly Ile Ala Gly
100 105 110
Ile Asn Pro Lys Val Ala Thr Ile Gly Ser Val Thr Phe Ala Arg Tyr
115 120 125
Ala Val Gln Val Ala Leu Gln Tyr Glu Ile Asp Ile Arg Asp Leu Gly
130 135 140
Pro Asn Tyr Thr Ser Pro Tyr Ile Pro Gln Gly Ala Tyr Ala Pro Asp
145 150 155 160
Gln Tyr Pro Gly Ser Ile Tyr Gly Thr Glu Val Phe Glu Val Asn Ala
165 170 175
Glu Leu Arg Ser Leu Ala Ala Ser Phe Ala Arg Ala Ala Gln Leu Ala
180 185 190
Asp Ser Asp Thr Ala Lys Ala Tyr Arg Ala Lys Tyr Val Thr Asn Asn
195 200 205
Gly Thr Tyr Ala Ala Gly Thr Gln Thr Pro Ser Val Val Glu Cys Asp
210 215 220
Val Ser Thr Ser Asp Val Tyr Phe Ser Gly Thr Ile Leu Asp Asp Val
225 230 235 240
Phe Asp Asn Thr Ile Arg Val Leu Thr Asn Gly Thr Gly Val Tyr Cys
245 250 255
Ser Thr Ala Gln Glu Asp Asn Ala Thr Leu Glu Ala Leu Leu Arg Ala
260 265 270
Ala Ser His Asn Arg Val Asp Phe Ser Arg Ile Ile Ile Met Arg Thr
275 280 285
Ala Ser Asp Phe Asp Arg Pro Tyr Pro Gly Gln Ser Ala Ile Glu Asn
290 295 300
Leu Leu Tyr Ala Asp Gln Gly Ala Phe Gly Pro Ala Ile Gln Asn Ile
305 310 315 320
Tyr Leu Ala Gly Ile Lys Val Val Gln Gly Ile Met Asp Gly Trp Asn
325 330 335
Lys Thr Phe Thr Ala Gly Val Lys Pro Ser Ser Tyr Ile Gly Asp Glu
340 345 350
Phe Gly Thr Leu Gly Gly Arg Pro Asp Phe Gly Pro Gly Arg Thr Ile
355 360 365
Ala Arg Lys Glu Ala Asn Ala Leu Arg Lys Arg Gly Val Ala Lys Arg
370 375 380
Gly Arg Arg Leu
385

<210> 36126
<211> 190
<212> PRT
<213> A.fumigatus

<400> 36126
Ser Pro Arg Ala Gln Arg His Arg Ala Trp Cys Phe Ala Cys Val Ser
1 5 10 15
Arg Arg Leu Leu His Cys Arg Leu Gln His Leu Pro Ala His His Arg
20 25 30
Arg Arg Arg Asp Gln Arg Ser Arg His Arg Leu Leu Asp Arg Leu Leu
35 40 45
Leu Pro Leu Arg Pro His Ala His Leu Leu Pro Asp Arg Arg His Arg
50 55 60

```
Arg His Gln Pro Gln Gly Arg His His Arg Gln Arg His Leu Arg Pro
65                  70                  75                  80
Leu Cys Arg Ala Ser Arg Ser Ala Val Arg Asp Arg His Pro Arg Pro
                85                  90                  95
Arg Thr Glu Leu His Ile Pro Leu His Pro Ala Gly Ser Leu Arg Thr
            100                 105                 110
Arg Pro Ile Pro Gly Glu His Leu Arg His Arg Gly Leu Arg Ser Gln
        115                 120                 125
Arg Arg Ala Ala Leu Ala Ser Gly Leu Leu Arg Pro Arg Gly Ala Ala
    130                 135                 140
Gly Arg Leu Arg His Arg Gln Gly Leu Pro Arg Gln Val Arg His Gln
145                 150                 155                 160
Gln Trp His Leu Arg Ser Gly His Ala Asp Pro Phe Arg Arg Gly Val
                165                 170                 175
Arg Arg Leu Asp Gln Arg Arg Leu Leu Gln Arg Asp Asp Pro
            180                 185                 190
```

<210> 36127
<211> 140
<212> PRT
<213> A.fumigatus

<400> 36127

```
Ala Ile Pro Ser Phe Lys Ser Pro Gly Thr Ala Ala Leu Thr Ala Pro
1               5                   10                  15
Gly Thr Arg Thr Cys Pro Ser Leu Leu Gly Ser Tyr Pro Gly Arg Gln
            20                  25                  30
Gln Ala Ser His Ser Arg Arg Glu Glu Arg Pro Gly His Ala Gly Leu
        35                  40                  45
Pro Ser Asp Val Trp Lys His Gln Ser Thr Asn Pro Leu Ala Cys Ser
    50                  55                  60
His Ala Asp Pro Cys Ser Asn Ser Asp Leu Ile Phe Ser Val Pro Gln
65                  70                  75                  80
Leu Val Ser Phe Leu Ser Gln Gly Thr Thr Leu Pro Ala Gly Thr Ile
                85                  90                  95
Ile Leu Thr Gly Thr Pro Pro Gly Val Gly Ala Ala Lys Asn Pro Lys
            100                 105                 110
Glu Phe Leu Thr Ala Gly Asp Glu Phe Ala Val Glu Leu Leu Pro His
        115                 120                 125
Val Gly Thr Leu Ile Thr Lys Ile Glu His Gln Gln
    130                 135                 140
```

<210> 36128
<211> 119
<212> PRT
<213> A.fumigatus

<400> 36128

```
Tyr Val Ser His Ala Ala Glu Met Lys Leu Thr Ile Pro Asn Val Pro
1               5                   10                  15
Thr Leu Phe Leu Lys Pro Ser Thr Ala Leu Ala Asp Pro Trp Pro Ala
            20                  25                  30
Pro Thr Ile Leu Pro Lys Ile Thr Gln Val Asp Asn Thr Gly Asp Tyr
        35                  40                  45
Glu Ser Glu Met Val Ile Val Ile Gly Arg Asp Ala Lys Asp Val Ser
    50                  55                  60
```

```
Glu Ala Glu Val Leu Asp Tyr Val Leu Gly Tyr Thr Ala Ala Asn Asp
65                  70                  75                  80
Val Ser Ser Arg Thr Ser Gln Met Asn Gln Ser Gln Trp Ser Phe Ser
                85                  90                  95
Lys Gly Phe Asp Thr Ser Cys Pro Ile Gly Lys Leu Phe Arg His Ser
            100                 105                 110
Asn His Arg Glu Pro Leu Arg
        115
```

<210> 36129
<211> 60
<212> PRT
<213> A.fumigatus

<400> 36129

```
Pro Pro Leu Val Gln Gly Pro Val Leu Val Ser Ser Ala Leu Ile Pro
1               5                  10                  15
Asp Ala Ser Lys Leu His Ile Arg Gly Val Lys Asn Gly Arg Val Met
            20                  25                  30
Gln Asp Cys Pro Leu Thr Tyr Gly Asn Ile Asn Leu Arg Ile His Leu
        35                  40                  45
Leu Val Leu Thr Leu Thr Arg Ala Arg Ile Val Ile
    50                  55                  60
```

<210> 36130
<211> 229
<212> PRT
<213> A.fumigatus

<400> 36130

```
Pro Ser Ser Gln Ile Asn Gly Gly Gln Phe Ile Leu Tyr Leu Phe Phe
1               5                  10                  15
Gly Pro Glu Thr Arg Tyr Ile Gly Gly Asp Glu Asn Pro Lys Glu Pro
            20                  25                  30
Ala Trp Lys Arg Glu Tyr Leu Ser Leu Arg Arg Ile Asp Leu Thr Pro
        35                  40                  45
Phe Met Trp Tyr Glu Phe Val Lys Pro Leu Thr Met Val Met Gln Pro
    50                  55                  60
Cys Ile Ala Ile Pro Ala Ala Ala Tyr Ala Met Val Phe Cys Leu Ser
65                  70                  75                  80
Asn Val Leu Ala Thr Val Glu Val Pro Thr Leu Leu Glu Arg Arg Trp
                85                  90                  95
Gly Leu Asn Pro Glu Gln Leu Gly Leu Gln Phe Leu Gly Pro Ile Ile
            100                 105                 110
Gly Ser Val Leu Gly Glu Gln Leu Gly Gly Arg Met Ser Asp Leu Trp
        115                 120                 125
Met Arg Gln Arg Glu Arg Lys Thr Arg Lys Arg Pro Glu Pro Glu Tyr
    130                 135                 140
Arg Leu Trp Leu Ser Tyr Ile Gly Tyr Phe Leu Ser Ile Val Gly Leu
145                 150                 155                 160
Ile Val Phe Leu Val Cys Thr Gln Leu Ser Gly Asn Arg Trp Glu Val
                165                 170                 175
Ala Pro Ile Ile Gly Ile Ala Ile Gly Ala Ala Gly Asn Gln Val Val
            180                 185                 190
Thr Thr Val Leu Ile Thr Phe Ala Val Asp Cys Tyr Pro Glu Glu Ala
        195                 200                 205
```

```
Gly Ser Val Gly Val Phe Ile Thr Phe Val Arg Gln Ile Trp Gly Phe
    210                 215                 220
Leu Gly Pro Phe Trp
225
```

<210> 36131
<211> 230
<212> PRT
<213> A.fumigatus

<400> 36131

```
Ser Arg Pro Met Lys Val Gln Leu Leu Met Arg His Phe Asn Ser Ile
1               5                  10                  15
Ala Glu Asp Phe Gly Val Ser Ile Asn Lys Ala Ser Tyr Leu Thr Ser
            20                  25                  30
Leu Gln Ile Ala Ile Leu Gly Gly Ala Pro Leu Phe Trp Lys Pro Leu
        35                  40                  45
Ser Gln Arg Tyr Gly Arg Arg Pro Ile Phe Leu Leu Ser Leu Met Cys
    50                  55                  60
Ser Cys Val Cys Asn Ile Gly Cys Ala Lys Ser Thr Asn Tyr Ala Ser
65                  70                  75                  80
Val Ala Ala Cys Arg Ala Leu Gln Ala Phe Phe Ile Ser Pro Ala Ser
                85                  90                  95
Gly Lys Ser Cys Val Asp Ala Gly Glu Glu Gly Ser Arg Leu Thr Thr
            100                 105                 110
Val Thr Ala Ile Gly Ser Ala Ile Val Met Glu Thr Thr Phe Lys Lys
        115                 120                 125
Asp Arg Ala Lys Tyr Met Gly Ile Trp Thr Leu Met Val Thr Val Gly
    130                 135                 140
Ile Pro Cys Gly Pro Phe Ile Phe Gly Phe Val Ala His Arg Ala Gly
145                 150                 155                 160
Tyr Val Trp Ile Tyr Trp Val Leu Ala Met Val Ser Trp Thr His Arg
                165                 170                 175
Pro His Ser Ser Pro Ala Ala Ile Asp Leu His His Arg Ser Met Ala
            180                 185                 190
Val Ser Ser Phe Cys Thr Ser Ser Ser Gly Gln Lys Pro Ala Thr Ser
        195                 200                 205
Ala Ala Thr Lys Thr Arg Lys Ser Pro Pro Gly Asn Glu Ser Thr Phe
    210                 215                 220
Leu Cys Asp Glu Ser Ile
225                 230
```

<210> 36132
<211> 359
<212> PRT
<213> A.fumigatus

<400> 36132

```
Pro Trp Gly Ala Leu Phe Arg Trp Thr Asp Asp Ser Thr Trp Arg Ile
1               5                  10                  15
Leu Thr His Leu Asp Cys Ala Asp Asp Asp Gly Leu His His Arg Arg
            20                  25                  30
Phe Phe Gly Ser Asn Ala Glu Gly Pro Lys Thr Ala Pro Lys Lys Gln
        35                  40                  45
Thr Thr Leu Ser Phe Ser Ser Lys Lys Asp Lys Lys Ser Asp Val Val
    50                  55                  60
```

```
Asp Glu Gln Ala Glu Ala Arg Glu Ser Ser Gly Ile Pro Glu Ala Lys
65                  70                  75                  80
Ser Glu Pro Ala Asn Ser Glu Asp Val Lys Met Glu Asp Leu Ser Glu
                85                  90                  95
Thr Glu Val Ala His Met Asn Gly Ser Pro Gly Ser Lys Ser Leu Lys
            100                 105                 110
Arg Glu Lys Ser Ser Asp Glu Glu Ser Asp Ser Asp Val Gln Pro Leu
        115                 120                 125
Gln Lys Arg Arg Arg Lys Ser Ser Arg Gly Ala Glu Ala Ala Pro Thr
    130                 135                 140
Ile Arg Arg Glu Ser Pro Ser Pro Met Ile Ser Glu Ile Ser Lys Ala
145                 150                 155                 160
Glu Val Lys Glu Ser Ser Pro Pro Ala Ile Leu Lys Lys Ala Ser Gly
                165                 170                 175
Glu Glu Thr Pro Glu Lys Glu Thr Glu His Ser Glu Glu Glu Glu Val
            180                 185                 190
Ala Thr Ala Ser Glu Glu Glu Asp Glu Asp Glu Lys Pro Glu Val Met
        195                 200                 205
Lys Lys Thr Met Glu Lys Val Gln Ala Thr Leu Lys Ala Thr Gly Thr
    210                 215                 220
Glu Pro Tyr Pro Asp Trp Lys Pro Gly Glu Pro Val Pro Tyr Ala Ala
225                 230                 235                 240
Leu Cys Lys Thr Phe Ser Leu Ile Glu Met Thr Thr Lys Arg Leu Ile
                245                 250                 255
Ile Leu Ala His Cys Ser Leu Phe Leu Arg Gln Val Leu Arg Leu Thr
            260                 265                 270
Pro Gln Asp Leu Leu Pro Thr Val Gln Leu Met Ile Asn Lys Leu Ala
        275                 280                 285
Ala Asp Tyr Ala Gly Ile Glu Leu Gly Ile Gly Glu Ser Phe Ile Met
    290                 295                 300
Lys Ala Ile Gly Glu Ser Thr Gly Arg Ser Leu Ala Val Ile Lys Ala
305                 310                 315                 320
Asp Gln His Glu Ile Gly Asp Leu Gly Leu Val Ala Ala Lys Ser Arg
                325                 330                 335
Ser Asn Gln Pro Thr Met Phe Lys Pro Lys Pro Leu Thr Val Arg Gly
            340                 345                 350
Val Gln Ser Ser Pro Arg Gly
        355
```

<210> 36133
<211> 111
<212> PRT
<213> A.fumigatus

```
<400> 36133
Gly Thr Gly Ser Pro Gly Phe Gln Ser Gly Tyr Gly Ser Val Pro Val
1               5                   10                  15
Ala Phe Asn Val Ala Cys Thr Phe Ser Ile Val Phe Phe Ile Thr Ser
            20                  25                  30
Gly Phe Ser Ser Ser Ser Ser Ser Ser Leu Ala Val Ala Thr Ser Ser
        35                  40                  45
Ser Ser Glu Cys Ser Val Ser Phe Ser Gly Val Ser Ser Pro Asp Ala
    50                  55                  60
Phe Phe Lys Met Ala Gly Gly Glu Leu Ser Leu Thr Ser Ala Leu Glu
65                  70                  75                  80
Ile Ser Glu Ile Ile Gly Asp Gly Asp Ser Leu Arg Met Val Gly Ala
```

```
                85                  90                  95
Ala Ser Ala Pro Arg Glu Leu Phe Arg Arg Leu Phe Cys Asn Gly
            100                 105                 110

<210> 36134
<211> 60
<212> PRT
<213> A.fumigatus

<400> 36134
Arg Glu Thr Arg Thr Asp His Val Leu Tyr His Tyr Phe Ser Glu Met
1               5                   10                  15
Gln Pro Glu Glu Ala Tyr Ile Ala Ile Arg Asp Phe Arg Ser Phe Asn
            20                  25                  30
Gly Gln Ile Thr Thr Thr Asp Gly Thr Val Ile Ala Ser Ser Asn Ile
        35                  40                  45
Thr Arg Gly Leu Arg Arg Phe Ala Met Cys Val Phe
    50                  55                  60

<210> 36135
<211> 241
<212> PRT
<213> A.fumigatus

<400> 36135
Cys Ser Thr Ala Asp Thr Gln Cys Arg Ala Ser Trp Gln Asn Leu His
1               5                   10                  15
Ser Gln Ser Lys Met Lys Ser Tyr Leu Leu Phe Val Ala Val Leu Leu
            20                  25                  30
Gln Ala Val Leu Val Arg Thr Ala Ala Leu His Pro Ser Ser Arg Arg
        35                  40                  45
Thr Cys Gln Thr Ser Leu Arg Asn Cys Pro Glu Gly Thr Val Ile Val
    50                  55                  60
Ser Lys Ser His Pro Lys Ala His Phe Ser Thr Val Gln Ala Ala Ile
65                  70                  75                  80
Glu Ser Leu Pro Asn Asp Asn Ser Lys Gln Thr Ile Leu Ile Leu Ala
                85                  90                  95
Gly Asn Tyr Thr Glu Gln Leu Asn Val Thr Arg Ser Gly Pro Ile Thr
            100                 105                 110
Leu Leu Gly Gln Thr Asp Ser Val Thr Asp Ala Ser Lys Asn Lys Val
        115                 120                 125
Thr Ile Thr Trp Ala Gln Ala Asn His Asp Asn Thr Gly Gln Ser Val
    130                 135                 140
Asp Asn Val Phe Ser Ser Val Leu Val Val Ala Pro Thr Leu Glu Ala
145                 150                 155                 160
Ser Tyr Thr Gly Ser Gly Pro Thr Gly Tyr Pro Val Pro Glu Asp Thr
                165                 170                 175
Pro Phe Gly Asn Thr Asp Phe Arg Val Tyr Asn Ile Asp Phe Arg Asn
            180                 185                 190
Thr Trp Ala Asp Tyr Ser Asp Gly Pro Ala His Ala Leu Ser Phe Ser
        195                 200                 205
Arg Ala Asn Gly Gly Phe Tyr Tyr Cys Gly Phe Tyr Ser Tyr Gln Asp
    210                 215                 220
Thr Val Arg Leu Phe Ala His Ala Ser Ser Arg Leu Gln Gly Trp Thr
225                 230                 235                 240
Asn
```

<210> 36136
<211> 288
<212> PRT
<213> A.fumigatus

<400> 36136
Thr Met Ser Phe Pro Ala Cys Trp Ser Leu His Leu His Ser Arg Pro
1 5 10 15
Ala Thr Pro Ala Gln Ala Gln Arg Gly Ile Leu Cys Arg Arg Ile Leu
20 25 30
Arg Ser Val Thr Pro Ile Ser Gly Ser Thr Thr Ser Ile Phe Ala Thr
35 40 45
His Gly Leu Ile Thr Pro Thr Asp Arg Arg Met Leu Ser Ala Ser Val
50 55 60
Ala Pro Thr Ala Ala Ser Thr Thr Ala Asp Ser Thr Leu Thr Arg Ile
65 70 75 80
Leu Tyr Val Ser Leu Leu Met Leu Leu Val Gly Cys Arg Asp Gly Gln
85 90 95
Thr Asp His Ala Gln Val Tyr Val Gly Lys Leu Gly Asn Ala Tyr Phe
100 105 110
Tyr Lys Asn Ile Ile Ala Gly Gln Thr Asp Phe Leu Tyr Gly Phe Gly
115 120 125
Thr Ala Trp Ile Gln Ser Ser Asp Ile Leu Leu Arg Asn Cys Gly Gly
130 135 140
Gly Ile Thr Ala Trp Lys Gly Thr Asn Thr Thr Phe Glu Asn Gln Tyr
145 150 155 160
Gly Val Tyr Ile Val Asp Ser Thr Val Arg Ala Ala Asn Ala Phe Ile
165 170 175
Ala Pro Val Ile Ala Gly Lys Cys Ala Leu Gly Arg Pro Trp Asn Ser
180 185 190
Leu His Arg Ser Ile Phe Ala Asn Thr Tyr Glu Asp Gly Ser Ile Glu
195 200 205
Pro Ser Gly Tyr Ile Asp Trp Val Val Ser Gly Val Ser Arg Phe Thr
210 215 220
Asn Gln Thr Val Met Ala Glu Tyr Lys Ala Phe Gly Pro Gly Phe Asn
225 230 235 240
Ala Thr Gly Arg Ala Glu Gly Gly Val Thr Ile Val Met Asp Lys Lys
245 250 255
Gln Tyr Lys Arg Tyr Asp Ser Pro Ala Lys Val Phe Gln Ser Pro Asp
260 265 270
Gly Lys Thr Gly Asn Ile Gly Trp Ile Asp Phe His Ala Asp Arg Val
275 280 285

<210> 36137
<211> 63
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36137

```
Ala Ile Leu Arg Asp Arg Xaa Pro Val Gly Pro Ser Ser Pro Val Val
1               5                  10                  15
Lys Thr Ala Met Leu Val Ser Pro Val Asp Ile Arg Gln Cys Leu Arg
            20                  25                  30
Phe Lys His Cys Gln Pro Arg Gly Tyr Ser Pro Gly Leu Phe Tyr Pro
        35                  40                  45
Gly Phe Cys Ser Pro Gln Phe Leu Gln Ile Ser Pro Glu Ala Gln
    50                  55                  60
```

<210> 36138
<211> 77
<212> PRT
<213> A.fumigatus

<400> 36138

```
Asp Ser His Ala His Ser Leu Ser Ser Pro Ser Thr Ser Ser Ser Pro
1               5                  10                  15
Phe Pro Gln Thr Pro Ala Ala Pro Arg Pro Thr Gly Ala Ser Ala Pro
            20                  25                  30
Gly Thr Pro Pro Arg Cys Gln Pro Thr His Gly Thr Pro Ala Pro Ser
        35                  40                  45
Thr Arg Arg Leu Pro Ser Pro Asp Pro Leu Pro Ala Gln Ser Asp Asn
    50                  55                  60
Arg Thr Ser His Ser Thr Leu Pro Pro Ser Pro Ser Thr
65                  70                  75
```

<210> 36139
<211> 329
<212> PRT
<213> A.fumigatus

<400> 36139

```
Asp Leu Ser Gln Val Gln Phe Ser Arg His Val Leu Ser Leu Phe Ser
1               5                  10                  15
Ser Asn Leu Arg Ser Lys Ser Val Lys Met Ala Met Asp Ala Lys Glu
            20                  25                  30
Ile Glu Leu Lys Ala Lys Ala Leu Thr Lys Ala Ala Thr Gln Asn Glu
        35                  40                  45
Pro Ala Ala Asn Ile Val Ser Leu Leu Lys Glu Leu Gln Ser Gly Val
    50                  55                  60
Lys Ala Thr Glu Asp Leu Leu Arg Ser Thr Arg Val Gly Ile Ile Val
65                  70                  75                  80
Asn Lys Phe Lys Gln His Lys Ser Pro Glu Val Ala Arg Leu Ser Ser
                85                  90                  95
Glu Ile Val Ser Lys Trp Arg Asn Glu Val Asn Lys His Lys Ala Ser
            100                 105                 110
Gly Ser Pro Ser Val Ser Gln Arg Ser Ser Gly Ser Pro Arg Pro Ala
        115                 120                 125
Gln Asn Gly Thr Ala Ser Pro Ala Gly Thr Thr Pro Ser Asp Lys Leu
    130                 135                 140
Ser Lys Leu Ser Val Pro Pro Asp Lys Arg Thr Trp Lys Ala Asp Gly
145                 150                 155                 160
Val Asp Ile Asn Gln Thr Ser Asn Lys Ile Arg Asp Ser Cys Ile Gly
                165                 170                 175
Leu Met Tyr Asp Gly Leu Cys Leu Asn Ser Thr Glu Ser Pro Arg Ala
            180                 185                 190
```

```
Val Leu Ser Lys Ala Ser Ala Val Glu Ala Ala Ala Phe Asn Ala Leu
        195                 200                 205
Gly Pro Glu Thr Lys Glu Gln Tyr Arg Thr Lys Ile Arg Ser Leu Tyr
    210                 215                 220
Gln Asn Leu Lys Asn Lys Ser Asn Pro Thr Leu Arg Val Arg Val Leu
225                 230                 235                 240
Ser Asn Glu Val Thr Pro Glu Gln Phe Val Lys Met Ser His Asp Glu
                245                 250                 255
Leu Lys Ser Asp Glu Gln Arg Glu Gln Glu Arg Arg Ile Gln Lys Glu
            260                 265                 270
Asn Met Asp Lys Ala Met Val Ala Gln Ala Glu Arg Ser Ile Ser Thr
        275                 280                 285
Ser Leu Gln Cys Gly Lys Cys Gly Gln Arg Lys Val Thr Tyr Thr Glu
    290                 295                 300
Ala Gln Thr Arg Ser Ala Asp Glu Pro Met Thr Leu Phe Cys Thr Cys
305                 310                 315                 320
Met Asn Cys Gly Lys Ser Trp Arg Gln
                325
```

<210> 36140
<211> 206
<212> PRT
<213> A.fumigatus

<400> 36140

```
Lys Lys Leu Ser Val Ile Met Thr Thr Ala Lys Thr Tyr Thr Arg Ser
1               5                   10                  15
Ala Leu Val Gln Pro Thr Leu Ala Leu Cys Asp Ala Phe Ala Ser Ala
            20                  25                  30
Ala Pro Val Pro Val Leu Leu Ser His Phe Thr Ala Asp Pro Leu Pro
        35                  40                  45
Met Val His Glu His Gly Leu Pro Val Leu Ala Pro Phe Leu Gly Arg
    50                  55                  60
Thr Phe Thr Gly Thr Asp Gly Val Cys Arg Tyr Phe Glu Leu Ile Ala
65                  70                  75                  80
Asp Leu Leu Ser Phe Glu Lys Met Ser Phe Asp Gly Glu Asp Glu Trp
                85                  90                  95
Ile Val Asp Thr Val Ser Met Ala Val Ser Leu Arg Gly Arg Ala Arg
            100                 105                 110
Phe Thr Trp Lys Glu Thr Gly Glu Gly Trp Asn Glu Thr Phe Cys Tyr
        115                 120                 125
Arg Ile Gly Leu Ala Glu Asp Gln Gly Lys Gly Gly Gly Gly Leu Lys
    130                 135                 140
Val Gln Glu Tyr Arg Val Trp Ala Asp Thr Gly Ala Ala Tyr Leu Ala
145                 150                 155                 160
Arg Thr His Gln Leu Gly Glu Val Gln Arg Glu Phe Ala Glu Arg Glu
                165                 170                 175
Thr Lys Lys Ser Met Glu Arg Thr Arg Ser Gly His Gly Asn Leu Ile
            180                 185                 190
Gly Glu Gly Gln Arg Val Tyr Ser Gly Gly Ser Gly Thr Ala
        195                 200                 205
```

<210> 36141
<211> 107
<212> PRT
<213> A.fumigatus

<400> 36141
His Arg Gly Gly Val Pro Gly Ala Asp Ala Pro Val Gly Arg Gly Ala
1 5 10 15
Ala Gly Val Cys Gly Lys Gly Asp Glu Glu Val Asp Gly Glu Asp Lys
20 25 30
Glu Trp Ala Trp Glu Ser Tyr Trp Gly Gly Thr Glu Gly Ile Phe Trp
35 40 45
Gly Lys Trp Asp Gly Ile Asp Glu Tyr Ile Ala Ser Cys Asp Ile Asp
50 55 60
Ser Ser Ile Trp Leu Asp Ile Ser Lys Leu Arg Gln Ala Val Ser Val
65 70 75 80
Lys Leu Asp Ala Ile Arg Val Glu Ile Asp Pro Ala Asp Val Ala Arg
85 90 95
Leu Ala Val Arg Arg Leu Glu Tyr Leu Arg Trp
100 105

<210> 36142
<211> 470
<212> PRT
<213> A.fumigatus

<400> 36142
Ser Ile Asp Lys Ala Asp Ser Gly His Thr Ala Met Ala Leu Gln Asn
1 5 10 15
Val Ile Asp Tyr Leu Glu Leu Ile Lys Ala Ser Glu Leu Pro Ser Val
20 25 30
Leu Glu Glu His Trp Arg Arg Val Gln Ala Gly Tyr Ile Leu Ser Gln
35 40 45
Ser Leu Ala Val Ser Pro Cys Asp Ser Arg Ala Val Ser Gly Ser Ser
50 55 60
Ser Pro Ser Asn Ser Arg Arg Val Arg Gln Ile Val Pro Thr Asp Ser
65 70 75 80
Leu Thr Arg Gln Ile Ile Glu Ile Phe Lys Gly Lys Ser Thr Val Ser
85 90 95
Pro Lys Tyr His Cys Gln Ser Lys Val Lys Ile Gly Asn Arg Thr Leu
100 105 110
Ala Glu Trp Leu Asp Ser Thr Leu Trp Met His Asp Asp Glu Gln Lys
115 120 125
His Ile Glu Leu Leu Gly Ala Leu Ala Lys Ser Lys Arg Trp Val Gln
130 135 140
Pro Gly Met Gly Ser Ala Ser Lys Leu Val Gln Glu Leu Ser Trp Gly
145 150 155 160
Gly Arg Met Phe Gly Ala Phe Thr Asn Asp Glu Leu Asp Ala Leu Ile
165 170 175
Ala Trp Ile Asp Leu Leu Asp Pro Glu Asn Ser Ser Trp Leu Tyr Tyr
180 185 190
Arg Phe Thr Leu Arg Ala Pro Val Ala Ser Arg Asp Val Val Gly Gly
195 200 205
Leu Gln Asp Pro Thr Cys His His Leu Thr Leu Pro Ala Arg Asn Ala
210 215 220
Asp Glu Thr Ile Asp Gly Ala Phe Met Glu Lys Leu Pro Asp Cys Arg
225 230 235 240
Leu Asp Thr Glu Cys Pro Asp Gln Lys Thr Pro Leu Asn Thr Pro Ser
245 250 255
Lys Thr Gln Leu Pro Asp Ile Val Ala Leu Trp Phe Ala His Ile Gly

```
            260                 265                 270
Leu Leu Glu Asn Ile Ile Asn Val Pro Ala Arg Thr Ala Thr Ser Leu
        275                 280                 285
Tyr Ser Gly Ile Leu Leu Ala Leu Arg Ala Gln Ala Gly Phe Ala Ala
    290                 295                 300
Glu Ala His Val Pro Ala Gly Met Ala Glu Val Arg Arg Gln Pro Ala
305                 310                 315                 320
Cys Ser Leu Val Asp Ile Gly Leu Glu Ile Ile Ser Arg Ala Gln Trp
                325                 330                 335
Thr Arg Asp Gly Asn Pro Ser Cys Leu Lys Asp Val Phe Val Leu Ala
            340                 345                 350
Arg Lys Gln Gly Gln Ser Ala Glu Ser Ile Lys Leu Ser Asp Asn Met
        355                 360                 365
Leu Arg Trp Ala Asn Arg Pro Asn Glu Asn Phe Gly Ile Leu Val Gly
    370                 375                 380
Leu Ala Leu Ala Phe Leu Gly Leu Lys Glu Ala Ile Ala Gly Ser His
385                 390                 395                 400
Glu Leu Leu Ser Glu Glu Ser Gln Ala Ala Leu Lys Ala Ile Ile Lys
                405                 410                 415
Arg Glu Gln Lys Gly Leu Phe Ser Cys Met Gln Glu Ile Lys Ser Thr
            420                 425                 430
Gly Asp Gly Arg Tyr Lys Asp Ile Glu Lys Gly Tyr Cys Leu Gly Arg
        435                 440                 445
Ser Ala Leu Glu Lys Leu Leu Gly Lys Thr Ala Gly Val Glu Asn Thr
    450                 455                 460
Leu Leu Met Arg Thr Ala
465                 470

<210> 36143
<211> 179
<212> PRT
<213> A.fumigatus

<400> 36143
Thr Asn Met Ala Leu Asp Gly Arg Ser Pro Ser Pro Ser Ile Ser Asp
1               5                   10                  15
Leu Glu Cys Ala Cys Leu Tyr Phe Ala Tyr Gly Ser Asn Met Asn Leu
            20                  25                  30
Thr Gln Met Ala Gln Arg Cys Pro Glu Ser Val Ile Phe Ala Lys Gly
        35                  40                  45
Ala Leu Cys Asn Tyr Lys Trp Gln Thr Asn Ser Arg Gly Gly Gly Asn
    50                  55                  60
Val Ile Gln Gly Asn Thr Glu Asp Val Val His Gly Ile Val Phe Ile
65                  70                  75                  80
Ile Ser Ser Ser Glu Val Glu Ala Leu Arg Arg Tyr Glu Gly Val Asp
                85                  90                  95
Lys Gln Phe Phe Val Glu Lys Lys Leu Val Ile Glu Leu Glu Ala Ile
            100                 105                 110
Ser Asp Pro Arg Phe Ser Arg Gln Lys Thr Ala Asp Val Val Lys Val
        115                 120                 125
Leu Ala Thr Lys Asp Ser Asp Tyr Gly Lys His Thr Ile Leu Ala Thr
    130                 135                 140
Lys Arg Pro Thr Ser Ser Asp Glu Ile Cys Gln Val Glu Thr Arg Leu
145                 150                 155                 160
Ser Gly Thr Leu Thr Leu Lys Arg Trp Asp Leu Val Asp Ile Leu Thr
                165                 170                 175
```

Asp His Ala

<210> 36144
<211> 540
<212> PRT
<213> A.fumigatus

<400> 36144
Tyr Arg Leu Thr Arg Thr Ile Met Ala Pro Ala Ala Gly Pro Arg Thr
1 5 10 15
Gly Lys His Ala Lys Pro Gln Arg Ser Lys Thr Leu Lys Arg Lys Arg
20 25 30
Gly Gln Glu Glu Leu Ser Ser Leu Ile Gln Arg Val Glu Asp Leu Asp
35 40 45
Leu Lys Gly Ile Phe Lys Ser Phe Ser Asp Leu Pro Leu Ser Glu Pro
50 55 60
Thr Ala Ser Gly Leu Ala Ser Ser His Tyr Lys Thr Leu Thr Asp Ile
65 70 75 80
Gln Ser Arg Ala Ile Ser His Ala Leu Lys Gly Arg Asp Ile Leu Gly
85 90 95
Ala Ala Lys Thr Gly Ser Gly Lys Thr Leu Ala Phe Leu Val Pro Val
100 105 110
Leu Glu Asn Leu Tyr Arg Lys Gln Trp Ala Glu His Asp Gly Leu Gly
115 120 125
Ala Leu Ile Leu Ser Pro Thr Arg Glu Leu Ala Ile Gln Ile Phe Glu
130 135 140
Val Leu Arg Lys Ile Gly Arg Tyr His Thr Phe Ser Ala Gly Leu Val
145 150 155 160
Ile Gly Gly Lys Ser Leu Lys Glu Glu Gln Glu Arg Leu Gly Arg Met
165 170 175
Asn Ile Leu Val Cys Thr Pro Gly Arg Met Leu Gln His Leu Asp Gln
180 185 190
Thr Ala Leu Phe Asp Thr Tyr Asn Leu Gln Met Leu Val Leu Asp Glu
195 200 205
Ala Asp Arg Ile Leu Asp Leu Gly Phe Gln Gln Thr Val Asp Ala Ile
210 215 220
Ile Gly His Leu Pro Lys Glu Arg Gln Thr Leu Leu Phe Ser Ala Thr
225 230 235 240
Gln Thr Lys Lys Val Ser Asp Leu Ala Arg Leu Ser Leu Gln Asp Pro
245 250 255
Glu Tyr Val Ala Val His Glu Thr Ala Ser Ser Ala Thr Pro Ser Lys
260 265 270
Leu Gln Gln His Tyr Val Ile Thr Pro Leu Pro Gln Lys Leu Asp Ile
275 280 285
Leu Trp Ser Phe Ile Arg Ser Asn Leu Lys Ser Lys Thr Met Val Phe
290 295 300
Leu Ser Ser Gly Lys Gln Val Arg Phe Val Tyr Glu Ser Phe Arg His
305 310 315 320
Leu Gln Pro Gly Ile Pro Leu Met His Leu His Gly Arg Gln Lys Gln
325 330 335
Gly Gly Arg Leu Asp Ile Val Thr Arg Phe Ser Gln Ser Lys His Cys
340 345 350
Val Leu Phe Ser Thr Asp Val Ala Ala Arg Gly Leu Asp Phe Pro Ala
355 360 365
Val Asp Trp Val Ile Gln Leu Asp Cys Pro Glu Asp Ala Asp Thr Tyr

```
    370                 375                 380
Ile His Arg Val Gly Arg Thr Ala Arg Tyr Glu Arg Glu Gly Cys Ala
385                 390                 395                 400
Val Leu Phe Leu Asp Pro Ser Glu Glu Glu Gly Met Leu Lys Arg Leu
                405                 410                 415
Glu Gln Lys Lys Val Pro Ile Glu Lys Ile Asn Ile Lys Ala Asn Lys
            420                 425                 430
Gln Gln Ser Ile Lys Asp Gln Leu Gln Asn Met Cys Phe Lys Asp Pro
        435                 440                 445
Glu Leu Lys Tyr Leu Gly Gln Lys Ala Phe Ile Ser Tyr Val Lys Ser
    450                 455                 460
Val Tyr Ile Gln Lys Asp Lys Glu Ile Phe Lys Leu Lys Glu Leu Lys
465                 470                 475                 480
Leu Asp Glu Phe Ala Ala Ser Leu Gly Leu Pro Gly Ala Pro Arg Ile
                485                 490                 495
Lys Phe Ile Lys Gly Asp Asp Thr Lys Gln Arg Lys Asn Ala Pro Arg
            500                 505                 510
Ala Ala Ala His Leu Leu Ser Asp Asp Asp Asp Thr Asp Glu Glu Asp
        515                 520                 525
Gly Glu Lys Lys Ser Lys Lys Lys Glu Glu Pro Gln
    530                 535                 540
```

<210> 36145
<211> 198
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (3)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36145

```
Arg Thr Xaa Tyr Asp Arg Met Phe Glu Arg Arg Asn Gln Asp Val Leu
1               5                  10                  15
Ala Glu His Tyr Ser Lys Leu Ile Asn Asp Asp Gly Thr Met Val Ala
            20                  25                  30
Pro Asn Ala Gly Ala Gly Ala Asp Ala Asp Glu Asp Asp Asp Phe Leu
        35                  40                  45
Ser Val Lys Arg Arg Phe Asp Ala Gly Asp Lys Asp Leu Gly Ser Ser
    50                  55                  60
Gly Asp Glu Asp Asp Glu Ser Glu Lys Gly Asn Lys Lys Asn Val Lys
65                  70                  75                  80
Val Val His Ile Asp Gly Ser Thr Pro Leu Val Ile Asp Ser Lys Arg
                85                  90                  95
Arg Glu Lys Leu Leu Lys Ser Lys Lys Lys Leu Leu Lys Phe Lys Gly
            100                 105                 110
Lys Gly Thr Lys Leu Val Tyr Asp Asp Glu Gly Asn Pro His Glu Leu
        115                 120                 125
Tyr Glu Leu Glu Asp Glu Glu Gln Phe Lys Ala Arg Gly Asp Ala Lys
    130                 135                 140
Asp Gln Gln Ala Lys Phe Leu Ala Glu Glu Ala Glu Arg Thr Arg Leu
145                 150                 155                 160
Ala Asp Met Glu Asp Lys Glu Ile Ala Lys Gln Lys Arg Arg Glu Lys
                165                 170                 175
Lys Glu Lys Arg Lys Ala Arg Glu Arg Leu His Thr Arg Ala Leu Glu
```

```
            180                 185                 190
Gly Thr Ala Ile Gly Val
        195

<210> 36146
<211> 279
<212> PRT
<213> A.fumigatus

<400> 36146
Ser Phe Asn Lys His Arg Val Thr Glu Ala Cys Gly Ile Arg Lys Ala
1               5                  10                  15
Glu Phe Thr Met Ser Ser Asp Glu Gln Asp Ala Leu Asp Ala Leu Glu
            20                  25                  30
Lys Glu Ala Ser Asp Phe Ile Lys Val Cys Glu Ser Cys Pro Ser His
        35                  40                  45
Asn Trp Arg Gln Thr Asp Ile Cys Tyr Asp Val Gly Cys Gly Asn Arg
    50                  55                  60
Ser His Ser Lys Gly Phe Ser Ile Arg Cys Val Ser Ile Ile Leu Phe
65                  70                  75                  80
Leu Leu Phe Leu Asp Thr Phe Tyr Ala Phe Tyr Gly Leu Pro Thr Asp
                85                  90                  95
Asn Phe Ala Ile Arg Tyr Ala Val Leu Asp Leu Gln Pro Gly Val Pro
            100                 105                 110
Glu Ser Asp Ile Lys Leu Gln Tyr Arg Lys Lys Ser Leu Leu Ile His
        115                 120                 125
Pro Asp Lys Thr Lys Asn Pro Ala Ala Pro Asp Ala Phe Asp Arg Leu
    130                 135                 140
Lys Lys Ala Gln Thr Thr Leu Leu Asp Glu Lys Ala Arg Ala Tyr Leu
145                 150                 155                 160
Asp Glu Cys Ile Ala Asp Ala Arg Arg Leu Leu Ile Arg Glu His Lys
                165                 170                 175
Tyr Thr Val Asp Ser Pro Glu Leu Gln Thr Glu Glu Phe Lys Lys Glu
            180                 185                 190
Trp Arg Gln Lys Thr Val Gln Val Leu Leu Glu Glu Glu Ala Arg Arg
        195                 200                 205
Arg Arg Gln Leu Lys Ala Lys Leu Gln Glu Glu Gly Arg Glu Lys Arg
    210                 215                 220
Lys Glu Glu Glu Glu Leu Glu Ala Arg Lys Arg Lys Arg Glu Leu Glu
225                 230                 235                 240
Gln Ala Trp Glu Asn Thr Arg Asp Glu Arg Ile Gly Ser Trp Arg Glu
                245                 250                 255
Phe Gln Lys Gly Gln Lys Lys Gly Thr Asp Gly Asp Lys Lys Lys Lys
            260                 265                 270
Lys Lys Met Lys Val Leu Gly
        275

<210> 36147
<211> 174
<212> PRT
<213> A.fumigatus

<400> 36147
Leu Arg Leu Pro Pro Gly Ile Pro His Pro Met Ala Ser Thr His Pro
1               5                  10                  15
Leu His Pro Tyr Phe Pro Leu Met Lys Ala Arg Phe Asp Asn Asp Met
```

```
            20                  25                  30
Tyr Ala His Leu Asn Asn Thr Val Tyr Ala Met Leu Phe Asp Ser Ile
        35                  40                  45
Val Asn Ser Trp Leu Ile Ala Glu Cys Gly Met Asp Pro Phe Asn Arg
    50                  55                  60
Asn Lys Ser Thr Thr Ser Thr Gly Ala Ser Asp Asp Asp Gly Ala Val
65                  70                  75                  80
Ser Gln Gln Val Gly Ile Met Val Asn Ser Tyr Cys Asp Tyr Phe Ala
                85                  90                  95
Ser Val Ser Tyr Pro Asp Val Leu Asp Leu Gly Leu Arg Val Ala Arg
            100                 105                 110
Leu Gly Ser Ser Ser Val Thr Tyr Glu Val Gly Val Phe Arg Arg Gly
        115                 120                 125
Glu Glu Asp Val Lys Val Val Gly Gly Tyr Thr His Val Phe Cys Ala
    130                 135                 140
Arg Glu Thr Met Arg Pro Ala Lys Gly Gly Met Glu Glu Arg Ile Arg
145                 150                 155                 160
Arg Gly Leu Glu Lys Leu Val Val Arg Glu Gly Ala Lys Leu
                165                 170
```

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<210> 36148
<211> 240
<212> PRT
<213> A.fumigatus

<400> 36148

```
Gln His Arg Arg Leu Ser Pro Ile Ile Phe Phe Gln Pro Leu Arg Ser
1               5                   10                  15
Leu Phe Glu Val Arg Pro Ser Arg Trp Ile Ser Ile Tyr Asp Leu Ala
            20                  25                  30
Val Phe Leu Ser His Phe Ser Asn His Lys Ser Ser Ala Thr Glu Arg
        35                  40                  45
Phe Leu Ser Asn Phe His Ser Ser Ser Pro Phe Ser Leu Ile Arg Pro
    50                  55                  60
Leu Pro Leu Phe Val Ile Gln Ile Ser Asn Thr Met Ala Pro Asn Leu
65                  70                  75                  80
Phe Ile Cys Leu Arg Ala Val Phe Cys Pro Thr Tyr Trp Phe Gln Arg
                85                  90                  95
Gly Glu Arg Ile Gln Gly Ser Ile Phe Gln Glu Glu His Trp Glu Ser
            100                 105                 110
Pro Val Pro Gly Ile Tyr Lys Tyr Ile Pro Gly Arg Gly Trp His Leu
        115                 120                 125
Val Gln Arg Asp Asp Ser Glu Tyr Glu Glu Lys Val Pro Val Pro Leu
    130                 135                 140
Val Tyr Cys Arg Ile Leu His Arg Tyr Ile Phe Glu His Glu Met Glu
145                 150                 155                 160
Asp Arg Cys Arg Trp Gln Ser Val Thr Leu His Glu Gly Ala Lys Pro
                165                 170                 175
Glu Arg Leu Leu Phe Phe Leu Leu Asp Asp Gly Tyr Thr Trp Val Ala
            180                 185                 190
Gly Trp Asp Ala Lys Gly Thr Phe Ile Pro Gly Pro Tyr Gln Lys Trp
        195                 200                 205
His Tyr Asp His Asp Thr Lys Thr Met Gln Arg Val Val Ser Pro Glu
    210                 215                 220
Ser Ser Asn Val Ser Arg Cys Ser Ser Ile Val Pro Thr Lys Met Gly
225                 230                 235                 240
```

<210> 36149
<211> 288
<212> PRT
<213> A.fumigatus

<400> 36149
Tyr Pro Cys Asp Arg Gln Ala Arg Gly Arg Pro Arg Pro Arg Arg Arg
1 5 10 15
Pro Val Pro Leu Gln Leu Asp Arg Arg Asp Pro Ala Leu Ala Ala Arg
20 25 30
Ala Gly Val Arg Pro Pro Ala Leu Gln Ser Pro Gly Pro Pro Asp Leu
35 40 45
Arg Gly Asp Val His Arg Glu Ala Pro Gln Gly Arg Gly Arg His His
50 55 60
His Gln Ala Glu Ala Ala His Arg Ala Lys Gly Val His Arg Ala Arg
65 70 75 80
Gln Gly Pro Leu Pro Arg Arg Gly Gly Arg Leu Arg Pro Ala His His
85 90 95
Val Arg Gln Pro Gln Ala Arg Ala Gln Pro Arg Ala Arg His Arg Gln
100 105 110
Gly Arg Lys Asp Gln Val Pro Pro Ala Ser Val Leu Ser Thr Cys Leu
115 120 125
Ala Arg Pro Gly Thr Arg Arg Gly Arg Ser Asp Arg Gln Arg Arg Pro
130 135 140
Ala Arg Asp Ala Ala Ala Ala Pro Arg Gln Arg Ile Gly Arg Leu Gln
145 150 155 160
His Arg Ala Leu Pro Pro Ala Asp Gly Ala His Ala Pro Asp Pro Arg
165 170 175
Ala Pro Ala Val Pro Gly Pro Pro Asp His Gln Arg Pro Asp Leu Leu
180 185 190
Gln Pro Ala Gly Leu Arg Pro Gly Pro Arg Pro Gln Arg Asn His Arg
195 200 205
Arg Ala Arg Pro Arg Asp His Gly Pro Ala Val Arg Asn Gly Gln Asp
210 215 220
Arg Ser Cys Arg Tyr Asp His Val Pro His Ala Pro Asp Asp Arg Ala
225 230 235 240
Ala Arg Thr Ala Gly His Ala Pro Val Arg Arg Arg Gly Asp His Val
245 250 255
Ala Arg Ala Arg Gly Arg Arg Ala Arg Leu Pro Gln Ala Gln Gly Arg
260 265 270
Ala Pro Leu Arg Arg Gly Leu Arg Arg Leu Arg His Gly Ala Leu Leu
275 280 285

<210> 36150
<211> 83
<212> PRT
<213> A.fumigatus

<400> 36150
Met Asn His Ser Phe Ala Pro Ser Leu Thr Thr Asn Phe Ser Asn Pro
1 5 10 15
Arg Arg Ile Leu Ser Ser Ile Pro Pro Phe Ala Gly Leu Ile Val Ser
20 25 30
Arg Ala Gln Asn Thr Cys Val Tyr Pro Pro Thr Thr Phe Thr Ser Ser
35 40 45

```
Ser Pro Leu Leu Asn Thr Pro Thr Ser Tyr Val Thr Leu Asp Asp Pro
    50                  55                  60
Ser Leu Ala Thr Arg Ser Pro Arg Ser Ser Thr Ser Gly Tyr Glu Thr
65                  70                  75                  80
Glu Ala Lys
```

<210> 36151
<211> 425
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (404)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36151

```
Thr Arg Ser Leu Met Gln Met Gln Val Gln Ala Leu Ala Asp Gly Lys
1               5                   10                  15
Val Thr Val Asn Gly Lys Thr Ala Ala Pro Asp Thr Val Ile Lys Asn
            20                  25                  30
Gly Glu Val Ile Ser His Thr Leu His Arg His Glu Pro Pro Val Thr
        35                  40                  45
Gly His Glu Ile Gly Ile Ile His Glu Asp Asn Asp Ile Leu Val Ile
    50                  55                  60
Asp Lys Pro Ala Gly Val Pro Val His Ala Ala Gly Arg Tyr His Tyr
65                  70                  75                  80
Asn Ser Ile Val Glu Ile Leu Arg Ser Gln Arg Gly Gln Glu Phe Val
                85                  90                  95
Pro Arg Pro Cys Asn Arg Leu Asp Arg Leu Thr Ser Gly Val Met Phe
            100                 105                 110
Ile Ala Lys His Pro Lys Ala Ala Asp Ala Ile Thr Ile Lys Leu Lys
        115                 120                 125
Gln Arg Thr Val Gln Lys Glu Tyr Ile Ala Arg Val Lys Gly Arg Phe
    130                 135                 140
Pro Asp Gly Val Val Val Cys Asp Gln Pro Ile Met Ser Val Ser Pro
145                 150                 155                 160
Lys Leu Gly Leu Asn Arg Val Arg Ala Thr Gly Lys Asp Ala Lys Thr
                165                 170                 175
Lys Phe Arg Arg Leu Ala Tyr Tyr Pro Pro Ala Ser Pro Ala Pro Glu
            180                 185                 190
Arg Asp Glu Asp Glu Val Thr Ala Ser Gly Asp Arg Pro Ala Thr Pro
        195                 200                 205
Pro Pro Leu Leu Ala Asn Glu Ser Glu Gly Tyr Ser Ile Val His Cys
    210                 215                 220
Leu Pro Leu Thr Gly Arg Thr His Gln Ile Arg Val His Leu Gln Phe
225                 230                 235                 240
Leu Gly His Pro Ile Thr Asn Asp Pro Ile Tyr Ser Asn Arg Arg Val
                245                 250                 255
Phe Gly Pro Asp Leu Gly Arg Asn Glu Thr Thr Ala Glu Arg Asp Gln
            260                 265                 270
Glu Ile Met Asp Arg Leu Ser Glu Met Gly Lys Thr Glu Val Ala Asp
        275                 280                 285
Thr Thr Thr Tyr Arg Thr His Leu Thr Thr Val Pro Pro Val Pro Pro
    290                 295                 300
```

```
Gly Thr His Pro Ser Val Val Glu Glu Ile Met Ser Arg Glu His Glu
305                 310                 315                 320
Ala Ala Val His Asp Tyr His Lys Arg Lys Gly Glu Arg Leu Ser Gly
                325                 330                 335
Glu Val Cys Asp Val Cys Gly Thr Glu Leu Tyr Ser Asp Pro Gly Val
            340                 345                 350
His Glu Leu Gly Ile Phe Leu His Ala Val Ala Tyr Ser Asp Leu Glu
        355                 360                 365
Gly Gln Trp Lys Tyr Pro Tyr Lys Met Pro Ser Trp Ala Met Pro Pro
    370                 375                 380
Asn Gly Leu Asp Gly Pro Arg Glu Ala Pro Asp Trp Val Pro Cys Pro
385                 390                 395                 400
Arg Lys Lys Xaa Asp Ile Val Phe Gly Pro Asp Ala Arg Phe Pro Arg
                405                 410                 415
Gly Ile Val Val Gln Ala Phe Leu Asn
            420                 425

<210> 36152
<211> 180
<212> PRT
<213> A.fumigatus

<400> 36152
Thr Cys Ile Leu Phe Phe Tyr Tyr Arg Tyr Val Tyr Asn Glu Ile Ile
1               5                   10                  15
Gln Leu Leu Ala Tyr Val Leu Ser Arg Ser Asp Leu Pro Ala Thr Leu
            20                  25                  30
Ile Tyr Phe Leu Ile Phe Phe Phe Gly Gly Tyr Phe Leu Pro Ser Pro
        35                  40                  45
Gly His Ser Arg Thr Arg Thr His Thr Ile Thr Gly Ser Ser Ile Ser
    50                  55                  60
Pro Leu Ala Pro Ser Pro Arg Ile Thr Ala Tyr Leu Leu Arg Arg Gly
65                  70                  75                  80
Arg Ile Pro Ala Ser Ser Met Ala Val Val Pro Val Asp Thr Thr Leu
                85                  90                  95
Lys Val Pro Pro Pro Asp Pro Val Glu Glu Pro Pro Lys Val Ala Val
            100                 105                 110
Thr Pro Cys Asp Pro Trp Pro Ile Pro Tyr Tyr Phe Glu Gly Gly Leu
        115                 120                 125
Arg Arg Val Lys Pro Tyr Tyr Tyr Thr Tyr Asn Thr Tyr Cys Lys Glu
    130                 135                 140
Arg Trp Arg Gly Arg Gln Leu Gln Glu Ile Phe Thr Ser Glu Phe Arg
145                 150                 155                 160
Asp Arg Pro Ala Glu Tyr Tyr Val Gly Arg Gln Pro Val Asn Glu Ile
                165                 170                 175
Glu Arg Gly Arg
            180

<210> 36153
<211> 127
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (108)
```

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36153

```
Arg Pro Cys Arg Pro Tyr Arg Arg Ala Arg Thr Arg Pro Ser Ser Arg
1               5                  10                  15
Arg Ser Cys Arg Ala Ser Thr Arg Pro Pro Cys Thr Thr Thr Thr Ser
            20                  25                  30
Ala Arg Ala Ser Ala Ser Pro Ala Arg Ser Ala Thr Ser Ala Ala Arg
        35                  40                  45
Ser Ser Thr Leu Thr Leu Ala Ser Met Ser Ser Ala Ser Ser Cys Met
    50                  55                  60
Arg Leu His Thr Leu Ile Trp Lys Ala Ser Gly Ser Ile Leu Thr Arg
65                  70                  75                  80
Cys Pro Arg Gly Leu Cys Arg Pro Met Gly Trp Met Gly Arg Val Arg
                85                  90                  95
Pro Arg Thr Gly Cys Pro Val Pro Gly Arg Arg Xaa Ile Leu Ser Leu
            100                 105                 110
Gly Gln Thr Pro Asp Ser Pro Gly Glu Ser Leu Phe Lys Pro Ser
        115                 120                 125
```

<210> 36154
<211> 277
<212> PRT
<213> A.fumigatus

<400> 36154

```
Ser Phe Ser Leu Pro Ser Cys Lys Ala Ser Ser Thr Met Thr Leu Pro
1               5                  10                  15
Thr Asn Asn Ala Glu Trp Gly Ala Val Ile Ser Ser Tyr Lys Asp Gln
            20                  25                  30
Leu Pro Glu Val Tyr Pro Val Tyr Gln Thr Pro Leu Pro Ser Ser Val
        35                  40                  45
Asn Arg Tyr Ile Asp His Thr Gln Leu Ser Leu Asp Ala Thr Asp Glu
    50                  55                  60
Asp Ile Asp Lys Leu Cys Ala Glu Ala Ala Lys His Asn Phe Ser Ala
65                  70                  75                  80
Val Cys Val Arg Leu Arg His Val Arg Arg Ala Val Thr Asn Leu Gln
                85                  90                  95
Gly Ser Pro Glu Cys Thr Val Ala Cys Val Val Gly Phe Pro Glu Gly
            100                 105                 110
Thr His Asp Thr Met Glu Lys Glu Lys Glu Ala Leu Asp Ala Ala Glu
        115                 120                 125
Leu Gly Ala Ser Glu Leu Asp Met Val Ile Asn Trp Pro Lys Leu Lys
    130                 135                 140
Glu Gly Gln Tyr Met Asp Val Tyr Thr Asp Val Leu Glu Val Arg Lys
145                 150                 155                 160
Gly Ala Pro Ser Pro Val Lys Leu Lys Val Ile Leu Glu Thr Ser Gln
                165                 170                 175
Leu Thr Lys Asp Glu Ile Ile Ala Gly Ser Val Ile Ser Ser Met Ala
            180                 185                 190
Gly Ala Asp Phe Val Lys Thr Ser Thr Gly Phe Lys Gly Ala Gly Ala
        195                 200                 205
Asn Val Asp Asp Val Ala Met Met Arg Ala Ile Val Glu Leu Val Gly
    210                 215                 220
Arg Gly Thr Lys Val Lys Ala Ser Gly Gly Val Arg Ser Ala Glu Asp
225                 230                 235                 240
```

```
Cys Ile Lys Met Leu Lys Ala Gly Ala Asp Arg Ile Gly Thr Ser Ser
                245                 250                 255
Gly Val Asn Ile Ile Asn Gln Leu Ala Gly Lys Glu Thr Gln Pro Thr
            260                 265                 270
Thr Pro Ala Ala Tyr
        275
```

<210> 36155
<211> 193
<212> PRT
<213> A.fumigatus

<400> 36155

```
Ile Pro Ala Cys Thr Tyr Thr Arg Leu Ala Val Met His Ala Trp Pro
1               5                   10                  15
Ala Cys Arg His Phe Ser Ala Ile Ser Trp Ser Arg Ala Trp Ser Arg
            20                  25                  30
Phe Ala Ser Ser Asn Thr Met Lys Gly Gln Phe Pro Pro Ser Ser Arg
        35                  40                  45
Val Thr Phe Phe Ser Pro Ser Ala Gln Cys Ala Ala Ile Ser Leu Pro
    50                  55                  60
Thr Arg Val Asp Pro Val Asn Val Thr Phe Leu Thr Ser Gly Cys Leu
65                  70                  75                  80
Gln Ser Ala Ser Leu Ser Glu Gly Val Phe Ser Arg Ser Val Val Ser
                85                  90                  95
Thr Phe Asn Thr Pro Ala Gly Lys Pro Ala Arg Cys Ala Arg Cys Ala
            100                 105                 110
Ser Thr Ser Val Val Ile Gly Val Ser Gly Leu Gly Leu Thr Ile Ile
        115                 120                 125
Val Gln Pro Ala Ala Lys Ala Ala Pro Ala Leu Arg Arg Thr Met Ala
    130                 135                 140
Met Gly Lys Phe Gln Gly Thr Arg Ala Ala Ala Thr Pro Met Gly Cys
145                 150                 155                 160
Leu Thr Val Lys Thr Arg Arg Leu Gly Ala Glu Gly Thr Leu Thr Val
                165                 170                 175
Pro Trp Met Arg Ser Ala Ser Pro Ala Asn His Gln Val Lys Pro Val
            180                 185                 190
Ala
```

<210> 36156
<211> 159
<212> PRT
<213> A.fumigatus

<400> 36156

```
Ser His Ala Asn Ala Pro Ser Gly Lys Leu Thr Gln Phe Ser Thr Thr
1               5                   10                  15
Tyr Lys Asn Leu Leu Val Leu Pro Phe Asp Ser Gln Gly Ser Ser Phe
            20                  25                  30
Gly Asp Gln Ile Leu Val Asp Ser His Leu Phe Pro Thr Leu Leu Ala
        35                  40                  45
Val Ser Arg Leu Leu Asp Ala Ala Lys Arg Arg Leu Arg Ser Arg Arg
    50                  55                  60
Ile Thr Arg Val His Ala Asn His Ala Arg Leu Lys Ile Leu Gln His
65                  70                  75                  80
```

```
Pro Pro His Thr Val Asn Ile Leu Gly Lys Arg Val Ala Gly Gln Ala
                85                  90                  95
His Ala Cys Ile Val Gly His Ala His Gly Leu Leu Leu Arg Leu Lys
            100                 105                 110
Pro Val Gln Arg Arg Asn Gly Cys Lys Cys Leu Leu Ala Arg His Gln
        115                 120                 125
His Leu Leu Leu His Pro Cys Gln Asp Gly Gly Leu Glu Glu Val Pro
    130                 135                 140
Phe Leu Pro Arg Asn Leu Ser Ala Ala Glu Asp Asp Ile Arg Thr
145                 150                 155
```

<210> 36157
<211> 157
<212> PRT
<213> A.fumigatus

<400> 36157

```
Pro Ala Arg Ile Phe Asp Leu Leu Pro Arg Leu Val Gln Ala Pro Arg
1               5                  10                  15
Cys Arg Glu Gly Ala His Ser Ser Ala Leu Leu Arg Ala Val Ala Asp
            20                  25                  30
Asp Gln Leu Leu Arg Ala Phe Leu Glu His Leu Cys Glu Phe Ile Val
        35                  40                  45
Asp Pro Cys Leu His Val His Thr Val Gly Ser Asp Ala Arg Leu Ala
    50                  55                  60
Cys Met Pro Pro Phe Gln Arg His Gln Leu Val Gln Gly Leu Val Glu
65                  70                  75                  80
Val Arg Ile Val Glu His Asn Glu Gly Ala Ile Pro Thr Glu Leu Glu
                85                  90                  95
Gly His Leu Leu Gln Pro Leu Gly Ala Val Arg Ser Asp Gln Leu Ala
            100                 105                 110
Asp Ala Arg Gly Ser Arg Lys Cys His Leu Phe Asp Glu Arg Met Leu
        115                 120                 125
Ala Lys Arg Leu Thr Gln Arg Arg Arg Val Phe Gln Val Gly Gly Gln
    130                 135                 140
His Ile Gln His Ala Cys Trp Glu Thr Arg Ala Leu Arg
145                 150                 155
```

<210> 36158
<211> 175
<212> PRT
<213> A.fumigatus

<400> 36158

```
Val Arg Gln His Glu Cys Arg Asp Arg Ser Leu Arg Ala Arg Leu Asp
1               5                  10                  15
Asp His Arg Ala Ala Gly Gly Glu Gly Gly Ala Cys Phe Thr Gln Asp
            20                  25                  30
His Gly Asp Gly Glu Ile Pro Gly Asp Gln Ser Gly Gly His Thr Asp
        35                  40                  45
Gly Leu Leu Asp Arg Glu Asp Ala Thr Val Gly Arg Arg Gly His Ala
    50                  55                  60
Tyr Arg Thr Val Asp Ala Leu Cys Leu Ala Ser Lys Pro Pro Gly Glu
65                  70                  75                  80
Ala Arg Gly Val Val Asp Leu Pro Val Arg Phe Gly Glu Gly Phe Pro
                85                  90                  95
```

```
Arg Phe Val Gly Glu Asn Leu Gly Glu Val Gly Pro Arg Arg Pro Tyr
            100                 105                 110
Glu Ser Val Pro Phe His Glu Pro Leu Gly Ala Leu Pro Gly Val Gly
        115                 120                 125
Leu Leu Val Gly Phe Glu Cys Phe Met Gly Gly Leu Asp Gly Gly Ile
    130                 135                 140
His Val Phe His Ala Ile Gly Arg Thr Thr Gly Pro Gly Cys Val Gly
145                 150                 155                 160
Thr Gly Val Tyr Pro Asp Val Thr Val Asp Ser Ile Arg Gly Glu
                165                 170                 175
```

<210> 36159
<211> 467
<212> PRT
<213> A.fumigatus

<400> 36159

```
Val Tyr Gly Asn Ile Arg Ile Asp Pro Gly Thr Asp Thr Pro Trp Ala
1               5                   10                  15
Ser Cys Pro Ala Asn Gly Val Glu Asp Val Asn Pro Ala Val Gln Ala
            20                  25                  30
Ala His Glu Ala Phe Glu Thr Tyr Lys Lys Thr Asn Pro Arg Gln Arg
        35                  40                  45
Ala Gln Trp Leu Met Lys Trp Asp Ala Leu Ile Arg Ala Ala Arg Ser
    50                  55                  60
Asp Leu Ala Gln Ile Leu Thr His Glu Thr Gly Lys Pro Leu Ala Glu
65                  70                  75                  80
Ser Tyr Gly Glu Ile Asp Tyr Ala Thr Gly Phe Thr Trp Trp Phe Ala
                85                  90                  95
Gly Glu Ala Glu Arg Ile His Gly Thr Val Ser Val Pro Ser Ala Pro
            100                 105                 110
Asn Arg Arg Val Phe Thr Val Lys Gln Pro Ile Gly Val Ala Ala Ala
        115                 120                 125
Leu Val Pro Trp Asn Phe Pro Ile Ala Met Val Leu Arg Lys Ala Gly
    130                 135                 140
Ala Ala Phe Ala Ala Gly Cys Thr Met Ile Val Lys Pro Ser Pro Glu
145                 150                 155                 160
Thr Pro Ile Thr Thr Leu Val Leu Ala His Leu Ala Gln Arg Ala Gly
                165                 170                 175
Phe Pro Ala Gly Val Leu Asn Val Leu Thr Thr Asp Leu Glu Asn Thr
            180                 185                 190
Pro Ser Leu Ser Glu Ala Leu Cys Lys His Pro Leu Val Lys Lys Val
        195                 200                 205
Thr Phe Thr Gly Ser Thr Arg Val Gly Lys Leu Ile Ala Ala His Cys
    210                 215                 220
Ala Glu Gly Leu Lys Lys Val Thr Leu Glu Leu Gly Gly Asn Cys Pro
225                 230                 235                 240
Phe Ile Val Phe Asp Asp Ala Asn Leu Asp Gln Ala Leu Asp Gln Leu
                245                 250                 255
Met Ala Leu Lys Trp Arg His Ala Gly Gln Ala Cys Ile Thr Ala Asn
            260                 265                 270
Arg Val Tyr Val Gln Ala Gly Ile Tyr Asp Lys Phe Ala Gln Met Leu
        275                 280                 285
Lys Glu Arg Thr Glu Lys Leu Val Val Gly His Gly Ala Gln Glu Gly
    290                 295                 300
Thr Thr Met Gly Pro Leu Thr Thr Pro Arg Gly Leu Asp Lys Ala Arg
```

```
305                 310                 315                 320
Glu Gln Val Glu Asp Ala Arg Arg Leu Gly Ala Asp Val Ile Leu Gly
                325                 330                 335
Gly Gly Gln Val Pro Gly Gln Lys Gly Tyr Phe Phe Gln Pro Thr Ile
            340                 345                 350
Leu Thr Gly Met Lys Glu Glu Met Leu Val Ser Arg Glu Glu Thr Phe
        355                 360                 365
Ala Pro Ile Ala Ala Leu Tyr Arg Phe Glu Thr Glu Glu Glu Ala Val
    370                 375                 380
Arg Met Ala Asn Asn Thr Ser Met Gly Leu Ala Ser Tyr Ala Phe Thr
385                 390                 395                 400
Lys Asn Ile Asp Arg Met Trp Arg Met Leu Glu Asn Leu Glu Ala Gly
                405                 410                 415
Met Ile Gly Met Asn Thr Gly Asn Ala Ser Ala Ala Glu Ser Pro Phe
            420                 425                 430
Gly Gly Ile Lys Glu Ser Gly Tyr Gly Lys Glu Ser Gly Lys Glu Val
        435                 440                 445
Ala Val Asn Glu Tyr Leu Ile Thr Lys Thr Gly Thr Leu Thr Ile Glu
    450                 455                 460
Gly Gln Tyr
465
```

<210> 36160
<211> 97
<212> PRT
<213> A.fumigatus

```
<400> 36160
Ser Gln Ile Phe Ala Ser Glu Gln Arg Lys Ile Glu Gly Arg Gly Arg
1               5                   10                  15
Ala His His Ser Val Ser Arg Thr Glu Ala Arg Ser Lys Glu Ala Asn
            20                  25                  30
Arg Pro Glu Gly Ala Asn Gly Arg Thr Ile Thr Arg Glu Glu Ser Lys
        35                  40                  45
Lys Arg Ile Glu Ser Gln Glu Arg Lys Gln Lys Glu Gly Arg Ala Gly
    50                  55                  60
Glu Glu Arg Glu Glu Glu Glu Glu Arg Ser Gln Ser Lys Ser Gly Asp
65                  70                  75                  80
His Arg Ser Arg Gly Lys Ile Pro Asp Asp Arg Tyr Arg Ser Tyr Pro
                85                  90                  95
Pro
```

<210> 36161
<211> 168
<212> PRT
<213> A.fumigatus

```
<400> 36161
Arg Gly Thr Gly Glu Lys Lys Gly Glu Glu Lys Glu Lys Ala Asp Ser
1               5                   10                  15
His Arg Tyr Ser Gln Val Asn Lys Gly Arg Ser Lys Ala Glu Glu Gly
            20                  25                  30
His Thr Thr Ala Phe Pro Glu Arg Lys His Gly Pro Arg Lys Leu Ile
        35                  40                  45
Asp Gln Lys Glu Gln Thr Asp Gly Gln Ser Gln Glu Lys Lys Ala Lys
```

```
    50                  55                  60
Ser Gly Ser Lys Val Arg Arg Glu Ser Arg Lys Lys Glu Glu Gln Glu
65                  70                  75                  80
Arg Arg Glu Lys Arg Arg Lys Arg Gly Val Arg Ala Ser Gln Glu Thr
                85                  90                  95
Thr Gly Ala Glu Ala Lys Phe Arg Met Ile Asp Ile Asp His Thr Leu
            100                 105                 110
Arg Arg Met Glu Gln Leu Leu Asn Lys Asn Leu Leu Glu Lys Ser Ala
        115                 120                 125
Ser Lys Ala Glu Ala Ala Lys Lys Glu Gln Thr Glu Ile Lys Arg His
    130                 135                 140
Arg Lys Asn Glu Asn His Arg Ala Gly His His Gly Met Gly Lys Met
145                 150                 155                 160
Arg Pro His Gly Ala Asn Trp Pro
                165
```

<210> 36162
<211> 131
<212> PRT
<213> A.fumigatus

<400> 36162

```
Ser Pro Lys Phe Asn Met Pro Glu Pro Ser Leu Glu Ala Gln Ser Leu
1               5                   10                  15
Thr Pro Asp Ala Val Arg Ser Ala Tyr Ala Leu Ile Gln Pro Tyr Val
            20                  25                  30
His Arg Thr Pro Leu Leu Thr Cys Gln Thr Leu Asn Asn Ile Ala Ser
        35                  40                  45
Thr Pro Gln Ser Ala Glu Ser Leu Val Gly Thr Pro Phe Glu Gly Gln
    50                  55                  60
Thr Pro Ala Asn Pro Lys Phe Arg Phe Phe Phe Lys Cys Glu Asn Tyr
65                  70                  75                  80
Gln Arg Ile Gly Ala Phe Lys Pro Arg Gly Ala Phe His Ala Leu Leu
                85                  90                  95
Arg Leu Leu Ala Glu Trp Gly Glu Glu Glu Val Lys Arg Arg Gly Val
            100                 105                 110
Ile Thr His Ser Ser Gly Thr Gln Ile Tyr Pro Thr Leu Leu Lys Leu
        115                 120                 125
Arg Val Ser
    130
```

<210> 36163
<211> 282
<212> PRT
<213> A.fumigatus

<400> 36163

```
Gly Phe His Asp Ala Asp Asn Arg Ile Gly Asn His Ala Gln Ala Leu
1               5                   10                  15
Ala Leu Ala Ala Ser Thr Leu His Val Pro Ala Tyr Ile Val Met Pro
            20                  25                  30
Ser Ile Ser Thr Pro Ser Lys Ile Ala Gly Thr Arg Ser His Gly Ala
        35                  40                  45
Glu Val Ile Phe Ser Gly Ser Thr Ser Thr Glu Arg Glu Ala Val Val
    50                  55                  60
Ala Glu Ile Gln Ala Lys Thr Asp Ala Ile Leu Ile Pro Pro Tyr Asp
```

```
65                  70                  75                  80
His Phe Asp Ile Ile Cys Gly Gln Gly Thr Thr Ala Leu Glu Met Glu
                85                  90                  95
Glu Gln Tyr Arg Ala Leu Val Ala Asp Lys Pro His Leu Ser Ala His
            100                 105                 110
Ala Gly Gly Ala Glu Ala Asp Ser Gly Ser Arg His Leu Asp Ala Val
        115                 120                 125
Ile Thr Pro Leu Gly Gly Gly Gly Leu Asn Ala Gly Val Ala Thr Phe
    130                 135                 140
Phe Ser Gly Lys Pro Thr Arg Val Phe Gly Ala Glu Pro Ser Phe Glu
145                 150                 155                 160
Gly Ala Asp Asp Cys Arg Arg Gly Leu Glu Ala Gly Gln Arg Val Glu
                165                 170                 175
Ser Val Lys Thr Leu Thr Ile Ala Asp Gly Leu Arg Thr Pro Val Gly
            180                 185                 190
Val Leu Asn Trp Glu Val Ile Ser Asp Arg Ser Lys Val Ala Gly Val
        195                 200                 205
Phe Ala Val Thr Glu Asp Gln Ile Lys Ala Thr Met Arg Leu Val Leu
    210                 215                 220
Glu Arg Met Lys Val Val Val Glu Pro Ser Ala Val Val Gly Leu Ala
225                 230                 235                 240
Val Cys Leu Phe Asn Glu Glu Phe Arg Arg Leu Val Glu Lys Glu Ala
                245                 250                 255
Gly Pro Asp Gly Trp Asp Met Gly Ile Val Phe Ser Gly Gly Asn Thr
            260                 265                 270
Thr Val Glu Ala Ile Gly Lys Leu Phe Ser
        275                 280
```

<210> 36164
<211> 228
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (7),(29)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 36164
Ser Pro Arg Ala Arg Pro Xaa Asn Phe Pro His Gly Phe Ser Pro Val
1               5                   10                  15
Phe Lys Glu Leu Thr Lys Val Asp Val Pro Lys Asp Xaa Asp Val Ile
            20                  25                  30
Phe Val Ala Pro Lys Gly Ser Gly Arg Thr Val Arg Thr Phe Phe Arg
        35                  40                  45
Glu Gly Arg Gly Ile Asn Ser Ser Ile Ala Val Tyr Gln Asp Val Thr
    50                  55                  60
Gly Lys Ala Lys Glu Lys Ala Ile Ala Met Gly Val Ala Val Gly Ser
65                  70                  75                  80
Gly Tyr Leu Tyr Glu Thr Thr Phe Glu Lys Glu Val Tyr Ser Asp Leu
                85                  90                  95
Tyr Gly Glu Arg Gly Cys Leu Met Gly Gly Ile His Gly Met Phe Leu
            100                 105                 110
Ala Gln Tyr Glu Val Leu Arg Glu Arg Gly His Ser Pro Ser Glu Ala
        115                 120                 125
Phe Asn Glu Thr Val Glu Glu Ala Thr Gln Ser Leu Tyr Pro Leu Ile
```

```
    130                 135                 140
Gly Ala Asn Gly Met Asp Trp Met Tyr Ala Ala Cys Ser Thr Thr Ala
145                 150                 155                 160
Arg Arg Gly Ala Ile Asp Trp Ser Ser Arg Phe Lys Asp Thr Leu Lys
                165                 170                 175
Pro Ile Phe Asn Glu Leu Tyr Asp Ser Val Arg Asp Gly Thr Glu Thr
            180                 185                 190
Lys Arg Ser Leu Glu Tyr Asn Ser Gln Lys Asp Tyr Arg Glu Lys Tyr
        195                 200                 205
Glu Lys Glu Met Gln Asp Ile Arg Asp Leu Glu Ile Trp Arg Ala Gly
    210                 215                 220
Lys Ala Val Arg
225
```

<210> 36165
<211> 709
<212> PRT
<213> A.fumigatus

<400> 36165

```
Val Pro Leu Val Glu Arg Trp Tyr Pro Arg Thr Leu Ile Val Cys Pro
1               5                   10                  15
Gly Thr Leu Ile Gln Asn Trp Ile Ser Glu Phe Asn Arg Trp Gly Trp
            20                  25                  30
Trp His Val Asp Thr Tyr His Gly Asp Asn Lys Glu Leu Ala Leu Gln
        35                  40                  45
Ala Ala Arg Ser Gly Arg Leu Glu Ile Leu Ile Thr Thr Tyr Gly Thr
    50                  55                  60
Tyr Leu His Asn Lys Asp Ala Val Asn Met Val Glu Trp Asp Cys Val
65                  70                  75                  80
Val Ala Asp Glu Cys His Ile Ile Lys Glu Arg Ser Ser Glu Thr Thr
                85                  90                  95
Lys Ala Met Asn Val Val Asn Ala Leu Cys Arg Ile Gly Leu Thr Gly
            100                 105                 110
Thr Ala Ile Gln Asn Lys Tyr Glu Glu Leu Trp Thr Leu Leu Asn Trp
        115                 120                 125
Thr Asn Pro Gly Lys Leu Gly Pro Val Thr Thr Trp Lys Arg Thr Ile
    130                 135                 140
Ser Glu Pro Leu Lys Ile Gly Gln Ser His Asp Ala Thr Leu Tyr Gln
145                 150                 155                 160
Leu Ser Lys Ala Arg Lys Thr Ala Lys Lys Leu Val Glu Asn Leu Leu
                165                 170                 175
Pro Gln Phe Phe Leu Arg Arg Met Lys Thr Leu Ile Ala Asp Gln Leu
            180                 185                 190
Pro Lys Lys Ser Asp Arg Val Val Phe Cys Pro Leu Thr Glu Thr Gln
        195                 200                 205
Ala Ser Ala Tyr Glu Asn Ile Leu Asp Ser Asp Ile Val Gln Tyr Ile
    210                 215                 220
Lys Thr Ser Ser Asp Lys Cys Asp Cys Gly Ser Gly Lys Lys Ala Gly
225                 230                 235                 240
Trp Cys Cys Arg Gln Phe Leu Pro Ser Gly Gly Arg Trp Gln Asn Tyr
                245                 250                 255
Val Phe Pro Ala Ile Ala Ile Leu Gln Lys Leu Ser Asn His Leu Ala
            260                 265                 270
Thr Leu Ile Pro Gln Gly Ala Asp Ser Leu Glu Lys Gln Glu Lys Asp
        275                 280                 285
```

```
Lys Glu Met Leu Glu Ile Ala Val Pro Asp Gln Trp Glu Gln Leu Tyr
    290                 295                 300
Arg Thr Arg Asp Ser Ile Val Asn Tyr Ala Asn Pro Glu Phe Cys Gly
305                 310                 315                 320
Lys Trp Lys Val Leu Arg Lys Leu Leu Lys Trp Trp His Ala Asn Gly
                325                 330                 335
Asp Lys Val Leu Val Phe Ser His Ser Val Arg Leu Leu Lys Met Leu
            340                 345                 350
Gln Met Leu Phe His Tyr Thr Ser Tyr Asn Val Ser Tyr Leu Asp Gly
        355                 360                 365
Ser Met Thr Tyr Glu Glu Arg Thr Lys Val Val Asp Glu Phe Asn Ser
    370                 375                 380
Asp Pro Lys Gln Phe Val Phe Leu Ile Ser Thr Arg Ser Gly Gly Val
385                 390                 395                 400
Gly Leu Asn Ile Thr Ser Ala Asn Lys Val Val Val Val Asn Pro Asn
                405                 410                 415
Trp Asn Pro Ser His Asp Leu Gln Ala Gln Asp Arg Ser Tyr Arg Ile
            420                 425                 430
Gly Gln Ser Arg Asn Val Glu Val Phe Arg Leu Ile Ser Val Gly Thr
        435                 440                 445
Ile Glu Glu Ile Val Tyr Ala Arg Gln Ile Tyr Lys Gln Gln Gln Ala
    450                 455                 460
Asn Ile Gly Tyr Asn Ala Ser Ser Glu Arg Arg Tyr Phe Lys Gly Val
465                 470                 475                 480
Gln Glu Lys Lys Asp Arg Lys Gly Glu Ile Phe Gly Leu Asp Asn Leu
                485                 490                 495
Phe Glu Phe Lys Thr Asn Asn Ile Val Leu Arg Asp Ile Val Asn Lys
            500                 505                 510
Thr Asn Val Ala Glu Ser Lys Ala Gly Val Gln Val Met Asp Leu Ala
        515                 520                 525
Ile Asp Glu Ser Asp Thr Lys Thr Thr Thr Val Asp Ser Ser Ser Glu
    530                 535                 540
Thr Lys Asn Gln Asp Asp Gln Val Met Ser Gln Leu Ala Ala Met Ile
545                 550                 555                 560
Arg Gly Asp Ala Asp Asp Ala Ala Leu Gln Ala Gln Ala Ala Val Thr
                565                 570                 575
Ala Gln Lys His Asp Pro Ile Gln Ala Ile Leu Ala Gly Ala Gly Val
            580                 585                 590
Glu Tyr Thr His Leu Asn Asn Glu Val Ile Gly Ser Ser Lys Val Glu
        595                 600                 605
Glu Arg Leu Ser Arg Arg Ala Glu Leu Ala Asp Glu Lys Leu Gly Glu
    610                 615                 620
Val Gln Val Phe Gly Ser Ser Gln Asp Arg Thr Glu Gln Gly Gly Ile
625                 630                 635                 640
Leu Asp Lys Asp Gly Arg Pro Ile Arg Tyr Lys Phe His Pro Pro Arg
                645                 650                 655
Glu Val Met Lys Arg Gln Phe Cys Ser Met Ala Lys Arg Phe Gly Phe
            660                 665                 670
Ala Ser Ala Thr Glu Phe Ala Leu Val Val Glu Gly Met Thr Gln Ala
        675                 680                 685
Gln Arg Arg Ala Cys Leu Glu Arg Trp Tyr Thr Glu Arg Arg Glu Ile
    690                 695                 700
Leu Leu Gly Arg Arg
705
```

<210> 36166

<211> 222
<212> PRT
<213> A.fumigatus

<400> 36166
Lys Met Glu Ala His Leu Arg Leu Ser Thr Ala Pro Ser Pro Phe Pro
1 5 10 15
Val Ile Ser Phe Gly Thr Gly Ser Leu Val Arg Leu Pro Gly Pro Ser
20 25 30
Ile Thr Gln Pro Asn Val Tyr Asn Phe Asn Thr Thr Ser Tyr Ser Gln
35 40 45
Met Tyr Asp Glu Leu Leu Ala Lys Asp Glu Arg Leu Tyr Arg Asn Asn
50 55 60
Gly Leu Leu Asn Met Leu Asp Arg Asn Arg Asn Leu Lys Trp Gly Pro
65 70 75 80
Glu Arg Phe Gln Asp Trp Val Pro Gly Met Pro Arg Val Asp His Val
85 90 95
Ser Lys Gly Asp Lys Gly Ala Leu Gly Thr Glu Gly Gly Thr Val Asp
100 105 110
Val Ile Ile Thr Cys Glu Glu Arg Cys Trp Asp Ala Val Val Asp Asp
115 120 125
Leu Met Asn Lys Gly Ala Ala Leu Asn Arg Pro Val His Val Phe Asn
130 135 140
Val Asp Ile Arg Asp Asn His Glu Glu Ala Leu Val Gly Gly Lys Ala
145 150 155 160
Ile Leu Glu Leu Ala Thr Arg Leu Asn Asp Ala Ala Thr Gln Glu Arg
165 170 175
Lys Ile His Gly Ala Glu Gly Trp Glu Asn Gly Asn Gly Glu Ala Arg
180 185 190
Arg Ser Phe Asp Glu Arg Val Pro Glu Ile Leu Ala Ser Trp Gln Glu
195 200 205
Lys Trp Pro Asn Leu Pro Ala Leu Trp Thr Leu Ala Trp Leu
210 215 220

<210> 36167
<211> 78
<212> PRT
<213> A.fumigatus

<400> 36167
Tyr Thr Asn Ile Thr Lys Gln Pro Asn Lys Cys Cys Phe Val Asn Pro
1 5 10 15
Thr Pro Thr Lys Gln Lys Gly Ile Ser Gln Thr Lys Pro Pro Ile Arg
20 25 30
Ser Glu Ala Val Phe Gln Ser His Asn Ile Ile Ser Gly Leu Glu Val
35 40 45
Ser Pro Val Ala Arg Tyr Thr Thr Ala Pro Asn Thr Pro Val Ser Glu
50 55 60
Pro Ala Ser Tyr Pro Pro Pro Gln Val Gln Thr Gln Trp His
65 70 75

<210> 36168
<211> 74
<212> PRT
<213> A.fumigatus

<400> 36168
Ala Arg Ser Cys Lys Leu Leu Leu Lys Trp Thr Asp Cys Pro Glu Asp
1 5 10 15
Tyr Thr Glu Phe Ala Ser Pro Phe Lys Glu Val Ser Ile Ala Glu Trp
20 25 30
Ile Glu Arg Ala Leu Gln Ala Gly Ile Asp Ser Leu Ile Thr Gly Tyr
35 40 45
Leu Glu Ala Lys Val Ile Lys Gly Glu Thr Ile Arg Phe Pro Ser Met
50 55 60
Gly Asp Thr Gly Arg Leu Glu Asp Leu Ala
65 70

<210> 36169
<211> 102
<212> PRT
<213> A.fumigatus

<400> 36169
Leu Leu Arg His Cys Leu Gly Ile Asn Pro Thr Lys Asn Ser Trp Leu
1 5 10 15
Pro Val His Gln Val Gln Val Cys Gly Arg Gly Phe Ala Leu Ser Gly
20 25 30
Lys Tyr Leu Phe Pro Arg Phe Pro Thr Val His Asn Thr Gly Phe Ser
35 40 45
Ala His Ala Gly Ser Phe Lys Pro Thr Val Ala Ser Ser Asn Ser Pro
50 55 60
Lys Tyr Arg Cys Gly Ser Gly Thr Ser Ile Ala Asp Phe Pro Val Leu
65 70 75 80
Arg Phe His Asp Arg Gly Trp Val Ala Tyr Pro Thr Phe Met Ser Arg
85 90 95
Cys Ser Phe Ser Ala Ile
100

<210> 36170
<211> 424
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (315)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36170
Leu Val Asp Ser Val Ser Pro Phe Arg Met Lys Phe Leu Gln Arg Ser
1 5 10 15
Cys Leu Ser Leu Leu Val Ser Leu Ser Ser Ser Leu Ser Leu Pro Asp
20 25 30
Gly His Gly Arg His Asp Ile Ile Pro Lys Thr Val Val Ile Asp Gly
35 40 45
Thr Arg Leu Val Glu Asn Lys Leu Arg Leu Arg Ala Gly Asp Ala Ser
50 55 60
Leu Thr Ala Ala Leu Gly His Leu Thr Ala Glu Ala Asp Arg Trp Leu
65 70 75 80
Ser Gln Gly Pro Trp Thr Val Thr Ala Lys Thr Gln Ala Pro Pro Asn
85 90 95

```
Gly Thr Ile His Asp Tyr Ala Ser Gln Ala Pro Tyr Trp Trp Pro Ser
            100                 105                 110
Asn Thr Thr Asp Gly Cys Pro Tyr Val Asn Arg Asp Gly Glu Arg Asn
        115                 120                 125
Pro Glu Val Glu Lys Tyr Pro Asp His Ser Gly Arg Asp Ser Met Phe
    130                 135                 140
Arg Ser Ser Tyr Ile Leu Ser Leu Ala Trp Tyr Tyr Thr Gly Gln Ala
145                 150                 155                 160
Lys Tyr Ala Gln Arg Ala Ser Leu Ile Leu Gln Thr Trp Phe Ile Asp
                165                 170                 175
Pro Ala Thr Ala Met Thr Pro Asn Leu Arg His Ala Gln Ile Ile Pro
            180                 185                 190
Cys Arg Asn Asp Gly Arg Ser Ile Gly Ile Ile Asp Phe Ser Met Glu
        195                 200                 205
Tyr Ser Asn Val Leu Asp Ala Ala Val Ile Leu Ala Ser Thr Asn Ala
    210                 215                 220
Pro Gly Trp Thr Arg Ala Asn Gln Arg Ala Phe Met Asn Trp Asn Arg
225                 230                 235                 240
Gln Phe Leu Asp Trp Leu Val Asn Ser Pro Phe Gly Lys Glu Glu Ala
                245                 250                 255
Ser His Glu Asn Asn His Gly Thr Phe Ala Asn Met Gln Ile Ala Ala
            260                 265                 270
Leu Ala Leu Phe Thr Gly Asn Thr Ser Leu Ser Arg Lys Thr Ser Gln
        275                 280                 285
Gly Ala Lys Ser Leu Ile Asp Leu Gln Ile Arg Pro Asn Gly Ser Gln
    290                 295                 300
Pro Met Glu Leu Ala Arg Thr Arg Ser Trp Xaa Tyr Ser Asn Phe Asn
305                 310                 315                 320
Leu Gly Ala His Val Arg Phe Ala Leu Val Ala Lys Lys Val Gly Val
                325                 330                 335
Asp Leu Phe Gly Tyr Lys Gly Pro Asp Gly Gln Ser Leu Phe Gly Ala
            340                 345                 350
Thr Asn Phe Leu Leu Lys Ala Ala Val Glu Gly Lys Ser Ala Trp Glu
        355                 360                 365
Phe Glu Glu Leu Glu Phe Lys Pro Tyr Ala Ala Thr Asp Asn Val His
    370                 375                 380
Ala Ala Ala Asp Ala Gly Asp Ser Arg Ala Lys Ala Ala Val Pro Arg
385                 390                 395                 400
Leu His Pro Pro Pro Thr Gly Asp Ile Tyr Leu Leu Arg Pro Ala Ala
                405                 410                 415
Glu Gln Leu Asp Asn Ile Ala Gly
            420
```

<210> 36171
<211> 279
<212> PRT
<213> A.fumigatus

<400> 36171

```
Ser Arg Phe Asn Trp Ser Arg Gly Pro Lys Arg Lys Tyr Thr Arg Thr
1               5                   10                  15
Asp Leu Gln Phe Ser Ser Arg His Leu Gln Asp Phe Phe Asn Ala Ser
            20                  25                  30
Asp Gln Val Gly Asp Phe Glu Ser Gly Val Asp Val Val Thr Glu Asp
        35                  40                  45
Ser Val Leu Gln Ser Leu Gln Gln Trp Ala Thr Asn Thr His Ser Gln
```

```
    50                  55                  60
Met Leu Ala Val Gly Gly Ser Pro Pro Thr Thr Phe Pro Asn Thr Val
65                  70                  75                  80
Ala Leu Phe Ser Ala Cys Phe Ala Thr Phe Ala Arg Gln Ala Arg Leu
                85                  90                  95
Pro Val Ile Ser His Phe Cys Ser Leu Pro Thr Gln Ser Thr Asp Ala
            100                 105                 110
Leu Thr Leu Phe Gln Gln Gly Leu Ile Ala Leu Ala Tyr Ser Leu Ile
        115                 120                 125
Arg Gln Leu Ile Asp Tyr Leu Pro Pro Val Val Glu Ser His Glu Ala
    130                 135                 140
Cys Asp Leu Cys Leu Glu Arg Phe Thr Ser Leu Asn Gly Thr Leu Ser
145                 150                 155                 160
Ser Trp Lys Thr Leu Leu Ser Leu Ile Asp Ala Leu Leu His Tyr Ala
                165                 170                 175
Pro Pro Leu Leu Val Cys Val Ile Asp Gly Leu Asp Lys Leu Gln Asp
            180                 185                 190
Glu Ser Thr Asp Ala His Ile Arg Glu Leu Val Arg Thr Leu Met Ile
        195                 200                 205
His Thr Arg His Arg Val Asp Asp Thr Ala Asp Gly Ser Trp Asn Gln
    210                 215                 220
Lys Val Leu Leu Lys Val Leu Phe Thr Val Ala Asp Arg Pro Ser Ser
225                 230                 235                 240
Leu Val Glu Thr Met Ser Glu Asn Gln Leu Ile Leu Ser Glu Pro Lys
                245                 250                 255
Gly Ala Asp Glu Pro Ile Pro Thr Asp Thr Thr Pro Ala Ser Gly Val
            260                 265                 270
Gly Val Val Met Met Asn Ala
        275
```

<210> 36172
<211> 199
<212> PRT
<213> A.fumigatus

<400> 36172

```
Arg Thr Thr Pro Thr Pro Gly Cys Ala Ser Ser Pro Ser Pro Gly Ser
1               5                   10                  15
Ala Gln Pro Thr Ala Ser Gln Pro Lys Ser Thr Ser Ser Thr Pro Ala
            20                  25                  30
Ala Arg Pro Arg Asn Pro Thr Ala Thr Thr Thr Ser Ala Ser Arg Pro
        35                  40                  45
Ala Pro Pro Pro Pro Ala Ser Arg Ala Pro Cys Thr Ser Pro Arg Ser
    50                  55                  60
Ile Ser Arg Cys Lys Gly Pro Ser Arg Thr Ala Ile Cys Arg Arg Ala
65                  70                  75                  80
Val Gly Arg Pro Ala Ser Ser Pro Ser Ala Ser Ala Leu Ser Leu Gly
                85                  90                  95
Thr Ser Arg Gly Gly Ala Lys Ser Ser Gly Arg Phe Ser Arg Arg Thr
            100                 105                 110
Thr Leu Arg Cys Arg Trp Ser Ser Gly Thr Gly Cys Phe Ser Thr Arg
        115                 120                 125
Gln Cys Phe Met Arg Arg Gly Arg Met Arg Trp His Leu Arg Met Gly
    130                 135                 140
Arg Ala Gly Val Ser Ser Ala Arg Arg Thr Cys Cys Arg Leu Val Val
145                 150                 155                 160
```

```
Arg Leu Ala Arg Gln Trp Arg Val Leu Ile Arg Cys Arg Leu Trp Arg
                165                 170                 175
Gly Val Gly Gly Ile Trp Cys Gly Gly Gly Arg Arg Pro Glu Ala Gly
            180                 185                 190
Trp Met Arg Ser Ser Arg Arg
        195
```

<210> 36173
<211> 467
<212> PRT
<213> A.fumigatus

<400> 36173

```
Leu Pro Glu His Val Val Gly Val Val Ser Ile Cys Gly Val Gln Phe
1               5                   10                  15
His Leu Phe Pro Ala Val Leu Ser Thr Met Ile Arg Ser Ser Glu Phe
            20                  25                  30
Arg Thr Glu Ala Glu Ile Gly Leu Lys Ser Pro Thr Ser Ser Arg Ser
        35                  40                  45
Val Val His Pro Asp Asp Leu Phe Arg Thr Ser Ala Thr Thr Leu Cys
    50                  55                  60
Glu Met Asn Gly Asn His Leu Ala Thr Ser Arg Leu Phe Glu Thr Thr
65                  70                  75                  80
Pro Arg Ile Glu Asp Phe Lys Glu Ile Cys Ser Gln Thr Thr Asp Lys
                85                  90                  95
Ala Ser Tyr Pro Leu Ser Ser Arg Ile Glu Lys Asn Ile Pro Ile Tyr
            100                 105                 110
Asp Ile Thr Thr Leu Asp His Leu Asn Gly Glu Leu Thr Thr Cys Leu
        115                 120                 125
Gln Asp Glu Trp His Asn Ala Leu Asn Thr Gly Pro Gly Ile Val Val
    130                 135                 140
Leu Lys Gly Met Tyr His Pro Thr His His Gly Pro Thr Leu Thr Ala
145                 150                 155                 160
Thr Thr Glu Ala Phe Ala His Ile Ile Ala Gln Glu Arg Arg Thr Ala
                165                 170                 175
Thr Lys Lys Gly Asp His Phe Ala Ala Ser Gly Lys Asn Asp Arg Ile
            180                 185                 190
Trp Asn Ser Phe Ser Lys His Ala Leu Leu Asp Pro Arg Ser Phe Val
        195                 200                 205
Ala Tyr Tyr Ser Asn Pro Trp Leu Arg Leu Ile Ala Glu Ser Trp Leu
    210                 215                 220
Gly Pro Ala Tyr Arg Ile Thr Ala Gln Val Asn Ile Val Asn Pro Gly
225                 230                 235                 240
Gly Ala Ala Gln Glu Ser His Arg Asp Tyr His Leu Gly Phe Gln Ala
                245                 250                 255
Gly Thr Thr Thr Ala Arg Phe Pro Arg Thr Leu His Leu Ala Ser Gln
            260                 265                 270
Tyr Leu Thr Leu Gln Gly Ala Val Ala His Ser Asp Met Pro Ala Cys
        275                 280                 285
Ser Gly Pro Thr Arg Phe Leu Pro Phe Ser Gln Cys Phe Glu Pro Gly
    290                 295                 300
Tyr Leu Ala Trp Arg Arg Glu Glu Phe Arg Ala Phe Phe Gln Glu Asn
305                 310                 315                 320
Tyr Val Ala Leu Pro Leu Glu Leu Gly Asp Gly Val Phe Phe Asn Pro
                325                 330                 335
Ala Val Phe His Ala Ala Gly Ala Asn Glu Met Ala Pro Glu Asp Gly
```

```
            340                 345                 350
Pro Gly Gly Gly Phe Gln Arg Lys Ala Asn Leu Leu Gln Ile Ser Cys
        355                 360                 365
Ala Phe Gly Lys Thr Met Glu Ser Ile Asp Thr Val Pro Ile Val Glu
    370                 375                 380
Arg Cys Trp Gly Asp Met Val Arg Arg Trp Glu Glu Ala Gly Gly Arg
385                 390                 395                 400
Leu Asp Ala Glu Leu Glu Ala Leu Val Met Ala Val Ala Asp Gly Tyr
                405                 410                 415
Pro Phe Pro Thr Asn Leu Asp Arg Arg Pro Pro Ala Pro Ser Gly Met
            420                 425                 430
Ala Pro Glu Ser Glu Gln Glu Ile Val Leu Arg Gly Leu Lys Glu Gly
        435                 440                 445
Trp Gly Val Asp Arg Val Val Glu Glu Leu Lys Gln Met Lys Lys Asp
    450                 455                 460
Ser Ser Ala
465
```

<210> 36174
<211> 154
<212> PRT
<213> A.fumigatus

```
<400> 36174
Ala Tyr Asp Arg Tyr Tyr Gln Thr Ser Asn Met Leu Leu Ile Tyr Gln
1               5                   10                  15
Arg Tyr Leu Leu Ser Asp Pro Arg Ala Leu Pro Ser Ala His Ser Ala
            20                  25                  30
Gly Trp Phe Phe Lys Lys Leu Ile Tyr Leu Leu Gly Pro Arg Leu Pro
        35                  40                  45
Ile Gln Arg Gln Ile Lys His Leu Asn Pro Ser Ser Ser Val Ser Thr
    50                  55                  60
Pro Pro Pro Pro Cys Pro Pro Pro Ile Pro Pro Ser Thr Leu Gly Glu
65                  70                  75                  80
Gln Ser Pro Ala Arg Ser Pro Val Pro Ser His Trp Glu Pro Ala Ala
                85                  90                  95
Ser Tyr Leu Asp Ser Ser Glu Thr Asp Thr His Pro Gln Gln Pro Ser
            100                 105                 110
Leu Ala Pro Arg Ala Pro His Pro Thr Gly Leu Arg Pro Pro Pro Thr
        115                 120                 125
Ala Ala Pro Tyr Pro Pro Asn Thr Ser Pro Gln Ser Ala Pro Tyr Gln
    130                 135                 140
Tyr Ser Pro Leu Ser Cys Gln Thr His Asn
145                 150
```

<210> 36175
<211> 64
<212> PRT
<213> A.fumigatus

```
<400> 36175
Glu Leu Ser Ile Ile Pro Arg Val Ala Ala Ser Phe Ile Phe Lys Pro
1               5                   10                  15
Ser Met Ile Ala Thr Met Leu Leu Pro Ala Arg Phe Asp Ser Thr Tyr
            20                  25                  30
Phe Ser Glu Asn Glu Cys Ser Glu Glu Gly Trp Lys Ala Thr Asp Ser
```

```
        35                  40                  45
Met Cys Gln Ser Lys Ser Asp Met Ala Asp Ile Glu Lys Pro Ile Val
    50                  55                  60
```

<210> 36176
<211> 210
<212> PRT
<213> A.fumigatus

<400> 36176

```
Pro Lys Leu Pro Gly Pro Ala Lys Thr Phe Ser Ser Leu Phe Ser Gly
1               5                   10                  15
Thr Ser Ser Ala Gly Asp Ala Thr Ala His Thr Val Ala Pro His Asn
            20                  25                  30
Pro Phe Ala Ser Ile Ser Ser Pro Phe Met Pro Phe Lys Thr Pro Val
        35                  40                  45
Thr Glu Gln Thr Ala Pro Thr Leu Pro Ala Val Ser Ser Ser His Gln
    50                  55                  60
Pro Thr Ser Ile Phe Ser Thr Gly Thr Tyr Ser Leu Thr Pro Gly Lys
65                  70                  75                  80
Pro Asp Thr Ala Pro Ala Ser Ala Thr Ser Gln Leu Lys Ala Pro Asn
                85                  90                  95
Val Phe Gln Pro Tyr Thr Thr Pro Ser Ala Ser Pro Phe Gly Leu Pro
            100                 105                 110
Gln Thr Pro Ser Ile Ser Arg Pro Asp Gln Val Pro Gly Pro Thr Ala
        115                 120                 125
Ala Gln Pro Ser Ile Asn Ile Phe Asn Thr Gly Lys Pro Ser Ser Ala
    130                 135                 140
Pro Gln Ile Ser Ser Ser Val Phe Ser Leu Thr Gly Gln Asn Ala Leu
145                 150                 155                 160
Leu Gly Lys Ser Glu Ala Glu Asn Arg Gln Pro Ser Leu Phe Asn Ser
                165                 170                 175
Ala Lys Thr Thr Ser Ala Pro Ser Pro Phe Ala Gln Ala Ser Asn Leu
            180                 185                 190
Phe Ala Pro Ala Lys Asp Gly Thr Phe Phe Cys Pro Thr Ala Ser Leu
        195                 200                 205
Ser Val
    210
```

<210> 36177
<211> 110
<212> PRT
<213> A.fumigatus

<400> 36177

```
Leu Asp Cys Pro Glu Ile His Gln Ser Arg Arg Gln Leu Cys Thr Ile
1               5                   10                  15
Leu Ser Ile Ile Lys Val His Arg Ile Phe His Val Gly Leu Leu Gln
            20                  25                  30
Arg Arg Phe Ala Ser Ser Ser Leu Thr Arg His Leu Thr Thr Thr Ser
        35                  40                  45
Ala Val Glu Arg Ala Arg Lys Ala Ile Thr Leu Ser Cys Leu Ala Gln
    50                  55                  60
Val Ser Arg Leu Gln His Arg Gly Met Arg Ile Ala Thr Leu Gln Phe
65                  70                  75                  80
Ala Pro Lys Val Gly Asp Val Glu Gly Asn Ile Lys Arg Thr Asn Glu
```

```
                85                  90                  95
Leu Leu Asn Ser Gly Tyr Ala Thr Gly Ile Glu Asn Leu Asn
            100                 105                 110

<210> 36178
<211> 330
<212> PRT
<213> A.fumigatus

<400> 36178
Asp Glu Gln Leu Leu Ser Asp Ile Arg Thr Pro Lys Gln Phe Phe Gln
1               5                  10                  15
Ser Thr Asn Ile Leu Ile Arg Tyr Ile Leu Gly Gly Pro Glu Pro Leu
            20                  25                  30
Gly Leu Met His Lys Phe Val Trp Asp Arg Thr Arg Ser Ile Arg Asn
        35                  40                  45
Asp Phe Ser Val Gln Gln Leu Thr Gln Glu Glu Asp Val Lys Ile Ala
    50                  55                  60
Val Thr Cys Leu Glu Arg Ile Ala Arg Phe His Ile Val Ser Leu His
65                  70                  75                  80
Leu Leu Ser Ser Pro Ala Asn Glu Glu Pro Phe Asp Arg His Gln Glu
                85                  90                  95
Arg Glu Gln Leu Asn Asn Thr Met Leu Ser Leu Met Tyr Tyr Tyr Asp
            100                 105                 110
Asp Asn Arg Gly Arg Ile Thr Phe Pro Asn Glu Asp Glu Phe Arg Ala
        115                 120                 125
Tyr Tyr Ile Ile Phe Ser Ile His Asp Gln Arg Pro Asp Leu Glu Ala
    130                 135                 140
Arg Val Gln Lys Trp Pro Ala Glu Leu Arg Ser Ser Pro Arg Val Gln
145                 150                 155                 160
Val Ala Leu Glu Leu Phe Ala Ala Ala Gly Asn Thr Trp Glu Tyr Gln
                165                 170                 175
Gly Thr Leu Asp Ala Lys Arg Pro Asn Ala Ile Ala Gln Gly Phe Tyr
            180                 185                 190
Glu Arg Phe Phe Asn Leu Val Asp Ser Pro Ala Val Ser Tyr Leu Met
        195                 200                 205
Ala Cys Val Ala Glu Thr Tyr Phe Asn His Met Arg Gln Thr Ala Ile
    210                 215                 220
Arg Ser Ile Trp Lys Gly Tyr Cys Arg Tyr Pro Ala Ser Gln Gln His
225                 230                 235                 240
Lys Asn Glu Glu Trp Thr Val Asp Glu Leu Thr Asn Val Leu His Phe
                245                 250                 255
Asp Asp Glu Ser Gln Thr Ile Glu Phe Cys Glu Glu Gln Asp Leu Gln
            260                 265                 270
Phe Ala Glu Asn Ala His Gly Asn Leu Tyr Leu Asn Trp Gly Asn Arg
        275                 280                 285
Pro Val Asp Ser Ile Gly Thr Cys Ala Leu Asp Asn Thr Ile Ala Phe
    290                 295                 300
Phe Pro Ser Phe Thr Ala Leu Phe Arg Pro Ile Gly Leu Arg Gln Ser
305                 310                 315                 320
Tyr Tyr Arg Leu Leu Asn Ile Gly His Ile
                325                 330

<210> 36179
<211> 98
<212> PRT
```

<213> A.fumigatus

<400> 36179
Cys Leu Ala Gly Trp Cys Leu Tyr Gly Val Ser Arg Ile Gly Phe Lys
1 5 10 15
Pro Ala Gln Arg Ile His Arg Thr Phe Ala Glu Tyr Asn Lys Arg Arg
20 25 30
Ser Gly Thr Tyr Ala Lys Gln Pro Asp Phe Phe Asp Cys Thr Asn Asp
35 40 45
Gln Tyr Asn Pro Asn Phe Arg Gly Arg Pro Arg Pro Phe Leu Pro Cys
50 55 60
Ser Leu Ala Leu Val Gln Pro Val Thr Gln Arg Arg Thr Gln Leu Arg
65 70 75 80
Leu Ile Thr His Leu Pro Ala Tyr His Arg Arg Leu Cys His Ser Arg
85 90 95
Arg Arg

<210> 36180
<211> 61
<212> PRT
<213> A.fumigatus

<400> 36180
Asn Asn Pro Cys Ser Val Gly Arg Val Asn Phe Arg Leu Pro Glu Pro
1 5 10 15
Lys Gly Arg Thr Tyr Glu Glu Pro Asp Leu Leu Phe Glu Gln Glu Val
20 25 30
Ser Ala Arg Lys Phe Arg Glu Thr Val Val Asp Pro Tyr Ala Gly Glu
35 40 45
Glu Glu His Val Glu Val Arg Glu Glu His His Lys Asp
50 55 60

<210> 36181
<211> 138
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (14)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36181
Ser Met Pro Ser Asn Thr Phe Val Trp Arg Glu Gly Phe Xaa His Arg
1 5 10 15
Val Ala Leu Gly Leu Met Leu Ala Pro Arg Val Pro Pro Gly Arg Val
20 25 30
Tyr Phe Lys Ser Ile Asp Ala Ala His Arg Gln Ile Ser Gln Ile Pro
35 40 45
Ser Ser Phe Tyr Leu His Thr Asp His His His His His His His His
50 55 60
His His His His His His Gly Leu Arg Thr His Leu Arg Ser Pro Pro
65 70 75 80
Ala Pro Pro Arg Arg Ala Ile Ser His Gln His Arg Gln Ser Arg Ala
85 90 95

```
Cys Pro Gly Arg Ala Val Leu Gln Leu Gly Leu Ser Pro Thr Val Asn
            100                 105                 110
Pro Lys Thr Leu Arg Arg Gly Pro Ala Glu Met Val Leu Ile Arg Leu
        115                 120                 125
Gln Ser Pro Asp Cys Leu Cys Pro Cys Ala
    130                 135
```

<210> 36182
<211> 138
<212> PRT
<213> A.fumigatus

<400> 36182

```
Gln Ile Glu Lys Ile Phe Glu Val Ala Cys Thr Leu Thr Asp Val Met
1               5                   10                  15
Ala Cys Leu Ser Thr Ala Gly Leu Arg Ser Ser Gly Phe Asn Leu Gly
            20                  25                  30
Pro Gln Asp Tyr Leu Lys His Phe Phe Ser Leu Val Asn Thr Leu Pro
        35                  40                  45
Gly Gly Arg Gln Arg Phe Leu Pro Leu Leu Leu Thr Lys Val Gly Gln
    50                  55                  60
Thr Leu Pro Ser Met Leu Gln Pro Val Thr Gln His Leu Asn Leu Pro
65                  70                  75                  80
Ala Ala Thr Val Glu Thr Leu Val Pro Pro Glu Lys Ala Glu Pro Glu
                85                  90                  95
Ala Phe Gly Asp Thr Trp Pro Asp Asp Gln Ser Tyr Ser Asp Phe Asn
            100                 105                 110
Tyr Ala Glu Met Ser Arg Ile Gly Asp Lys Thr Pro Glu Ile Asp Glu
        115                 120                 125
Ala Phe Met Gln Tyr Leu Gln Ser Ser Pro
    130                 135
```

<210> 36183
<211> 214
<212> PRT
<213> A.fumigatus

<400> 36183

```
Val Leu Cys Trp Pro His Gly Ser Leu Leu Ala Val Phe Ile Leu Asn
1               5                   10                  15
Gln Ser Met Pro Leu Ile Val Lys Phe Pro Lys Phe His Pro Leu Ser
            20                  25                  30
Ile Tyr Thr Leu Ile Ile Ile Ile Thr Ile Ile Ile Ile Thr Ile Ile
        35                  40                  45
Ile Ile Met Ala Ser Gly Leu Ile Phe Asp Pro Leu Gln Leu Leu Arg
    50                  55                  60
Val Ala Pro Leu Ala Thr Ser Thr Gly Ser Leu Val His Ala Leu Val
65                  70                  75                  80
Glu Leu Phe Ser Asn Ser Ala Phe Leu Gln Pro Ser Ile Arg Lys Pro
                85                  90                  95
Ser Asp Ala Val Leu Pro Lys Trp Tyr Ser Tyr Val Phe Asn Arg Gln
            100                 105                 110
Ile Val Ser Val Leu Ala Leu Asn Leu Thr Thr Ile Ser Thr Gly Ile
        115                 120                 125
Ser Asn Ile Leu Leu Ser Arg Ser Arg Ser Ala Leu Pro Leu Ser Arg
    130                 135                 140
```

```
Thr Thr Phe Tyr Trp Ala Gly Val Ala Gly Ala Val Ala His Leu Phe
145                 150                 155                 160
Phe Val Pro Phe Val Ala Pro Arg Ile Gln Arg Ile Val Glu Asp Ser
                165                 170                 175
Asn Ala Asn Gly Pro Thr Val Asp Met Glu Asp Trp Leu Gly Phe His
            180                 185                 190
Arg Ile Arg Met Leu Val Ala Asp Leu Pro Ala Trp Leu Ala Phe Ala
        195                 200                 205
Gly Ala Val Met Val Val
    210
```

<210> 36184
<211> 499
<212> PRT
<213> A.fumigatus

<400> 36184

```
Glu Leu Arg Pro Pro Leu His Cys Leu Asp Thr Gly Tyr Ser Trp Arg
1               5                   10                  15
Gly Met Thr Arg Lys Thr Ser Thr Phe Ser Pro Phe Phe Asp Pro Pro
            20                  25                  30
His Asn Phe Ser Gln Ile Ile Ala Thr Ser Asn Gln Thr Cys Lys Met
        35                  40                  45
Pro Arg Asp Thr Gln Met Val Lys Gln Ala Cys Asp Ala Cys Arg Arg
    50                  55                  60
Arg Lys Val Lys Cys Asn Ala Gln Arg Pro Cys Ser Gln Cys Arg Ser
65                  70                  75                  80
Ala Gly Leu Ser Cys Arg Thr Ser Leu Val Arg Gln Lys Lys Gly Arg
                85                  90                  95
Gln Gly Arg Ser Ala Asn Val Leu Ser Glu Leu Arg Thr Gln Asn Ala
            100                 105                 110
Gln Gly Asn Glu Pro Pro Asp Pro Thr Ile Ala Ser Leu Thr Val Ala
        115                 120                 125
Ala Ser Ile Val Ser Pro Pro Gly Gly Arg Cys Arg Phe Ala Arg Lys
    130                 135                 140
Glu Asn Val Leu Pro Arg Glu Leu Ile Arg Asp Cys Ser Glu Tyr Phe
145                 150                 155                 160
Phe Ala Arg Met Gln Gly Thr Val Pro Ile Leu Gln Ala Glu Thr Phe
                165                 170                 175
Gln Arg His Val Glu Gln Met Asp His Cys Ile His Ala Tyr Cys Leu
            180                 185                 190
Val Val Ala Phe Cys Ala Phe Val Met Met Gln Thr Gly Tyr Ser Ser
        195                 200                 205
Ala Gln Ala Ala Gly Ser Arg Trp Thr Arg Ser Met Asp Ala Gly Arg
    210                 215                 220
Glu Leu Leu Glu Glu Ala Thr Glu Ala Arg Lys His Leu Asp Pro Leu
225                 230                 235                 240
Thr Val Pro Val Arg Gln Ser Ile Thr Ile Ala Phe Leu Leu Tyr Gly
                245                 250                 255
Cys His Ile Ala Leu Gly Asn Gln Arg His Ala Tyr Tyr Phe Leu Arg
            260                 265                 270
Glu Ala Thr Thr Leu Tyr Thr Ala Gly Met Leu Asp Thr Gln Ser Asp
        275                 280                 285
Ala Glu Glu Gly Glu Glu Lys Leu Ser Ser Gly Lys Leu Phe Trp Leu
    290                 295                 300
Leu Leu Ile Ser Glu Arg Tyr Phe Asp Trp Met Ala Gln Val Glu Ile
```

```
305                 310                 315                 320
Val Leu Ile Arg Asn Arg Ala His Ala Ile Arg Arg His Arg Pro Val
                325                 330                 335
Thr Leu Gln Val Thr Ala Asn Ser Pro Thr Leu Glu Asp Pro Ser Pro
            340                 345                 350
Asp Asp Thr Ser Cys Ile Gly Phe Arg Cys Leu Ala Asp Leu Tyr Arg
        355                 360                 365
Pro Phe Asp Glu Ser Phe Leu Gly Leu Trp Asn Gly Thr His Ala Thr
    370                 375                 380
Cys Ser Arg Glu Ser Leu Ile Leu Leu Asp Lys His Ile Cys Asp Ala
385                 390                 395                 400
Val Pro Pro Asp Leu Glu Leu Pro Asp Ile Pro Met Ala Asp Leu Arg
                405                 410                 415
Val Ser Gln Gln Trp Leu Arg Thr Met Ile Trp Gln Leu Ser Thr Thr
            420                 425                 430
Val Gly Phe Leu Ser Ser Lys Ala Ser His Pro Cys Met Glu Phe Arg
        435                 440                 445
Tyr Pro Leu Gln Ile Ala Arg Asp Leu Ser Leu Ala Thr Trp Lys Leu
    450                 455                 460
Ser Thr Gln Ser Met Glu Thr His Gly Ile Gly Leu Val Gly Glu Pro
465                 470                 475                 480
Ser Pro Leu Tyr Thr Lys Met Leu Ile Asn Cys Asp Arg Leu Arg Lys
                485                 490                 495
Ser Ser Arg
```

<210> 36185
<211> 118
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (52),(62)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 36185
Arg Arg Glu Glu Phe Ser Arg Arg Trp Ser Ser Ser Glu Thr Ala Lys
1               5                   10                  15
Ser Ser Ser Ala Ala Asn Gln Thr Ile Phe Phe Gly Ile Gln Pro Thr
            20                  25                  30
Gly Val Pro His Leu Gly Asn Tyr Leu Gly Ala Leu Arg Glu Trp Leu
        35                  40                  45
Arg Leu Gln Xaa Ala Ala Lys Glu Gly Thr Arg Leu Phe Xaa Ser Ile
    50                  55                  60
Val Asp Leu His Ala Leu Thr Val Pro Gln Asp Ala Ser Gln Leu Arg
65                  70                  75                  80
Asn Trp Arg Lys Glu Thr Phe Ala Thr Leu Ile Ala Val Gly Leu Asp
                85                  90                  95
Pro Asn Arg Ser Thr Ile Phe Tyr Gln Ser Ala Val Cys Ser Met Asn
            100                 105                 110
Met Gly Cys Lys Val Tyr
        115
```

<210> 36186
<211> 154

<212> PRT
<213> A.fumigatus

<400> 36186
Arg Leu Ser Ile Ala Pro Ala Lys Arg Val Met Ser Leu Lys Glu Pro
1 5 10 15
Thr Leu Lys Met Ser Lys Ser His Ala Asp Arg Arg Ser Arg Ile Ile
20 25 30
Leu Thr Asp Ser Pro Ala Glu Ile Ser Lys Lys Ile Asn Ala Ala Leu
35 40 45
Thr Asp Ser Glu Leu Thr Ile Thr Tyr Asp Pro Val Arg Arg Pro Gly
50 55 60
Val Ala Asn Leu Ile Glu Ile Leu Ser His Phe Asp Gly Arg Thr Cys
65 70 75 80
Asp Glu Ile Ala Met Glu Tyr Arg Ser Ala Ser Leu Arg Ala Leu Lys
85 90 95
Glu His Leu Ala Arg Thr Leu Ser Asn His Leu Glu Pro Ile Arg Glu
100 105 110
Lys Tyr Leu Ser Leu Val Gly Asp Gln Thr Asp Tyr Leu Asp Ser Ile
115 120 125
Ala Glu Gln Gly Ser Glu Ala Ala Arg Ala Asn Ala Glu Leu Thr Met
130 135 140
Glu Gln Val Lys Val Ala Met Gly Leu Ile
145 150

<210> 36187
<211> 64
<212> PRT
<213> A.fumigatus

<400> 36187
Ile Arg Ala Thr His Val Pro Val Gly Asp Asp Gln Arg Gln His Leu
1 5 10 15
Glu Phe Ser Arg Asn Thr Ala Asn Ser Phe Asn His Val Tyr Gly Pro
20 25 30
Ile Phe Pro Ser Pro Glu Ala Ile Ile Cys Lys Trp Phe Leu Leu Leu
35 40 45
Ala Glu Arg Ser Cys Val Gly Lys Leu Thr Ala Ile Asn Ser Ala Cys
50 55 60

<210> 36188
<211> 219
<212> PRT
<213> A.fumigatus

<400> 36188
Arg Ala Asn Met Arg His Ile Phe Ser Leu Leu Ser Ile Val Cys Leu
1 5 10 15
Met Val Lys His Gly Ala Cys Leu Thr Leu His Gln Arg Asp Val Pro
20 25 30
Ala Val Val Ser Leu Asp Ile Lys Arg Ser Ile Val Ser Asp Pro Val
35 40 45
Val Arg Asp Arg Val Arg Arg Lys Arg Asp Lys Thr Ile Gly Gln Thr
50 55 60
Leu Asp Asn Ala Val Ser Asn Val Thr His Arg Lys Leu Thr Phe Arg
65 70 75 80

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09/417507
10/14/99

```
Phe Ile Ser Arg Thr Met Leu Thr Val Asn Gln Glu Thr Leu Tyr Phe
                  85                  90                  95
Cys Asn Val Thr Leu Gly Thr Pro Gly Gln Ala Leu Arg Leu Val Leu
             100                 105                 110
Asp Thr Gly Ser Ser Asp Leu Trp Cys Asn Ala Ala Asn Ser Thr Leu
         115                 120                 125
Cys Ser Asp Ser Asn Asp Ser Cys Asn Ile Ser Gly Ser Tyr Asp Pro
     130                 135                 140
Ser Ser Ser Ser Thr Tyr Ala Tyr Val Ser Ser Asp Phe Asn Ile Ser
145                 150                 155                 160
Tyr Ala Asp Gly Thr Gly Ala Val Gly Asp Tyr Ala Thr Asp Ile Leu
                 165                 170                 175
His Ile Gly Gly Ser Thr Leu Arg Asn Leu Gln Phe Gly Ile Gly Tyr
             180                 185                 190
Ser Ser Thr Ser Ser Gly Thr Pro Thr Thr Ala Leu Asp Leu Ala Asn
         195                 200                 205
Val Cys Ser Thr Cys Thr Cys Ile Val Leu Val
     210                 215

<210> 36189
<211> 73
<212> PRT
<213> A.fumigatus

<400> 36189
Ser Pro Pro Cys Pro Cys Thr Cys Ile Leu Val Ile Gln Ser Ala Glu
1               5                   10                  15
Ala Cys Leu Asn Met Leu Thr Thr Leu Tyr Gly Phe Ala Lys Gln Tyr
            20                  25                  30
Gly Leu Asn Val Arg Ser Pro Gln Ile Thr Thr Leu Ser His Gly Tyr
        35                  40                  45
Ile Pro Val Glu Ser Leu Gly Ser His Ala Ile Leu Gly Asp Thr Gln
    50                  55                  60
Ile Thr Tyr Trp Ser Gly Ser Ser Thr
65                  70

<210> 36190
<211> 226
<212> PRT
<213> A.fumigatus

<400> 36190
Met Ser Leu Tyr Ala Thr Thr Leu Lys Ser Ala Asn Ser Cys Leu Leu
1               5                   10                  15
Thr Asp Gln Gly Cys Lys Val Thr Ala Tyr Asp Leu Arg Pro Phe Glu
            20                  25                  30
Val Pro Asp Thr Ile Gly Glu Ser Tyr Ala Arg Leu Asn Ile Gln Arg
        35                  40                  45
Gly Asp Ile Ser Asp Glu Glu Ser Ile Arg Ser Gly Ile Ala Leu Ala
    50                  55                  60
Val Lys Arg Phe Gly Pro Ile Asn Ile Leu Ile Ala Asn Ala Gly Ile
65                  70                  75                  80
Thr Asp Glu Ser His Asp Tyr Pro Ile Trp Glu Leu Pro Leu Glu Thr
                85                  90                  95
Trp Glu Lys Thr Tyr Ser Val Asn Val Arg Gly Thr Phe Leu Thr Ile
            100                 105                 110
```

```
Lys His Phe Leu Arg Ala Ala Arg Thr Ala Gln Gln Ala Met Gly Arg
        115                 120                 125
Glu Leu Glu Asn Leu Ala Ile Val Val Thr Gly Ser Glu Thr Gly Val
    130                 135                 140
Phe Gly Gln Glu Gly His Ala Glu Tyr Ala Ser Gly Lys Ala Gly Leu
145                 150                 155                 160
Gln Tyr Gly Leu Val Lys Ser Val Lys Asn Glu Ile Val Arg Leu Asn
                165                 170                 175
Ser Arg Ala Arg Ile Asn Ala Val Ala Pro Gly Trp Val Asp Thr Pro
            180                 185                 190
Met Ile Glu Gly Arg Leu Asp Asp Pro Lys Glu Leu Trp Ala Glu Ala
        195                 200                 205
Gln Ala Thr Tyr Val Leu Ser Thr Ser Leu Glu Arg Leu Ser Leu Thr
    210                 215                 220
Lys Ser
225
```

<210> 36191
<211> 388
<212> PRT
<213> A.fumigatus

<400> 36191

```
Phe Tyr Ser His Ile Leu Leu Thr Trp Thr Arg Gln Tyr Arg Arg Thr
1               5                   10                  15
Ala His Met Asn Thr Thr His Arg Arg Arg Gln Ala Phe Tyr Ala Leu
            20                  25                  30
Pro Ser Ser His Trp Gln Met Leu Ala Glu Pro Pro Phe Ser Leu Leu
        35                  40                  45
Asp Asn Phe Asn Arg Val Asp Asp Ala Ile Asp Val Asn Ala Asp Ile
    50                  55                  60
Ala Asp Ser Ile Leu Ala Ala Gly Leu Ala Ser Phe Gly Leu Pro Ala
65                  70                  75                  80
Asp Pro Asp Pro Asn Asp Pro Arg Gln Asn Trp His Gly Thr Ala Thr
                85                  90                  95
Ser Ser Asp Val Asn Lys Ala His Ser Thr Ile Arg Gln Phe Tyr Arg
            100                 105                 110
Asp Trp Ser Ala Glu Gly Arg Ala Glu Arg Glu Ile Cys Tyr Glu Pro
        115                 120                 125
Val Leu Arg Asp Leu Arg Asp Glu Phe Asp Thr Arg His Ser Asp Arg
    130                 135                 140
Asn Glu Ile Arg Val Leu Val Pro Gly Ala Gly Leu Gly Arg Leu Val
145                 150                 155                 160
Phe Glu Ile Cys Gln Ala Gly Phe Ala Ala Glu Gly Asn Glu Ile Ser
                165                 170                 175
Tyr His Gln Leu Leu Ala Ser Ser Trp Val Leu Asn His Thr Arg Gly
            180                 185                 190
Pro Gln Gln His Ala Leu Tyr Pro Phe Ala Leu His Phe Ser Asn Leu
        195                 200                 205
Leu Ser Arg Glu Gln Gln Leu Gln Lys Ile Met Ile Pro Asp Lys His
    210                 215                 220
Pro Ala Thr Val Met Met Glu Ala Gln Ala Glu Asp Ser Ser Ala Phe
225                 230                 235                 240
Gly Thr Met Ser Met Ser Ala Ala Asp Phe Val Val Leu Tyr Asn Asn
                245                 250                 255
Pro Ser Asn Lys Glu Ala Phe Asp Ala Gly Ala Thr Val Phe Phe Ile
```

```
            260                 265                 270
Asp Thr Ser Pro Asn Leu Ile Arg Tyr Ile Glu Thr Ile Arg His Cys
        275                 280                 285
Leu Lys Pro Asn Gly Leu Trp Ile Asn Leu Gly Pro Leu Leu Trp His
    290                 295                 300
Phe Glu Asp Gly Ser Asn Lys Gly His Gly Ser Gly Ser Asp His Ser
305                 310                 315                 320
Gln Gly Ile Gly Glu Pro Gly Asn Val Glu Leu Thr Glu Glu Glu Val
                325                 330                 335
Cys Cys Leu Val Asp Arg Met Gly Phe Ser Ile Glu Lys Gln Leu Ser
            340                 345                 350
Ala Glu Asn Arg Pro Leu Cys Gly Tyr Ile Gln Asp Pro Gln Ser Met
        355                 360                 365
Leu His Asn Leu Tyr Arg Pro Ser His Trp Val Ala Arg Lys Asn Thr
    370                 375                 380
Glu Ile Gln Asn
385

<210> 36192
<211> 73
<212> PRT
<213> A.fumigatus

<400> 36192
Tyr Val Pro Cys Asn Ala Thr Val Pro Ala Ser Thr Phe Ile Trp Lys
1               5                   10                  15
Phe Glu Asp Ile Glu Ser Phe Cys Leu Val Ile Thr Phe Ser Ile Phe
            20                  25                  30
Ser Ile Ser Phe Pro Val Lys Gly Thr Ala Ile Asp Ser Ser Pro Arg
        35                  40                  45
His Gly Tyr Gly Tyr Pro Ser Pro Thr Gln Ser Leu Val Ala Ser Ile
    50                  55                  60
Val Met Tyr Cys Thr Leu Pro Tyr Ile
65                  70

<210> 36193
<211> 74
<212> PRT
<213> A.fumigatus

<400> 36193
Gly Pro Val Gln Val Val Gln His Thr Leu Trp Ile Leu Asp Ile Thr
1               5                   10                  15
Thr Gln Gly Ser Val Phe Arg Arg Gln Leu Phe Phe Asp Ala Glu Ala
            20                  25                  30
His Ser Ile Asn Lys Ala Thr His Phe Phe Phe Cys Gln Phe His Ile
        35                  40                  45
Pro Arg Leu Pro Asp Ala Leu Arg Val Ile Thr Ser Thr Ala Met Ala
    50                  55                  60
Phe Val Thr Thr Val Leu Lys Val Pro Gln
65                  70

<210> 36194
<211> 92
<212> PRT
<213> A.fumigatus
```

<220>
<221> UNSURE
<222> (89)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36194
Phe His Ser Leu Pro Ala Phe Val Pro Asn Asp Asp Met His Leu Ile
1 5 10 15
Thr Ser Asn Lys Ser Met Thr Tyr Asp Ser Ala Ile Leu Pro Val Arg
20 25 30
Ser Tyr Gln Leu Cys Leu Tyr Ser Ser Pro Ser Thr Glu Glu Tyr Thr
35 40 45
Ser Arg Val Ala Lys Ile Leu Ala Arg Arg Met Ser Leu Pro Val Tyr
50 55 60
Val Gly Cys Ser Ile Asp Pro Arg Ala Pro Gln Leu Ala Val Glu Glu
65 70 75 80
Glu Ile Glu Gly Leu Ser Lys Met Xaa Asp Val Lys
85 90

<210> 36195
<211> 396
<212> PRT
<213> A.fumigatus

<400> 36195
Phe Pro Gly Cys Lys Thr Asp Glu Gln Leu Arg Thr Ala Pro Arg Pro
1 5 10 15
Lys Thr Gly Phe Phe His Ser Leu Leu Ser Leu Leu Ser Leu Gly Arg
20 25 30
Ser Asn Asn Gly His Ala Leu Gln Lys Phe Glu Asp Ser Arg Arg Pro
35 40 45
Pro Asn Ser Gly Asn Ile Asp Trp Val Arg Leu Gly Asp Asn Gln Gln
50 55 60
Ser Asn Lys Pro His Asn Ser Ala Ala His Asp Arg Lys Glu Ser Glu
65 70 75 80
Ser Val Ser Ser Leu Ala Asp Gly Asp Gly Phe Ile Ile Gly Val Gln
85 90 95
Asp Trp Arg Asp Pro Asp Leu Val Pro Ala Arg Thr Ile Ser Leu Pro
100 105 110
Ser Pro Ser Ser Val Ala Ser Ser Ala Lys Thr Glu Ser Gly Asn Ser
115 120 125
Ala Lys Ser Gln Lys Lys Thr Ser Asn Ser Pro Lys Gly Gly Ser Ile
130 135 140
Thr Pro Gly Ser Gly Glu Tyr Arg Ser Val Asp Arg Ser Ser Asp Asn
145 150 155 160
Glu Glu Val Pro Ser Arg Asp Gly Ser Pro Val Asn Ser Ala Gly Asn
165 170 175
Ala Gly Ser Asp Lys Gly Trp Phe Phe Lys Arg Phe Phe Ala Pro Arg
180 185 190
Arg Thr Glu Gly Ala Asn Leu Tyr Lys Pro Ala Asn Asn Lys Met Arg
195 200 205
Arg Asn Thr Asp Gln Asn Ala Lys Val Thr Glu His Glu Gly Leu Trp
210 215 220
Val Thr Leu Thr Pro Thr Ser Met Ser Thr Ser Pro Phe Phe Asp Thr
225 230 235 240

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Leu Leu Val Leu Val Val Ser Pro Leu Leu Thr Leu Thr Val Val Tyr
                245                 250                 255
Ala Leu Leu Leu Ile Arg Ser Arg Ile Arg Arg Arg Arg Trp Arg Ala
            260                 265                 270
Pro Lys Ser Ile Val Glu Arg Leu Pro Val Arg Thr Tyr His Thr Ile
        275                 280                 285
Pro Thr Pro Ser Ser Ala Ala Ser Ser Ser Arg Ser Ser Ser Pro Gly
    290                 295                 300
Pro Val Ser Pro Thr Ser Pro Leu Leu Gly Ser Arg Ser Arg Pro Glu
305                 310                 315                 320
Leu Ala Pro Ser Arg Ser Ser Phe Leu Arg Ser Gly Thr Ala Glu Ala
                325                 330                 335
Lys Lys Thr Arg Asn Met Asp Ser Ala Lys Gly Glu Lys Ser Gly Ser
            340                 345                 350
Ala Ser Ser Val Trp Arg Arg Lys Tyr Thr Gly Arg Gln Val Glu Cys
        355                 360                 365
Val Val Cys Leu Glu Glu Tyr Ile Asp Gly Gln Ser Arg Val Met Ser
    370                 375                 380
Leu Pro Cys Gly His Glu Phe His Ala Glu Cys Met
385                 390                 395

<210> 36196
<211> 211
<212> PRT
<213> A.fumigatus

<400> 36196
His Ile Met Gln Gly Ile Leu Phe Phe Ser Tyr His Lys Asp Leu Trp
1               5                   10                  15
Arg Pro Phe Ile Ser Arg Ala Val Gln Thr Ile Gly Leu Gly Leu Gly
            20                  25                  30
Val Thr Thr Ala Met Phe Phe Phe Thr Tyr Val Pro Gln Ala Ala Ile
        35                  40                  45
Met Thr Phe Thr Ser Gly Pro Leu Ala Pro Ile Ser Ala Ala Leu Leu
    50                  55                  60
Val Leu Ser Glu Ser Ser Thr Ile Thr Asn Leu Leu Ala Arg Ser Phe
65                  70                  75                  80
Val Leu Ala Asp Ala Leu Thr Asp Thr Phe Asp Gly Thr Leu Val Ala
                85                  90                  95
Arg Gly His Thr Glu Leu Val Ala Lys Gly Arg Gln Ile Lys Ala Ser
            100                 105                 110
Gly Gly Gly Ala Val Ser Arg Leu Gly Arg Leu Leu Asn Arg Pro Leu
        115                 120                 125
Glu Arg Met Arg Pro Ser Ala Leu Val Arg Ser Leu Met Leu Leu Pro
    130                 135                 140
Leu Asn Phe Ile Pro Val Ile Gly Thr Ile Leu Tyr Val Tyr Met Gln
145                 150                 155                 160
Gly Lys Lys Thr Gly Pro Val Ala His Leu Arg Tyr Phe Gln Leu Lys
                165                 170                 175
Gly Trp Asp Glu Arg Lys Arg Glu Glu Trp Val Lys Lys Asn Gln Gly
            180                 185                 190
Gly Tyr Thr Gly Tyr Asp Ser Ala Trp Leu Leu Cys Tyr Ala Tyr Glu
        195                 200                 205
Ile Ala Asn
    210
```

<210> 36197
<211> 98
<212> PRT
<213> A.fumigatus

<400> 36197
Val Asp Thr Cys Cys Leu Arg Ala Ser Ala Pro Arg Ser Thr Ile Ser
1 5 10 15
Thr Asn Pro Pro Leu Phe Ser Gln Met Leu Pro Pro Leu Ala Arg Ile
20 25 30
His Ser Pro Ala Asp Thr Ile Pro Val Arg His Leu His Gln Ser Ile
35 40 45
Gly Lys Ser Lys Lys Pro Ile Thr Val Val Arg Trp Thr Pro Glu Gly
50 55 60
Arg Arg Leu Leu Thr Gly Gly His Thr Gly Glu Phe Met Leu Trp Asn
65 70 75 80
Gly Thr Ala Phe Asn Phe Glu Thr Val Met Asp Val Arg Leu Leu Pro
85 90 95
Leu Asp

<210> 36198
<211> 470
<212> PRT
<213> A.fumigatus

<400> 36198
Ser Phe Glu Gln Ala His Tyr Asp Gln Leu Gln Ala Gly Val Thr Ser
1 5 10 15
Ile Ala Trp Ser His Ser His Asp Trp Leu Ile Ser Gly Gly Gln Lys
20 25 30
Gly Asp Ile Lys Tyr Trp Arg Pro Asn Phe Asn Asn Val Glu Thr Ile
35 40 45
Asp Asp Ala His His Asp Ala Val Arg Asp Leu Ala Trp Ser Pro Ser
50 55 60
Asp Thr Lys Phe Leu Ser Ala Ser Asp Asp Thr Thr Leu Lys Ile Phe
65 70 75 80
Asp Phe Thr Ala Arg Thr Ala Asp Thr Val Leu Thr Gly His Asn Trp
85 90 95
Asp Val Lys Ser Cys Asp Trp His Pro Thr Lys Gly Leu Leu Val Ser
100 105 110
Gly Ser Lys Asp His Gln Val Lys Phe Trp Asp Pro Arg Thr Ala Arg
115 120 125
Cys Leu Thr Thr Leu His Ser His Lys Asn Thr Val Thr Thr Thr Arg
130 135 140
Phe Ser Arg Val Asn Ser Asn Leu Leu Ala Thr Ser Ser Arg Asp Gln
145 150 155 160
Thr Ala Arg Val Phe Asp Leu Arg Met Met Arg Asp Ile Cys Ile Leu
165 170 175
Arg Gly His Glu Lys Pro Ile Ser Ser Leu Thr Trp His Pro Ile His
180 185 190
Ser Ser Leu Ile Ser Thr Gly Ser Glu Asp Gly Ser Leu Tyr His Tyr
195 200 205
Leu Leu Asp Glu Pro Asn Leu Pro Ser Gly Gln Val Pro Thr Ile Ala
210 215 220
Pro Tyr Asp Ser Pro Asp Pro Ala Asn Thr Pro Ala Gln Val Ile Tyr

```
225                 230                 235                 240
Pro Ala His Arg Ile Gln Tyr Ala His Ser Ala Thr Ile Trp Ser Leu
                245                 250                 255
Asp Trp His Pro Leu Gly His Ile Leu Ala Ser Gly Ser Lys Asp Asn
            260                 265                 270
Phe Thr Arg Phe Trp Ser Arg Ala Arg Pro Gly Glu Thr Ser Tyr Met
        275                 280                 285
Lys Asp Arg Phe His Ile Gly Glu Glu Ala Ala Glu Ala Gln Gly Thr
    290                 295                 300
Trp Ser Arg Gly Phe Gly Arg Arg Gln Met Arg Glu Glu Glu Glu Gln
305                 310                 315                 320
Glu Ala Gln Asp Glu Ala Glu Ser Leu Val Asp Gln Lys Asn Thr Thr
                325                 330                 335
Ala Gln Ser Leu Pro Gly Ile Gln Ile Ala Pro Pro Gly Leu Gly Ser
            340                 345                 350
Leu Gln Thr Gly Ser Gly Ser Leu Leu Pro Gly Ile Gly Ala Pro Gln
        355                 360                 365
Pro Ala Pro Gln Ala Gly Met Ser Ala Ser Met Pro Gln Met Asp Pro
    370                 375                 380
Gly Arg Leu Ala Ala Ile Leu Ser Gln Gln Asn Pro Ser Gln Pro Gln
385                 390                 395                 400
Asn Phe Pro Ser Ala Thr Gly Ile Pro Gly Phe Pro Met Pro Pro Ala
                405                 410                 415
Met Ser Gly Thr Pro Pro Leu Asn Ile Asp Leu Ala Glu Leu Gln Lys
            420                 425                 430
Gln Leu Leu Ser Gln Gly Ile Ser Pro Gln Asn Phe Ala Ser Leu Ala
        435                 440                 445
Ala Ser Leu Gly Ser Ala Gly Leu Pro Gly Leu Gln Ser Ser Thr Pro
    450                 455                 460
Asp Asn Thr Tyr Arg Arg
465                 470

<210> 36199
<211> 62
<212> PRT
<213> A.fumigatus

<400> 36199
Thr Ala Pro Ser Leu Lys Ser Ile Ser Leu Asp Leu Pro Ser Glu Ile
1               5                   10                  15
Val Glu Val Thr Tyr Met Arg Pro Lys Tyr Thr Pro Thr Arg Arg Ser
            20                  25                  30
Phe Asn Ala Pro Met Gln Arg Thr Pro Thr Tyr Gly Lys Gln Thr Phe
        35                  40                  45
Asn Ser Asn Leu Arg Asp Thr Asp Asn His Asp Gly Arg Gly
    50                  55                  60

<210> 36200
<211> 65
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (52)
<223> Identity of amino acid sequences at the above locations are unknown.
```

<400> 36200
Ser Gln Ala Ser Arg Glu Tyr Cys Ala Ile Pro Asn Arg Glu Thr Ser
1 5 10 15
Arg His Ala Gly Ile Asn Ala Arg Phe Asp Thr Pro His Val Val Ser
20 25 30
Thr Glu Gly Gln Glu Gln Lys Tyr Ile Arg Leu Arg Gln Ser Leu Leu
35 40 45
Leu Leu Ala Xaa Thr Ile Cys Ile Ala Asn Met Pro Ser Leu Arg Lys
50 55 60
His
65

<210> 36201
<211> 101
<212> PRT
<213> A.fumigatus

<400> 36201
Arg Pro Asn Leu Gly Leu Met Ser Gly Lys Arg Leu Ala Met Gln Trp
1 5 10 15
Arg Arg Trp Pro Asp Ser Thr Pro Ile Thr Val Cys Pro Thr Ser Trp
20 25 30
Val Val Lys Lys Ser Ser Ile Ser Asn Glu Arg Ser Ser Leu Gly Asp
35 40 45
Gln Trp Pro Glu Leu Leu Gly Val Leu Phe Gln Ala Ser Gln Ser Pro
50 55 60
Glu Ala Gly Leu Arg Glu Ala Ala Phe Arg Ile Phe Ser Thr Thr Pro
65 70 75 80
Ser Ile Ile Glu Lys Asn His Glu Asp Ala Val Cys Arg Cys Val Arg
85 90 95
Gln Gly Phe Gln Gly
100

<210> 36202
<211> 109
<212> PRT
<213> A.fumigatus

<400> 36202
Arg Ala Ile Asn Met Ser Leu Leu Pro Pro Glu Val His Ser Ala Leu
1 5 10 15
Ser Gln Leu Leu Arg Ala Leu Thr Thr Pro Asp Asn Ala Ile Arg Thr
20 25 30
Gln Ala Glu Glu Gln Leu Asn Asn Asp Trp Ile Gln Asn Arg Pro Asp
35 40 45
Val Leu Leu Met Gly Leu Ala Glu Gln Ile Gln Gly Ala Glu Asp Thr
50 55 60
Val Val Ser Asp Thr Ser Ser Val Arg Arg His Gly Asp Arg Val Trp
65 70 75 80
Cys Arg Gln Arg Asp Ser Leu Glu Ala Phe Tyr Leu Leu Arg Leu Glu
85 90 95
Pro Cys Cys Arg Ala Leu Leu Asp Ser Thr Asp Phe Gly
100 105

<210> 36203

<211> 136
<212> PRT
<213> A.fumigatus

<400> 36203
Val Ile Gln Val Leu Ser Gly Asp Met Gly Thr Val Ser Gly Val Gly
1 5 10 15
Lys Glu Thr Ala Leu Lys Pro Ser Thr Tyr Tyr Asp Leu Ser Pro Val
20 25 30
Ala Ala Pro Cys Trp Ile Arg Leu Ile Leu Val Asn Leu Asp Pro Gln
35 40 45
Thr Arg Thr Phe Ala Ala Val Leu Phe Arg Arg Ile Ala Thr Lys Thr
50 55 60
Arg Lys Asp Pro Val Thr Asn Glu Ala Lys Glu Leu Phe Ser Thr Leu
65 70 75 80
Ser Gly Glu Gln Arg Leu Val Ile Arg Gln Lys Leu Val Ser Cys Leu
85 90 95
Thr Thr Glu Ser Gly Ser Asp Val Arg Lys Lys Ile Gly Asp Ala Val
100 105 110
Ala Glu Val Ala Arg Gln Tyr Thr Asp Asn Gly Met Pro Asn Phe Met
115 120 125
Gly Gly Glu Lys Glu Phe His Ile
130 135

<210> 36204
<211> 661
<212> PRT
<213> A.fumigatus

<400> 36204
Val Arg Ile Ala Ala Met Glu Ala Phe Ala Ser Phe Phe Arg Ser Ile
1 5 10 15
Ser Lys Lys Ser Gln Pro Lys Phe Phe Gly Leu Val Pro Asp Met Leu
20 25 30
Asn Ile Leu Pro Pro Leu Lys Glu Ser Ser Glu Ser Glu Glu Leu Ser
35 40 45
Ser Ala Phe Leu Ala Leu Ile Glu Leu Ala Glu Val Cys Pro Lys Met
50 55 60
Phe Lys Ala Met Phe Asn Asn Leu Val Lys Phe Ser Ile Ser Val Ile
65 70 75 80
Ala Asp Lys Asp Leu Ser Asp Gln Val Arg Gln Asn Ala Leu Glu Leu
85 90 95
Met Ala Thr Phe Ala Asp Tyr Ala Pro Ser Met Cys Lys Lys Asp Pro
100 105 110
Glu Phe Ala Gln Glu Met Val Thr Gln Cys Leu Ser Leu Met Thr Asp
115 120 125
Ile Gly Val Asp Asp Asp Asp Ala Ser Glu Trp Asn Ala Ser Glu Asp
130 135 140
Leu Asp Leu Glu Glu Ser Asp Leu Asn His Val Ala Gly Glu Gln Cys
145 150 155 160
Met Asp Arg Leu Ala Asn Lys Leu Gly Gly Gln Val Ile Leu Pro Ala
165 170 175
Thr Phe Ala Trp Ile Pro Arg Met Met Ser Ser Ser Ala Trp Arg Asp
180 185 190
Arg His Ala Ala Leu Met Ala Ile Ser Ala Ile Ser Glu Gly Cys Arg
195 200 205

```
Asp Leu Met Val Gly Glu Leu Asp Gln Val Leu Ala Leu Val Val Pro
    210                 215                 220
Ala Leu Gln Asp Pro His Pro Arg Val Arg Tyr Ala Gly Cys Asn Ala
225                 230                 235                 240
Leu Gly Gln Met Ser Thr Asp Phe Ala Gly Thr Met Gln Glu Lys Tyr
                245                 250                 255
His Ser Val Val Leu Asn Asn Ile Ile Pro Val Leu Asp Asn Ala Glu
            260                 265                 270
Pro Arg Val Gln Ala His Ala Ala Ala Ala Leu Val Asn Phe Cys Glu
        275                 280                 285
Glu Ala Glu Lys Lys Val Leu Glu Pro Tyr Leu Ala Asp Leu Leu Arg
    290                 295                 300
His Leu Leu Gln Leu Leu Arg Ser Glu Lys Arg Tyr Val Gln Glu Gln
305                 310                 315                 320
Ala Leu Ser Thr Ile Ala Thr Ile Ala Asp Ser Ala Glu Asn Ala Phe
                325                 330                 335
Asp Gln Phe Tyr Glu Thr Leu Met Pro Leu Leu Phe Asn Val Leu Lys
            340                 345                 350
Glu Glu Gln Ser Lys Glu Tyr Arg Leu Leu Arg Ala Lys Ala Met Glu
        355                 360                 365
Cys Ala Thr Leu Ile Ala Leu Ala Val Gly Lys Glu Lys Met Gly Gln
    370                 375                 380
Asp Ala Leu Asn Leu Val Gln Leu Leu Gly Asn Ile Gln Gln Asn Ile
385                 390                 395                 400
Val Asp Ala Asp Asp Pro Gln Ser Gln Tyr Leu Leu His Cys Trp Gly
                405                 410                 415
Arg Met Cys Arg Val Leu Gly Gln Asp Phe Val Pro Tyr Leu Pro Ala
            420                 425                 430
Val Met Pro Pro Leu Leu Ser Val Ala Ala Ala Lys Ala Asp Ile His
        435                 440                 445
Leu Leu Asp Asp Glu Asp Gln Ile Asp Gln Val Glu Gln Asp Glu Gly
    450                 455                 460
Trp Glu Leu Val Pro Leu Lys Gly Lys Ile Ile Gly Ile Lys Thr Ser
465                 470                 475                 480
Ala Leu Glu Asp Lys Asn Thr Ala Ile Glu Leu Ile Thr Ile Tyr Ala
                485                 490                 495
Gln Ile Leu Glu Ala Ala Phe Glu Pro Phe Val Leu Glu Thr Met Glu
            500                 505                 510
Lys Ile Ala Val Pro Gly Leu Ala Phe Phe Phe His Asp Pro Val Arg
        515                 520                 525
Val Ser Ser Ala Lys Leu Ile Pro Gln Leu Leu Asn Ser Tyr Lys Lys
    530                 535                 540
Ala His Gly Val Gln Ser Pro Gly Phe Ala Ala Met Trp Asn Arg Val
545                 550                 555                 560
Ala Glu Lys Ile Ile Glu Val Leu Ser Ala Glu Pro Thr Val Asp Thr
                565                 570                 575
Leu Ala Glu Met Tyr Gln Cys Phe Tyr Glu Ser Val Glu Val Val Gly
            580                 585                 590
Lys Asn Cys Leu Ser Pro Gln His Met Glu Ala Phe Ile Glu Ser Ala
        595                 600                 605
Lys Ser Thr Leu Glu Asp Tyr Gln Val Arg Val Lys Ala Arg Leu Glu
    610                 615                 620
Glu Arg Ala Asp Ala Glu Glu Gly Asp Glu Glu Asp Leu Asp Tyr Glu
625                 630                 635                 640
Tyr Ala Val Glu Asp Asp Gln Asn Leu Leu Ser Asp Met Asn Lys Ala
                645                 650                 655
```

Phe His Thr Ile Phe
660

<210> 36205
<211> 97
<212> PRT
<213> A.fumigatus

<400> 36205
Asn Gln Gly Thr Thr Phe Leu Pro Ser Trp Gln Arg Leu Leu Pro Phe
1 5 10 15
Tyr Asp Ala Phe Ile Thr Ser Gln Asp Pro Thr Gln Arg Arg Trp Ala
20 25 30
Leu Cys Ile Met Asp Asp Val Leu Glu Phe Cys Gly Pro Glu Ser Trp
35 40 45
Asn Tyr Gln Asp His Ile Met Gln Pro Leu Ala Ala Cys Leu Arg Asp
50 55 60
Glu Asn Ala Ala Asn Arg Gln Ala Ala Val Tyr Gly Val Gly Val Ala
65 70 75 80
Ala His Lys Gly Gly Leu Ala Leu Lys Arg Leu Arg Arg Cys Gln His
85 90 95
Pro

<210> 36206
<211> 111
<212> PRT
<213> A.fumigatus

<400> 36206
Lys Thr Met Ser Met Val Phe Phe Leu Phe Arg Thr Met Pro Val Glu
1 5 10 15
Arg Phe Ser Phe Ile Pro Asp Ile Phe Val Asp Asn Val His Met Glu
20 25 30
Leu Ser Leu Trp Asp Thr Ala Gly Gln Glu Glu Phe Asp Arg Leu Arg
35 40 45
Ala Leu Ser Tyr Glu Asp Thr His Val Ile Met Leu Cys Phe Ser Val
50 55 60
Arg Leu Leu Arg His Leu Glu Gly Arg Arg Leu Glu Thr Arg Pro Asp
65 70 75 80
His Val Leu Leu Leu Cys Arg Ser Ile Ala Leu Thr Arg Ser Lys Met
85 90 95
Trp Arg Arg Asn Gly Leu Met Arg Phe Ala Arg Ile Ala Pro Ala
100 105 110

<210> 36207
<211> 76
<212> PRT
<213> A.fumigatus

<400> 36207
Ala Tyr Asn Ser Ile Cys Glu Trp Glu Met Leu Asp Ser Ser Leu Phe
1 5 10 15
Tyr Gly Arg Leu Ile Tyr Ser Ala Val Gly Pro Gln Ser Ile Ser Asp
20 25 30
Val Ser Lys Lys Ala Gln Thr Ser Ile Phe His Val Asn Thr Met Tyr

```
        35                  40                  45
Lys Phe Leu Ser Ser Pro Gln Ser Glu Ser Thr Lys Ile Glu Pro Gly
    50                  55                  60
Lys Leu Thr Ile Ser Lys Leu Gln Leu Pro Glu His
65                  70                  75
```

<210> 36208
<211> 90
<212> PRT
<213> A.fumigatus

<400> 36208

```
Pro Cys Pro Ser Leu Val Gln Val Asp Ser Pro Asp Ser Phe Glu Asn
1               5                   10                  15
Val Ala Thr Lys Trp Ile Asp Glu Ile Arg Glu Asn Cys Pro Gly Val
            20                  25                  30
Lys Leu Val Leu Thr Ala Leu Lys Cys Asp Leu Arg Lys Asp Asp Glu
        35                  40                  45
Leu Asn Asp Asn Pro Asn Ala Ile Thr Phe Glu Gln Gly Leu Ala Lys
    50                  55                  60
Ala Lys Glu Ile Gly Ala Val Lys Tyr Leu Gly Glu Arg Leu Ser Pro
65                  70                  75                  80
Met Met Ser Arg Arg Ser Pro Ile Asp Ala
                85                  90
```

<210> 36209
<211> 263
<212> PRT
<213> A.fumigatus

<400> 36209

```
Arg Cys Arg Ser Ser Val Phe Gly Ser Arg Leu Val Leu Thr Lys Thr
1               5                   10                  15
Asp Tyr Phe Gln Ala Val Glu His Tyr Arg Glu Leu Leu Thr Tyr Val
            20                  25                  30
Lys Ser Ala Val Thr Arg Asn Tyr Ser Glu Lys Ser Ile Asn Asn Met
        35                  40                  45
Leu Asp Tyr Ile Glu Lys Ala Ser Asp Asp Asp Arg Ala Phe Gln Cys
    50                  55                  60
Met Glu Glu Phe Tyr Ser Leu Thr Leu Asn Ser Phe Gln Asn Thr Asn
65                  70                  75                  80
Asn Glu Arg Leu Trp Leu Lys Thr Asn Ile Lys Leu Ala Arg Leu Trp
                85                  90                  95
Leu Glu Arg Lys Glu Tyr Gly Gln Leu Arg Lys Lys Val Arg Glu Leu
            100                 105                 110
His Arg Ala Cys Gln Arg Glu Asp Gly Ser Asp Asp Pro Ser Lys Gly
        115                 120                 125
Thr Tyr Leu Leu Glu Leu Tyr Ala Leu Glu Ile Gln Met Tyr Ala Glu
    130                 135                 140
Thr Lys Asn Asn Lys Arg Leu Lys Ala Leu Tyr Gln Arg Ala Leu Arg
145                 150                 155                 160
Val Arg Ser Ala Val Pro His Pro Lys Ile Met Gly Ile Ile Arg Glu
                165                 170                 175
Cys Gly Gly Lys Met His Met Ser Glu Glu Asn Trp Glu Glu Ala Gln
            180                 185                 190
Ser Asp Phe Phe Glu Ser Phe Arg Asn Tyr Asp Glu Ala Gly Ser Met
```

```
        195                 200                 205
Gln Arg Ile Gln Val Leu Lys Tyr Leu Val Leu Thr Thr Met Leu Met
    210                 215                 220
Lys Ser Asp Ile Asn Pro Phe Asp Ser Gln Glu Thr Lys Pro Tyr Lys
225                 230                 235                 240
Asn Asp Pro Arg Ile Ser Ala Met Thr Asp Leu Val Asp Ala Phe Gln
                245                 250                 255
Arg Asp Asp Ile His Val Phe
            260
```

<210> 36210
<211> 88
<212> PRT
<213> A.fumigatus

<400> 36210

```
Tyr Leu Asp Thr Tyr Leu Asp Ser Leu Leu Ser Thr Ala Ala Leu Phe
1               5                   10                  15
Thr Met Ser Asp Asp Asp Asp Phe Met Gln Asp Ser Gly Asp Glu Glu
            20                  25                  30
Tyr Ala Thr His Ile Leu His Ala Thr Ser Ala Val Leu Val Thr Asp
        35                  40                  45
Asp Asp Leu Gly Met Ile Leu Asn Thr Lys Thr Gln Thr Lys Met Ser
    50                  55                  60
Arg Gly Thr Ser Glu Ser Arg Thr Asn Thr Thr Met Pro Asn Arg Ser
65                  70                  75                  80
Arg Ser Thr Ile Arg Arg Arg Leu
                85
```

<210> 36211
<211> 138
<212> PRT
<213> A.fumigatus

<400> 36211

```
Tyr Cys Ile Phe Pro Gln Val Leu Val Ser Leu Ser Asn Leu Gln Ala
1               5                   10                  15
Ala Val Ser Asp Leu Thr Arg Ala Tyr Ile Asn His Thr Asn Thr Val
            20                  25                  30
Leu Asn Pro Ser Leu Ser Thr Leu Asp Leu Gly His Ala Ser Asn Ile
        35                  40                  45
Thr Ala Ala Leu Leu Glu Asn Gly Leu Leu Gly Ala Arg Ser Ser Ser
    50                  55                  60
Pro Gly Ala Lys Ser Glu Val Gly Glu Lys Lys Lys Arg Lys Arg Ala
65                  70                  75                  80
Pro Pro Asp Pro Asn Ala Pro Lys Arg Ala Leu Thr Pro Tyr Phe Leu
                85                  90                  95
Tyr Met Gln His Asn Arg Pro Ile Ile Ala Gln Glu Leu Gly Pro Ser
            100                 105                 110
Ala Arg Pro Lys Asp Val Ser Asp Glu Gly Thr Arg Arg Trp Ala Glu
        115                 120                 125
Met Pro Glu Ala Gln Lys Glu Val Cys Leu
    130                 135
```

<210> 36212
<211> 157

<212> PRT
<213> A.fumigatus

<400> 36212
His Tyr Arg Gln Val Trp Lys Lys Leu Tyr Ala Asp Asn Leu Ala Val
1 5 10 15
Tyr Lys Glu Lys Val Lys Ala Tyr Lys Ala Gly Lys Pro Trp Thr Glu
20 25 30
Asp Asp Asn Thr Lys Ala Ala Ser Gln Leu Gln Gln Asp Ile Ala Gly
35 40 45
Ala Ser Ala Ser Gly Gly Glu Lys Ser Asp Glu Gln Glu Gln Glu Glu
50 55 60
Glu Ala Asp Glu Asp Glu Glu Thr Glu Glu Ser Ser Pro Glu Pro Val
65 70 75 80
Lys Glu Pro Thr Pro Pro Arg Asn Asn Lys Arg Arg Arg Ser Glu Val
85 90 95
Lys Thr Pro Ser Lys Arg Asn Glu Ser Pro Glu Lys Lys Lys Arg Thr
100 105 110
Ser Ala Arg Lys Gly Asn Glu Lys Asp Lys Asp Asp Glu Pro Pro Ala
115 120 125
Ser Thr Arg Lys Ala Ala Ala Ala Gly Ala Asp Ala Ser Ala Lys Arg
130 135 140
Ser Lys Lys Lys Arg Lys Ser Glu Val Gly Gly Asp Glu
145 150 155

<210> 36213
<211> 251
<212> PRT
<213> A.fumigatus

<400> 36213
Phe Pro Arg Arg Tyr Val Thr Gly Thr Cys Tyr Arg Arg His Thr Ser
1 5 10 15
Thr Ser Ala Val Lys Ser Ala Leu Thr Ile Leu His Pro Gln Leu Asp
20 25 30
Lys Leu Val Ile Ser Gln Leu Gly Phe Leu Ala Gln Arg Arg Leu Ala
35 40 45
Arg Gly Val Arg Leu Asn His Ala Glu Ala Ala Val Trp Ile Ser Leu
50 55 60
Phe Ser His Cys Ala Ile His Leu Gly Gly Leu Ser Arg Leu Ile Pro
65 70 75 80
Val Gln Ala Leu Ile Ser Ser Asn Leu Gln Glu Val Ser Ser Pro His
85 90 95
Pro Ser Trp Lys Leu Asp Ile Met Val Ala Tyr Ser Gln Gln Leu Ile
100 105 110
Arg Asp Gly His Tyr Ser Val Ala Asp Leu Met Ser Ile Gly Lys Thr
115 120 125
Met Leu Gly Arg Arg His Val Leu Pro Ser Val Val His Thr Leu Val
130 135 140
Glu Leu Gln Val Glu Gly Thr Phe Pro Thr Gly Thr Tyr Leu Val Thr
145 150 155 160
Val His His Pro Ile Ser Ser Asp Asp Gly Asp Leu Glu Lys Ala Leu
165 170 175
Tyr Gly Ser Phe Leu Pro Ile Pro Pro Ala Asp Thr Phe Pro Asp Pro
180 185 190
Asn Pro Asp Asp Tyr Leu Pro Glu Lys Met Pro Gly Ala Val Leu Pro

```
        195                 200                 205
Val Lys Asn Glu Arg Ile Thr Leu Asn Asp Gly Arg Lys Arg Ile Arg
    210                 215                 220
Leu Lys Val Met Ser Lys Gly Asp Arg Pro Ile Gln Val Arg Ser Leu
225                 230                 235                 240
Pro Phe His Thr His Thr Arg Asn Lys Gly Phe
                245                 250
```

<210> 36214
<211> 371
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (370)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36214

```
Val Gly Ser His Tyr His Phe Ile Glu Thr Asn Pro Gln Leu His Phe
1               5                   10                  15
Asp Arg Leu Arg Ala Tyr Gly Tyr Arg Leu Asp Ile Pro Ala Gly Thr
            20                  25                  30
Ser Val Arg Phe Glu Pro Gly Asp Thr Lys Thr Val Thr Leu Val Glu
        35                  40                  45
Ile Ala Gly Asn Arg Ile Ile Lys Gly Gly Asn Ser Ile Ala Ser Gly
    50                  55                  60
Lys Val Asp Ile Ser Arg Ala Glu Glu Ile Leu Gln Arg Leu Gln Val
65                  70                  75                  80
Glu Gly Phe Ala His Val Pro Glu Pro Ala Pro Thr Ala Asp Ser Ala
                85                  90                  95
Leu Ile Ala Pro Phe Thr Met Asp Arg Glu Ala Tyr Ala Arg Met Phe
            100                 105                 110
Gly Pro Thr Thr Gly Asp Leu Val Arg Leu Gly Leu Thr Asn Leu Trp
        115                 120                 125
Val Arg Val Glu Lys Asp Cys Thr Val Tyr Gly Asp Glu Cys Ala Phe
    130                 135                 140
Gly Gly Gly Lys Thr Leu Arg Glu Gly Met Gly Gln Ser Ser Glu Arg
145                 150                 155                 160
Ser Ala Thr Glu Cys Leu Asp Thr Val Ile Thr Asn Ala Leu Ile Ile
                165                 170                 175
Asp Trp Ser Gly Ile Tyr Lys Ala Asp Ile Gly Ile Lys Asn Gly Leu
            180                 185                 190
Ile Ser Ala Ile Gly Lys Ala Gly Asn Pro Asp Met Met Asp Gly Val
        195                 200                 205
His Pro Asp Met Ile Val Gly Ser Ser Thr Asp Val Ile Ala Gly Glu
    210                 215                 220
Asn Lys Ile Val Thr Ala Gly Gly Phe Asp Thr His Ile His Phe Ile
225                 230                 235                 240
Cys Pro Gln Gln Val Asp Glu Ala Leu Ala Ser Gly Ile Thr Thr Phe
                245                 250                 255
Leu Gly Gly Gly Thr Gly Pro Ser Thr Gly Thr Asn Ala Thr Thr Cys
            260                 265                 270
Thr Pro Gly Pro Thr Leu Met Arg Gln Met Ile Gln Ala Cys Asp Gly
        275                 280                 285
Leu Pro Ile Asn Val Gly Ile Thr Gly Lys Gly Asn Asp Ser Gly Gly
```

```
    290                 295                 300
Lys Ser Ile Glu Glu Gln Ile Arg Ala Gly Ala Ala Gly Leu Lys Leu
305                 310                 315                 320
His Glu Asp Trp Gly Ser Thr Pro Ala Ala Ile Asp Thr Cys Leu Asp
                325                 330                 335
Met Cys Asp Lys Phe Asp Val Gln Cys Met Ile His Thr Asp Thr Leu
            340                 345                 350
Asn Glu Ser Gly Phe Ser Tyr Thr Asp Gly Ala Arg Arg Lys Arg Val
        355                 360                 365
Asn Xaa Leu
    370
```

<210> 36215
<211> 366
<212> PRT
<213> A.fumigatus

<400> 36215

```
Pro Pro Val Leu Val Gln Leu Gln Ala Gly Arg Ser Gly Thr Asn Leu
1               5                   10                  15
Leu Leu Asn Thr Leu Ala Thr Ala Val Ile Thr Leu Ala Gly Asp Pro
            20                  25                  30
His Val Asp Arg Glu Thr Val Ala Arg Leu Asn His Leu Ala His Glu
        35                  40                  45
Arg Gly Ser Arg Arg Ala Gly Arg Arg Val Arg Ala Arg Arg Arg Thr
    50                  55                  60
Gly Pro Ser Ala Gln Lys Cys Gly Asp Ala Arg Ser Lys Arg Phe Val
65                  70                  75                  80
His Leu Leu Arg Ala Asp Lys Val Asn Val Gly Ile Lys Ser Thr Gly
                85                  90                  95
Arg His Asp Leu Val Phe Ser Ser Asn Asp Ile Gly Arg Arg Ala His
            100                 105                 110
Asp His Val Arg Met His Ala Val His His Ile Gly Ile Ala Ser Leu
        115                 120                 125
Ala Asp Ser Arg Asp Gln Pro Ile Leu Asp Thr Asp Val Ser Leu Val
    130                 135                 140
Asp Ser Ala Pro Val Asp Asp Gln Arg Ile Arg Asn Asp Gly Val Gln
145                 150                 155                 160
Thr Phe Gly Cys Gly Pro Leu Arg Gly Leu Ala His Ala Leu Ala Lys
                165                 170                 175
Gly Leu Ala Ala Ala Glu Arg Ala Leu Ile Ser Ile Asn Arg Thr Val
            180                 185                 190
Leu Phe His Pro His Pro Lys Val Gly Gln Pro Gln Ser Asp Gln Val
        195                 200                 205
Pro Gly Gly Gly Ser Lys His Pro Arg Ile Ser Phe Ala Ile His Cys
    210                 215                 220
Glu Arg Arg Asp Gln Arg Thr Val Arg Gly Arg Arg Gly Phe Arg Asn
225                 230                 235                 240
Val Ser Glu Thr Leu Asp Leu Gln Ala Leu Gln Asp Leu Leu Gly Ser
                245                 250                 255
Thr Asp Ile Asn Leu Ala Arg Ser Asn Gly Val Ala Ala Leu Asp Asn
            260                 265                 270
Ala Ile Ala Cys Asn Leu Asp Gln Arg Asp Arg Leu Gly Val Thr Gly
        275                 280                 285
Phe Glu Ser Tyr Arg Ser Pro Arg Gly Asp Ile Glu Pro Val Ser Val
    290                 295                 300
```

```
Gly Pro Gln Thr Val Lys Met Lys Leu Arg Val Gly Leu Asp Glu Val
305                 310                 315                 320
Ile Val Gly Ser Asp Leu Phe Ala Val Lys Asn Pro Cys Cys Ala Tyr
                325                 330                 335
Val Cys Gly Lys Ala Thr Asn Glu Pro Gly Leu Gly Asp Arg Pro Cys
            340                 345                 350
Ser Ser Pro Ser Val Gly Cys Ala Cys Gly His Arg Ser Glu
        355                 360                 365
```

<210> 36216
<211> 193
<212> PRT
<213> A.fumigatus

<400> 36216

```
Cys Phe Leu Pro Ser Phe Ser Phe Arg Gln Arg Ser Thr His Gly Arg
1               5                   10                  15
Thr Gly Arg Pro Pro Glu Ser Trp His Leu Leu Arg Ala Met Leu Pro
            20                  25                  30
Glu Ser Cys Leu Val Met Arg Gly Gly His Ser Arg Arg Tyr Leu Arg
        35                  40                  45
Ile Leu Cys Arg Val Met Leu Cys Ile Ser Arg Arg Ala Ile Asn Ser
    50                  55                  60
Gln Gln Met Ser Ala Leu Ser Arg Ser Arg Met Met His Ala Leu Thr
65                  70                  75                  80
Asp Arg Tyr Ser Pro Pro Ser Val Val Arg Ser His Val Ser Gln Ala
                85                  90                  95
Cys Cys Leu Arg Thr Ala Gly Glu Ser Leu Pro Ile Asn Gly Thr Val
            100                 105                 110
Asp Pro Thr Asp Glu Asn Tyr Leu Glu Thr His Asn Val Gly Leu Gln
        115                 120                 125
Gly Thr His Cys Val Ser Gly Ser Val Thr Gly Ile Val Val Ser Thr
    130                 135                 140
Gly Asp Ala Thr Val Phe Gly Arg Ile Ala Lys Leu Thr Ser Glu Pro
145                 150                 155                 160
Lys Thr Gly Leu Thr Thr Leu Glu Lys Glu Val Leu Arg Phe Val Ala
                165                 170                 175
Leu Ile Val Leu Ile Met Leu Thr Met Ile Ile Val Ile Ile Ile Val
            180                 185                 190
Trp
```

<210> 36217
<211> 103
<212> PRT
<213> A.fumigatus

<400> 36217

```
His Val Asn Arg Ala Thr Trp Leu Arg Arg Asp His Pro Gly Trp Ile
1               5                   10                  15
Asn Val Pro Thr Leu Ile Val Glu Cys Val Ser Val Ala Ile Ala Phe
            20                  25                  30
Ile Pro Glu Gly Leu Pro Ile Ala Leu Thr Ala Asn Leu Thr Ile Thr
        35                  40                  45
Ala Asn Leu Met Ser Lys Asn Lys Ile Leu Cys Lys Ser Leu Lys Thr
    50                  55                  60
```

```
Val Glu Thr Leu Gly Ser Val Ser Val Ile Cys Ser Asp Lys Thr Gly
65                  70                  75                  80
Thr Leu Thr Lys Val Ile Met His Ala Asn Arg Ser Asn Thr Pro Ile
                85                  90                  95
Leu Ala Pro Arg Ile Leu Arg
            100
```

<210> 36218
<211> 90
<212> PRT
<213> A.fumigatus

<400> 36218

```
Thr Ala Glu Ser Thr Val Val Gly Ala Gln Pro Glu Lys Ser Ile Trp
1               5                  10                  15
Leu Val Val Lys Ala Ser Ser Met Asp Asp Ser Ile Asn Asn Val Val
            20                  25                  30
Ser Phe Gln Gln Lys Glu Asn Lys Val Ala Asp Lys Val Pro Ser Gln
        35                  40                  45
Leu Asn His Trp Val Glu Phe Phe Phe Glu Leu Arg Glu Glu Gly Phe
    50                  55                  60
Ile Asp Val Ser Gly Ser Leu Asn Trp Tyr Leu Ser His His Arg His
65                  70                  75                  80
Ser Cys Trp Leu Lys Ser Tyr Gly Tyr Arg
                85                  90
```

<210> 36219
<211> 182
<212> PRT
<213> A.fumigatus

<400> 36219

```
Ile Ser Asp Leu Ser His Leu Asp Trp His Thr Ile Ala Val Glu Glu
1               5                  10                  15
Leu Gln Lys Arg Trp Gln Val Asp Ile Ser Gln Gly Leu Ser Pro Asn
            20                  25                  30
Gln Val Gln Glu Arg Leu His Gln Tyr Gly Lys Asn Ala Leu Ser Pro
        35                  40                  45
Leu Pro His Gln Trp Phe Trp Gln Ile Phe Gly Tyr Phe Phe Lys Gly
    50                  55                  60
Phe Gly Ala Ile Leu Leu Val Gly Cys Ile Leu Val Phe Ile Ser Trp
65                  70                  75                  80
Lys Pro Leu Gly Gln Pro Pro Ala Leu Ala Asn Leu Ala Leu Ala Ile
                85                  90                  95
Val Leu Leu Ala Val Phe Phe Ile Gln Ala Ala Phe Asn Ala Trp Gln
            100                 105                 110
Asp Trp Ser Ser Ser Arg Val Met Ala Ser Ile Thr Gly His Ala Ala
        115                 120                 125
Arg Lys Leu Ser Gly His Ala Trp Trp Ser Leu Pro Ser Ile Ser Pro
    130                 135                 140
Asp Ile Val Pro Gly Asp Val Val His Leu Lys Ala Gly Asn Lys Leu
145                 150                 155                 160
Pro Ala Asp Val Arg Phe Val Glu Val Ser Asn Asp Ala Cys Phe Asp
                165                 170                 175
Arg Ser Ile Leu Thr Ala
            180
```

<210> 36220
<211> 154
<212> PRT
<213> A.fumigatus

<400> 36220
Leu Cys Met Leu Thr Asp Arg Ile Leu Arg Ser Trp Pro Gln Glu Ser
1 5 10 15
Ser Ala Asp Cys Gln Gln Asn Arg Met Leu Val Thr Asp Cys Ala Val
20 25 30
Ser Ile Ser Thr Phe Thr Leu Asp Gly Ala Arg Asp Glu Met Val Leu
35 40 45
Lys Gly Lys Ala Ser Ala Ile His Gln Leu Arg Ala Val Ala Gly Leu
50 55 60
Cys Asn Ala Ala Glu Phe Asp Ala Ala Thr Met Asn Leu Pro Val His
65 70 75 80
Gly Arg Lys Val Ile Gly Asp Ala Thr Asp Gln Ala Ile Leu Arg Phe
85 90 95
Ser Glu Glu Leu Gly Pro Val Ala Glu Leu Arg Ser Met Trp Lys Lys
100 105 110
Thr Tyr Asp Leu Ala Phe Asn Ser Lys Asn Lys Phe Met Val Arg Thr
115 120 125
Phe Asp Leu Val Asp Arg Ala Gly Leu Gly His Ala Met Ser Pro Ala
130 135 140
Glu Ser Ala Gln Phe Gly His Asp Asp Thr
145 150

<210> 36221
<211> 77
<212> PRT
<213> A.fumigatus

<400> 36221
Cys Val Val Leu Glu Arg Gly Arg Pro Asn Ser Ser Arg Lys Asn Arg
1 5 10 15
Phe Phe Glu Leu Leu Ala Leu Leu Met Val Gly Asp Thr Gly Glu Thr
20 25 30
Asp Phe Ala Asn Val Cys Leu Leu Ser Asp Arg Gly Trp Ser Met Phe
35 40 45
Met Thr Thr Leu Cys Glu Val Asp Pro Ser Tyr Met Gly Met Ile Tyr
50 55 60
Val Ser Asn Arg Cys Glu Leu Phe Ile Leu Leu Met Thr
65 70 75

<210> 36222
<211> 68
<212> PRT
<213> A.fumigatus

<400> 36222
Asp Ser Arg Val Lys Val Arg Ser Gly Tyr Arg Cys Arg Lys His Ile
1 5 10 15
Ile Leu Lys Gln Leu Pro Val Ser Arg Pro Asp Asn Ser Glu Asp Gln
20 25 30
Trp Val Arg Tyr Val Thr Val Met Arg Arg Leu His Asp Leu Gly Gly

```
        35                  40                  45
Asp Gly Tyr Gly Thr Val Ala Phe Met Leu Thr Asn Ala Glu Cys Gly
    50                  55                  60
Gly Gln Ile Phe
65

<210> 36223
<211> 65
<212> PRT
<213> A.fumigatus

<400> 36223
Gln Lys Pro Pro Leu Trp Arg Arg His Leu Pro Ile Trp Val Arg Leu
1               5                   10                  15
Leu Leu Ala Lys Ile Ile Ile Leu Pro Arg Asp Asn Tyr Ser Ser Lys
            20                  25                  30
Ile Met Ile Glu Phe Val Arg Arg Gly Asp Leu Ile His Cys Arg Asn
        35                  40                  45
Ser Thr His Leu Gln Asn Ser Asp Arg Tyr Gly Arg Phe Thr Leu Arg
    50                  55                  60
Leu
65

<210> 36224
<211> 326
<212> PRT
<213> A.fumigatus

<400> 36224
Leu Ser Cys Ser Arg Asp Glu Phe Leu Gln Leu Tyr Gln Gln Ser Gln
1               5                   10                  15
Ile Leu Val Phe Val Gly Glu Thr Gly Ser Gly Lys Thr Thr Gln Ile
            20                  25                  30
Pro Gln Phe Val Leu Tyr Asp Asp Leu Pro Gln Thr Gln Arg Lys Met
        35                  40                  45
Val Ala Cys Thr Gln Pro Arg Arg Val Ala Ala Met Ser Val Ala Gln
    50                  55                  60
Arg Val Ala Ala Glu Leu Asp Val Lys Leu Gly Glu Glu Val Gly Tyr
65                  70                  75                  80
Ser Ile Arg Phe Glu Asp Met Thr Ser Ser Lys Thr Cys Leu Lys Tyr
                85                  90                  95
Met Thr Asp Gly Met Leu Leu Arg Glu Ala Met His Asp His Asp Leu
            100                 105                 110
Thr Arg Tyr Ser Thr Ile Ile Leu Asp Glu Ala His Glu Arg Thr Met
        115                 120                 125
Ala Thr Asp Val Leu Met Gly Leu Leu Lys Glu Val Val Gln Arg Arg
    130                 135                 140
Pro Asp Leu Lys Ile Ile Ile Met Ser Ala Thr Leu Asp Ala Gln Lys
145                 150                 155                 160
Phe Gln Arg Tyr Phe Asn Asp Ala Pro Leu Leu Ala Val Pro Gly Arg
                165                 170                 175
Thr His Pro Val Glu Met Leu Tyr Thr Pro Glu Pro Glu Gln Asp Asp
            180                 185                 190
Val Glu Ala Ala Ile Arg Thr Ile Leu Gln Ile His Ala Thr Glu Pro
        195                 200                 205
Glu Gly Asp Ile Ile Val Ile Met Thr Gly Glu Glu Glu Ile Glu Glu
```

```
    210                 215                 220
Ala Ala Arg Lys Ile Ser Leu Glu Glu Asp Glu Met Glu Arg Glu Ala
225                 230                 235                 240
Asp Ala Gly Pro Leu Lys Val Tyr Pro Leu Asn Gly Ser Leu Pro Pro
                245                 250                 255
His Met Gln Gln Arg Ile Leu Glu Pro Ala His Pro His Arg Arg Pro
            260                 265                 270
Gly Gly Arg Pro Gly Arg Lys Val Ile Val Ser Thr Asn Ile Ala Glu
        275                 280                 285
Thr Ser Leu Thr Ile Asp Gly Ile Val Tyr Val Val Asp Pro Gly Phe
    290                 295                 300
Ser Lys Gln Lys Met Tyr Asn Pro Arg Ile Arg Val Glu Ser Leu Val
305                 310                 315                 320
Val Ser Pro Ser Leu His
                325
```

<210> 36225
<211> 126
<212> PRT
<213> A.fumigatus

```
<400> 36225
Leu Asn Ser Ser Ala Glu Ala Ile Ser Phe Thr Val Val Thr Pro Leu
1               5                   10                  15
Ile Cys Arg Thr Gln Ile Ala Met Val Asp Ser Arg Ser Asp Ser Glu
            20                  25                  30
Asp Arg Ser Arg Ala Lys Arg Gln Lys Met Asp Lys Ser Glu Thr Asp
        35                  40                  45
Pro Arg Asn Asn Pro Tyr Leu Ala His Met Tyr Ala Asp Ala Ser Thr
    50                  55                  60
Asn Gly Asn Ser Ser Ser Ser Gly Thr Asn Pro Ala Phe Ala Lys Leu
65                  70                  75                  80
Lys Arg His Gln Thr Thr Ala Ala Leu Ala Lys Glu Val Glu Asp Gly
                85                  90                  95
Glu Ile Asn Pro Leu Thr Gly Arg Pro Phe Ser Ser Lys Tyr Phe Ser
            100                 105                 110
Ile Leu Gln Thr Arg Arg Asp Leu Pro Val His Gln Gln Arg
        115                 120                 125
```

<210> 36226
<211> 66
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (44)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 36226
Pro Thr Ala Leu Ser Leu Pro Lys Gln Leu Pro Pro Met Ser Val Gln
1               5                   10                  15
Ser Arg Trp His Ser Glu Pro Val His Leu Leu Thr Met Asp Ala Asn
            20                  25                  30
Thr Phe Ile Lys Asn Gln Lys Gly Tyr Pro Val Xaa Ser Lys Ala His
        35                  40                  45
```

```
Gln Ala Leu Ile Ser Lys Phe Met Arg Leu Arg Thr Pro Pro Trp Ile
    50                  55                  60
Leu Leu
65

<210> 36227
<211> 406
<212> PRT
<213> A.fumigatus

<400> 36227
Asp Val Gly Pro Ile Pro Gly Val Glu Ala Ser Glu Thr Ser Glu Ala
1               5                  10                  15
Thr Gln Ser Asn Leu Ser Ser Ser Glu Tyr Pro Ser Leu Ser Gln Ala
            20                  25                  30
Ala Val Ser Ser Lys Lys Phe Ile Asp Pro Thr Pro His Leu Ser Tyr
        35                  40                  45
Ile Arg Asn Leu Gln Gln Arg Gln Pro Pro Arg Ser Ala Ile Glu Arg
    50                  55                  60
Phe Gly Met Gly Tyr Gln Asp Tyr Leu Gln Ala Pro Leu Gln Pro Leu
65                  70                  75                  80
Thr Val Asn Leu Glu Ser Ile Thr Tyr Glu Val Phe Glu Lys Asp Pro
                85                  90                  95
Ile Lys Tyr Glu Trp Tyr Glu Arg Ala Ile Ala Lys Ala Leu Ser Asp
            100                 105                 110
Trp Ala Glu Gln Lys Lys Pro Thr Ser Asn Pro Asp Gly Arg Val Val
        115                 120                 125
Leu Ala Val Val Gly Ala Gly Arg Gly Pro Leu Val Thr Arg Ala Ile
    130                 135                 140
Arg Ala Ser Ala Glu Thr Gly Val Asp Ile Asp Leu Trp Val Val Glu
145                 150                 155                 160
Asn Asn Pro Asn Ala Phe Val Leu Leu Gln Arg His Asn Glu Glu Leu
                165                 170                 175
Trp Gly Gly Lys Ala Thr Leu Val Gln Ser Asp Met Arg Ser Trp Lys
            180                 185                 190
Gly Pro Gln Arg Ala Lys Asp Ser Gly Leu Pro Pro Ala Ala Val Gly
        195                 200                 205
His Ser Leu Gly Ile Glu Asp Ser Leu Leu Tyr Lys Pro Glu Pro Asp
    210                 215                 220
Gln Lys Gly Asn Thr Pro Ala Pro Glu Ser Val Lys Ser Met Ala Ser
225                 230                 235                 240
Ser Asp Leu Ser Ser Gly Met Ile Asp Ile Val Val Ser Glu Leu Leu
                245                 250                 255
Gly Ser Phe Gly Asp Asn Glu Leu Ser Pro Glu Cys Leu Asp Gly Ile
            260                 265                 270
Thr His Leu Leu Asn Pro Val His Gly Ile Ser Ile Pro Ala Ser Tyr
        275                 280                 285
Thr Ala His Leu Thr Pro Ile Ser Ala Pro Lys Leu His Ala Glu Val
    290                 295                 300
Val Asn Leu Ser Ile Ser Asn Pro Ala Ala Ser Glu Thr Pro Tyr Val
305                 310                 315                 320
Val Met Leu His Ala Ile Asp Phe Leu Ser Thr Asn Gln Ser Ser Ala
                325                 330                 335
Gly Thr Thr Ser Gly Asp Ser Gly Asn Ser Tyr Ile Ser Gln Thr Arg
            340                 345                 350
Ser Ser Ile Ser Thr Ile Pro Val Pro Glu Ser Thr Thr Pro Tyr Val
```

```
        355                 360                 365
Gln Thr Ala Trp Ser Phe Ser His Pro Asn Arg Asp Ile Pro Pro Gln
    370                 375                 380
Ser Pro Tyr Thr Ser Ile Ile Ser Asn Ser His Leu Pro Asp Gly Ala
385                 390                 395                 400
Trp Lys Ile Thr Arg Cys
                405
```

<210> 36228
<211> 226
<212> PRT
<213> A.fumigatus

<400> 36228

```
Tyr Asp Met Leu Thr Thr Pro Ile Thr Thr Pro His Phe His Ser Arg
1               5                  10                  15
Val Leu Ser Leu Leu Ser Gly His Leu Ser Lys Leu Arg Ala Val Ser
            20                  25                  30
Ser Asp Pro Asn Gly Thr Leu Ala Thr Thr Glu Asn Thr Arg Pro Val
        35                  40                  45
Ile Ile Pro Pro Leu Gly Pro Ser Asp Thr His Leu Thr Pro Asn Gln
    50                  55                  60
Thr Met Ser Gln Leu Met Gly Val Thr Ser Pro Trp Ile Asp Leu Cys
65                  70                  75                  80
Ser Pro Asp Pro Leu Ile Ala Asp Ile Ser Arg Gln Val Leu Met Leu
                85                  90                  95
Glu Val Ala Tyr Ala Ala Phe Cys Gly Ile Gly Tyr Val Leu Ile Pro
            100                 105                 110
Gly Pro Lys Leu His His Gly Asn Leu His Ser Glu Gly Leu Val Phe
        115                 120                 125
Tyr Ala Arg Ala Val Gln Asp Ala Ile Asn Leu Gly Pro Tyr Ile Gln
    130                 135                 140
Phe His Ile Trp Leu Arg Ile Val Asp Asn Pro Asp Leu Glu Val Asp
145                 150                 155                 160
Ser Met Gly Asp Leu Ala Pro Leu Ala Arg Asp Glu Phe Leu Trp Gly
                165                 170                 175
Ser Asp Asp Gly Gln Ser Leu Lys Val Asp Leu Phe Gly Thr Trp Asp
            180                 185                 190
Ala Trp Asp Val Ile Arg Arg Thr Cys Lys Tyr His Thr Arg Leu Phe
        195                 200                 205
Val Gly Lys Asn Leu Phe Pro Val Ser Ala Ala Leu Asp Ala Phe Leu
    210                 215                 220
His Leu
225
```

<210> 36229
<211> 122
<212> PRT
<213> A.fumigatus

<400> 36229
Asn Ser Ser Ile Val Val Tyr Lys Asp Trp Gly Val Ala Asp Val Leu
1 5 10 15
Cys Cys Asp Glu Ala Thr Lys Ala Gln Met Lys Tyr Phe Lys Ile Leu
20 25 30
Leu Gly Leu Leu Pro Thr Ala Leu Ala Asp Ser Ile Tyr Val Ser Pro
35 40 45
Thr Gly Ser Ser Ser Gly Ser Gly Ser Ile Thr Ser Pro Leu Asn Ser
50 55 60
Ile Gln Ser Ala Val Asp Leu Ala Lys Pro Gly Asp Thr Ile Tyr Leu
65 70 75 80
Arg Gly Gly Thr Tyr Ser Pro Thr Ser Asn Ile Gln Ile Thr Lys Ser
85 90 95
Gly Thr Ser Ser Lys Pro Tyr Ile Leu Arg Ala Tyr Glu Gly Glu Lys
100 105 110
Val Ile Ile Asp Gly Glu Ala Leu Pro Gly
115 120

<210> 36230
<211> 71
<212> PRT
<213> A.fumigatus

<400> 36230
Gly Asn Glu Asn Arg Thr Pro Ala Pro Leu Asp Ala Ser Leu Pro Asn
1 5 10 15
Glu Asp Arg Gly Ile Leu His Ile Gln Asn Ala Asn Tyr Trp Gln Phe
20 25 30
Tyr Asp Leu Glu Leu Ile His Gly Pro Tyr Gly Val Tyr Ala Arg Asp
35 40 45
Ala Ser Asn Asn His Tyr Glu Arg Leu Ile Thr Arg Asp Asn Tyr Glu
50 55 60
Thr Gly Ile Gly His Cys Leu
65 70

<210> 36231
<211> 155
<212> PRT
<213> A.fumigatus

<400> 36231
Leu Cys Arg Trp Gly Phe Ser Pro Phe Glu Gly Asp Gly Asn Gly Phe
1 5 10 15
Lys Leu Gly Gly Gly Asp Ala Ala Asp Lys Gly Pro Ala Asn His Val
20 25 30
Ile Thr Asn Cys Ile Ala Phe Gly Asn Val Lys Asp Gly Phe Thr Asp
35 40 45
Asn Ser Gln Pro Gly Asp Phe Thr Leu Arg Arg Asn Thr Ala Trp Asn
50 55 60
Asn Ala Lys Val Gly Phe Lys Phe Asn Thr Ala Val Ala Thr Leu Asn
65 70 75 80

```
Gly Asn Val Ala Ala Val Asn Gly Glu Ser Ala Thr Ala Leu Ser Ser
                85                  90                  95
Asn Gln Ile Ser Ser Gly Asn Ser Trp Asp Gly Ser Ala Ser Trp Ser
            100                 105                 110
Asn Ser Ser Phe Lys Ser Val Asp Val Ser Leu Val Gln Gly Ala Arg
        115                 120                 125
Gln Ala Asp Gly Arg Ile Lys Ala Ser Asp Phe Leu Leu Pro Lys Ser
    130                 135                 140
Gly Glu Ala Met Gly Ala Thr Thr Val Trp Glu
145                 150                 155
```

<210> 36232
<211> 109
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13),(21),(24),(27),(50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36232

```
Ile Phe Ala Ile Gly Phe Ala Arg His Lys Thr Gly Xaa Leu Ser Glu
1               5                   10                  15
Val Ala Gln Cys Xaa Ser Gln Xaa Gly Val Xaa His Leu Val His Thr
            20                  25                  30
Arg Ile Ala His His Val Gln Gln Pro Phe Ile Lys Asn Ser Phe Glu
        35                  40                  45
Tyr Xaa Asp Leu Pro Leu Glu Lys Lys Leu Glu Ile Glu Met Phe Asn
    50                  55                  60
Ser Lys His Phe Leu Gly Tyr Ser Arg Leu Gly Ala Glu Thr Thr Ala
65                  70                  75                  80
Ser Lys Thr Asp Tyr Arg Glu Gln Phe Asp Val Ser Ser His Leu Leu
                85                  90                  95
Gln Ser Pro Arg His Ala Leu Ser Arg Leu Thr Val Gly
            100                 105
```

<210> 36233
<211> 262
<212> PRT
<213> A.fumigatus

<400> 36233

```
Phe Ala Thr Glu Leu Pro Ala Pro Gly Pro Asp Glu Pro Val Tyr Arg
1               5                   10                  15
Asn Ile Arg Gly Pro Asn Gln Trp Pro Ala Glu Ala Ser Ile Pro Gly
            20                  25                  30
Phe Arg Lys Ala Ile Glu Ala Tyr Leu Ala Glu Ile Ser Pro Leu Ala
        35                  40                  45
Glu Ala Phe Lys Ser Leu Ile Ala Glu Ala Leu Asp Leu Pro Ser Asn
    50                  55                  60
Ala Leu Tyr Pro Phe Phe Asp His Pro Pro Gln His Lys Leu Lys Leu
65                  70                  75                  80
Ile Lys Tyr Pro Pro Pro Arg Ser Ala Ser Gln Ala Gln Gly Val Gly
                85                  90                  95
Ala His Lys Asp Ser Glu Phe Leu Thr Phe Leu Leu Gln Ala Thr Pro
```

```
            100                 105                 110
His Ser Gly Leu Glu Val Gln Asn Lys Ser Gly Asp Trp Ile Pro Ala
        115                 120                 125
Pro Pro Leu Asp Gly Ser Leu Val Val Asn Ile Gly Arg Ala Leu Glu
    130                 135                 140
Ala Val Thr Gly Gly Val Cys Thr Ala Thr Thr His Arg Val Asn Leu
145                 150                 155                 160
Arg Pro Glu Asn Phe Ile Asp Ala Glu Gly Lys Pro Leu Gly Pro Arg
                165                 170                 175
Phe Ser Phe Pro Val Phe Gln Gly Met Ser Leu Glu Leu Cys Ala Asp
            180                 185                 190
Asp Ile His Leu Asp Ile Pro Ala His Ile Arg Glu Leu Val Lys Asp
        195                 200                 205
Glu Gln Val Arg Ser Asp Ala Glu Ala Thr Phe Asn Lys Thr Phe Gln
    210                 215                 220
Gly Lys Thr Gly Glu Gly Thr Leu Ile His Arg Ile Thr Ser His Gln
225                 230                 235                 240
Asp Val Gly Arg Arg Trp Tyr Pro Glu Leu Leu Asp Trp Ala Leu Lys
                245                 250                 255
Glu Arg Gln Gly Ser His
            260
```

<210> 36234
<211> 192
<212> PRT
<213> A.fumigatus

<400> 36234

```
Leu Arg Asp Trp Tyr Trp Pro Leu Pro Val Asp Leu Gln Gln Thr Leu
1               5                   10                  15
Leu Thr Arg Asp Leu Gly Phe Gln Leu Gln Gly Ala Ser Ser Asn Asn
            20                  25                  30
Lys Val Leu Tyr Leu Asp Ser Tyr Gly Asn Arg Asp Pro Arg Lys Asn
        35                  40                  45
Gly Glu Ser Ala Asp Gly Phe Ala Cys Lys Glu Gly Ser Gly Glu Gly
    50                  55                  60
Asn Leu Leu Lys Gly Ala Arg Leu Trp Asn Asn Val Asp Asp Gly Leu
65                  70                  75                  80
Asp Leu Trp Glu Phe Lys Ser Ala Val Thr Ile Glu Asp Thr Ile Ser
                85                  90                  95
Trp Gly Asn Gly Tyr Asn Arg Tyr Ala Ala Thr Cys Ser Leu Val Lys
            100                 105                 110
Gly Asn Ala Ala Asp Phe Val Asp Gly Val Ser Pro Pro Ser Lys Ala
        115                 120                 125
Thr Ala Thr Gly Ser Asn Ser Ala Ala Glu Thr Gln Arg Ile Arg Ala
    130                 135                 140
Leu Arg Thr Met Leu Leu Pro Thr Ala Leu Pro Leu Ala Thr Ser Arg
145                 150                 155                 160
Thr Ala Ser Arg Ile Thr Arg Ser Arg Ala Ile Ser Arg Ser Ala Ala
                165                 170                 175
Thr Arg Arg Gly Ile Met Pro Arg Trp Ala Ser Ser Ser Thr Gln Leu
            180                 185                 190
```

<210> 36235
<211> 62
<212> PRT

<213> A.fumigatus

<220>
<221> UNSURE
<222> (11)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36235

```
Ile Gly Val Cys Ser Arg Asp Gln Thr Phe Xaa Phe Ala Glu Asn Pro
1               5                  10                  15
Gly Ser Phe Pro Phe Ser Gly Pro Leu Ser Phe Thr Phe Ser Ser Arg
            20                  25                  30
Ile Ile Ile Ile Ile Ile Ile Ile Ile Ile Ile Ile Ile Ile Phe Pro
        35                  40                  45
Phe Ile Ser Phe Thr Gln Arg Gly Thr Glu Arg Lys Glu Gly
    50                  55                  60
```

<210> 36236
<211> 987
<212> PRT
<213> A.fumigatus

<400> 36236

```
Arg Ile Val Gln Ala Leu Ala Leu Leu Arg Ile Ala Gln His Ile Lys
1               5                  10                  15
Pro Asp Leu Gly Leu Asp Ile Pro Ala Arg Ala Glu Gly Asp Gly Pro
            20                  25                  30
Gly His Val Gly Ile Pro Ala Val Pro Val Glu Lys Glu Ile Gly Arg
        35                  40                  45
Phe Pro Val Pro Gly Gln Phe Gln Asp Gln Leu Val Cys Gly Arg Leu
    50                  55                  60
Gly Glu Lys Ala Ala Gly His Phe Gly His His Val Pro Ile Gln Arg
65                  70                  75                  80
Phe Ser Arg Gln Leu Gln His Gly Gly Ile Ala Pro Ala Thr Glu Ala
                85                  90                  95
Leu Leu Val Val Val Ala Val Leu Gly His Ile Pro Phe Ala Asp Leu
            100                 105                 110
Gly Val Val Gly Ala Ser Asp Val Leu Val Pro Gly Asn Pro Phe Gly
        115                 120                 125
Gly Asp Gly Pro Gln Ala Glu Gln Gln Gln Ser Asp Glu Asp Val Glu
    130                 135                 140
His Asn Glu Val Asp Asp His Ile Val Met Ala Pro Val Gly His Asp
145                 150                 155                 160
Arg Arg Asp Glu Gln Asp Gly Asp Ala Gly Glu Asp Gly Leu Ala Ala
                165                 170                 175
Arg Glu Glu Leu Gly Ala Arg Val Ala Glu Thr Gly Glu Arg Gly Glu
            180                 185                 190
Asp Ala Glu Val Glu Gly Gln Gly Asn Gln Val Glu Val Glu Asp Asp
        195                 200                 205
Ala Gly Pro Gly Ala Phe Asp Gly Arg His Asp Asp Glu Ser His Gln
    210                 215                 220
Pro His Gly Asp Arg Glu Gly Glu Thr Gly Asp Glu Ser Asp Lys Asp
225                 230                 235                 240
Lys His Val Gly Gly Gly Lys Arg His Gly Asp Gln Val Val Gly Pro
                245                 250                 255
Ala Ala Gly Asp Pro Gly Ala Arg Arg Thr Arg Gln Glu Gln Arg Asp
```

```
            260                 265                 270
His Gln Arg Asp Gly Arg Thr Val His Asp Leu Leu Gly His Val Ala
        275                 280                 285
Gly Glu Val Gln Ala Ala Ala Ile Gln Arg Gln Gln Gln Asn Val Asp
    290                 295                 300
Gln Gly Gly His Arg Lys Asp Thr Glu Glu Gly Glu Ala Leu Val Pro
305                 310                 315                 320
Pro His Gly Leu Asp Leu Val Val Arg Val Asp Ile Asp Leu Cys Pro
                325                 330                 335
Gly Ile Arg Gly Arg His Leu Arg Ser Ala Val Asp Pro Val Arg Gln
            340                 345                 350
Phe Pro Val Leu Val Val Ser Ser Glu Ser Thr Arg Glu Gln Leu Pro
        355                 360                 365
Glu Gly Ala Gly Arg Glu Val Glu Val Gly Phe Ala Ala Arg Pro Lys
    370                 375                 380
Arg Lys Arg Leu Gly Glu Gly Gly Arg Leu Ile Gly Leu Val Val Glu
385                 390                 395                 400
Gln Gly Val Ala Ile Arg Asp Phe His Val Asp Leu Val Lys Gly Ala
                405                 410                 415
Phe Ala Gly Gly Ala Glu Glu Gly Glu Arg Glu Asp Ile Gly Ile Asp
            420                 425                 430
Val Asp Pro Val Phe Leu Asp Gln Leu Ala Gln Gly Val Gly Asp Leu
        435                 440                 445
Ser Gln Ile Ala Leu Ala Ala Phe Ser Glu Asp Ala Arg Glu Asp Ser
    450                 455                 460
Val Arg Phe Leu Glu Gln Gly Gln Ala Arg Gly Arg Gly Arg Arg Thr
465                 470                 475                 480
Ala Pro Leu Ile Ala Val Pro Val Asp Ala Gly Leu Asp Gln Gly Leu
                485                 490                 495
Trp Arg Glu Gly Ser Val Glu Val Arg Asp Gly Val Glu Leu Leu Glu
            500                 505                 510
Leu Arg Gln Gly Arg Gly Ile Asp Glu Leu Pro Ala Asp Val Pro Ala
        515                 520                 525
Asp Arg Leu Gly Gln Phe Thr Leu Gly Val Arg Gln Arg Lys Met Leu
    530                 535                 540
Gln Gln Glu Gln Ser Leu Leu Gly Thr Gln Gly Val His Ile Leu Asp
545                 550                 555                 560
Glu Pro Ala Gly Gln Ser Asp Val Phe Val His Val Leu Gly Pro Leu
                565                 570                 575
Arg Gln Ser Arg Leu Gly Phe Glu Ala Asp Met Thr Gly Glu Thr Ser
            580                 585                 590
Arg Gly Glu Glu Arg Val Gln His Gly Ala Arg Glu Ala Leu Arg Ala
        595                 600                 605
Phe Arg Gly Lys His Phe Glu Ser Val Arg Val Gly Leu Val Asp Gly
    610                 615                 620
Pro Glu Ala Asp Val Gly Ala Leu Ala Gln Thr Gly Val Glu Ala Gln
625                 630                 635                 640
Ile Asp Ala Gln Gly Ile Leu Gly Gly Lys Ile Gly Glu Val Leu Asp
                645                 650                 655
Arg Arg Arg Gln Arg Gly Gln Val Gly Pro Val Arg His Gly Glu Phe
            660                 665                 670
Ile Val Glu Ser Ser Gln Glu Gly Ala Gln Leu Leu Asp Phe Val Arg
        675                 680                 685
Gly Asn Arg Val Gln Gln Ser Gln Arg Leu Gln Pro Leu Leu Gly Leu
    690                 695                 700
Glu Asp Leu Asp Lys Gly His Gly Gly Gly Phe Gly Ser Gln Gly Glu
```

```
705                 710                 715                 720
Thr Ala Glu Leu Leu Val Phe His Ala Gly His Gly Asp Gly Gln Arg
                725                 730                 735
Ala Ala Leu Arg Pro Asp Leu Gly His Pro Phe Arg Arg Ile Thr Asn
            740                 745                 750
Arg Asp Arg Arg Ala Val His Val Arg Gly Gly Leu Ser Phe Gly Arg
        755                 760                 765
Gly Glu His Val Gly Lys Arg Gly Lys Val Leu Gln Gln Ser Gly Pro
    770                 775                 780
Cys Val Ser Gly Pro Asp Leu Leu Leu Leu Glu Val Gln Ile Gly Ala
785                 790                 795                 800
Pro Asp Val Val Asp Phe His Asp Leu Gly Phe Leu Gln Pro Thr Lys
                805                 810                 815
Gly Arg Gln Gly Leu Gly Asn Leu Asp Val Glu Arg Gly Ile Val Gln
            820                 825                 830
Gly Arg Leu Ala Ala Asp Pro Gly Asp Gly Ala Val Glu Val Ala Pro
        835                 840                 845
Leu Gln Arg Ser Leu Asp Asp Arg Ile Gly Gln Val Ser Val Val Val
    850                 855                 860
Asp Arg Leu Pro Gly His Asp His Glu Val Ala His Ala Gly Phe Arg
865                 870                 875                 880
His Glu Arg Phe Asp Gly Gly Leu His Leu Asp His Leu Lys Val Val
                885                 890                 895
Ala Phe Leu Ala Val Arg His Asp Gly Gly Ile Ala Asp Asp Glu Thr
            900                 905                 910
Gly Asp Gly Ile Gly Leu Gln Ser Leu Met Val Leu Glu Glu Val Arg
        915                 920                 925
Gly Arg Cys Leu Gln Ile His Gly Gln Ala Lys Gly Met Glu Ser Leu
    930                 935                 940
Gly Gln Tyr Pro Asp Gly Gly Arg Val Glu Ala Ala Leu Pro Val Gly
945                 950                 955                 960
Gln Glu His Ala Ala Glu Arg Arg Ala Ile Glu Pro Ala Glu Cys Ala
                965                 970                 975
Leu Asp Ser Val Asp Ser Arg Gln Ser Arg Pro
            980                 985
```

<210> 36237
<211> 1131
<212> PRT
<213> A.fumigatus

<400> 36237

```
Val Leu Ile Gly Leu Leu Leu Gly Ser Val Val Ile Gly Cys Ser Tyr
1               5                   10                  15
Leu Leu Tyr Ala Gly Leu Ser Arg Ala Arg Lys Trp Tyr Gln Val Gly
            20                  25                  30
Ile Arg Ser Met Ser Ser Val Asp Ala Leu Glu Glu Ile Ala Asp Ile
        35                  40                  45
Leu Gln Ser Arg Ala Gln Ser Ala Val Val Pro Arg Asn Val Leu Asp
    50                  55                  60
Arg Leu Asp Arg Leu Ser Arg Gln Gln Leu Ser Leu Pro Asn Val Gln
65                  70                  75                  80
Trp Ala Lys Lys Pro Ser Ser Phe Gly Val Tyr Leu Gly Ser Phe Asp
                85                  90                  95
Ala Ser Pro Thr Arg Asp Gln Ser Arg Leu Leu Ser Gln Trp Asp Leu
            100                 105                 110
```

```
Leu Ile Val Asp Pro Ala Gln Ser Gly Val Val Glu Ala Leu Ser Arg
        115                 120                 125
Ala Glu Arg Lys Gln Phe Leu Gly Arg Val Asp Val Gly Ser Gly Ser
    130                 135                 140
Gly Ser Thr Leu Ala Ala Ile Asp Arg Ile Glu Ser Ala Leu Ser Arg
145                 150                 155                 160
Phe Asp Gly Ala Pro Phe Ser Gly Met Leu Leu Ala Asn Trp Glu Ser
                165                 170                 175
Ser Phe Asn Pro Pro Ala Ile Arg Ile Leu Ala Glu Ala Leu His Ala
            180                 185                 190
Phe Gly Leu Pro Val Tyr Leu Glu Thr Ala Pro Pro Asp Phe Leu Gln
        195                 200                 205
Asp His Lys Thr Leu Gln Thr Asp Ala Ile Ala Gly Leu Val Ile Arg
    210                 215                 220
Asn Ala Ser Ile Met Pro Asp Gly Glu Lys Arg Asp Tyr Phe Gln Met
225                 230                 235                 240
Ile Lys Met Gln Pro Thr Ile Lys Ala Phe Val Ser Glu Ala Cys Met
                245                 250                 255
Arg Asp Phe Val Val Met Ala Trp Glu Thr Val Asp Asp Asn Ala His
            260                 265                 270
Leu Ser Asn Ala Val Ile Gln Arg Ser Leu Gln Trp Cys Asn Phe Tyr
        275                 280                 285
Ser Ala Ile Thr Trp Ile Gly Arg Gln Ala Ala Leu His Asp Ala Ser
    290                 295                 300
Leu Asn Val Lys Ile Pro Glu Pro Leu Ser Ala Phe Ser Trp Leu Lys
305                 310                 315                 320
Glu Ala Glu Ile Met Lys Val His Asp Ile Trp Arg Ala Asn Leu Asn
                325                 330                 335
Leu Gln Glu Glu Glu Val Gly Pro Arg Asp Ala Trp Thr Ala Leu Leu
            340                 345                 350
Gln Tyr Phe Pro Thr Leu Ser Asn Val Leu Thr Ser Ser Glu Arg Glu
        355                 360                 365
Pro Pro Ser His Met Asp Ser Ala Thr Ile Ala Val Arg Asp Pro Pro
    370                 375                 380
Glu Trp Val Ala Gln Val Arg Ser Gln Gly Ser Pro Leu Ser Ile Ser
385                 390                 395                 400
Met Ala Gly Val Glu Tyr Lys Glu Phe Gly Cys Phe Pro Leu Gly Ser
                405                 410                 415
Glu Ala Thr Ala Val Ala Phe Val Glu Ile Leu Lys Ser Gln Gln Arg
            420                 425                 430
Leu Lys Ser Leu Gly Leu Leu His Pro Val Pro Ser Asp Lys Ile Gln
        435                 440                 445
Lys Leu Gly Ala Leu Leu Arg Arg Phe His Asp Lys Phe Ala Val Ser
    450                 455                 460
His Trp Pro Asp Leu Pro Thr Leu Pro Ala Thr Ile Lys Asp Leu Ala
465                 470                 475                 480
Asn Phe Ala Ser Gln Asp Ser Leu Arg Ile Asn Leu Gly Leu Asp Ser
                485                 490                 495
Gly Leu Arg Lys Ser Ala Asp Val Arg Phe Trp Ala Val Tyr Gln Ser
            500                 505                 510
Asp Ala Asp Gly Phe Glu Val Phe Ala Ser Lys Ser Ala Gln Gly Leu
        515                 520                 525
Ala Gly Thr Val Leu His Thr Phe Leu Ser Ala Arg Gly Phe Pro Arg
    530                 535                 540
His Val Cys Phe Glu Ala Glu Thr Ala Leu Ala Gln Trp Ser Lys Asp
545                 550                 555                 560
```

```
Val Asn Glu Asp Ile Gly Leu Pro Arg Arg Leu Ile Gln Asp Val Asp
                565                 570                 575
Ala Leu Ser Pro Glu Glu Arg Leu Leu Leu Leu Gln His Leu Ser Leu
            580                 585                 590
Thr Asp Ala Lys Ser Glu Leu Ser Glu Thr Ile Cys Arg Tyr Ile Arg
        595                 600                 605
Arg Gln Leu Ile Asp Ala Pro Ser Leu Ala Gln Leu Lys Glu Leu Asn
    610                 615                 620
Thr Val Ala Tyr Leu Asp Gly Ser Leu Pro Pro Glu Ala Leu Ile Lys
625                 630                 635                 640
Ser Arg Ile His Trp Tyr Arg Asp Gln Gly Cys Arg Ser Pro Ala Pro
                645                 650                 655
Ala Ala Cys Leu Ala Leu Phe Gln Glu Thr Asp Ala Val Phe Thr Arg
            660                 665                 670
Ile Leu Arg Glu Arg Arg Glu Ser Asp Leu Ala Gln Ile Thr Asn Ala
        675                 680                 685
Leu Cys Gln Leu Val Gln Lys Asp Arg Ile Asp Val Tyr Ala Asp Ile
    690                 695                 700
Leu Thr Leu Ser Leu Phe Cys Ala Ala Arg Lys Gly Ala Phe Asp Glu
705                 710                 715                 720
Ile Tyr Met Glu Val Thr Asp Arg Asn Pro Leu Phe Asn Asp Gln Ser
                725                 730                 735
Asp Gln Ala Ala Ala Phe Ala Glu Ser Phe Ala Leu Gly Ser Arg Cys
            740                 745                 750
Glu Ala Tyr Phe Asp Leu Ser Pro Ser Ala Phe Gly Lys Leu Leu Ser
        755                 760                 765
Gly Arg Phe Arg Arg Tyr Tyr Gln Asp Arg Glu Leu Pro Asp Trp Ile
    770                 775                 780
Asn Gly Ala Pro Gln Met Ala Thr Ser Tyr Ala Gly Ala Gln Ile Asp
785                 790                 795                 800
Val Asn Pro Asp Asp Lys Val Lys Pro Met Arg Gly Tyr Gln Arg Phe
                805                 810                 815
Thr Phe Leu Ser Val Phe Ala Val Pro Ala Leu Ile Asp Ile Leu Leu
            820                 825                 830
Leu Thr Leu Tyr Gly Arg Gly Leu Tyr Leu Ser Gly His Met Pro Glu
        835                 840                 845
Glu Val Met His Ser Ala Ser Ile Ala Leu Met Ile Ser Leu Leu Leu
    850                 855                 860
Ser Gly Ala Ala Gly Thr Trp Ile Ala Cys Gly Gly Ser Tyr Tyr Leu
865                 870                 875                 880
Ile Ser Met Ala Phe Ala Ala Thr Asn Met Phe Val Phe Ile Arg Leu
                885                 890                 895
Ile Ala Cys Phe Ala Phe Thr Ile Ala Val Gly Leu Val Gly Phe Ile
            900                 905                 910
Val Met Ser Ala Val Lys Gly Pro Gly Pro Gly Ile Val Phe Tyr Leu
        915                 920                 925
Tyr Leu Ile Ala Leu Thr Leu Tyr Phe Ser Ile Phe Ala Ser Leu Ala
    930                 935                 940
Cys Phe Ser Tyr Pro Gly Ser Lys Phe Leu Ser Gly Arg Lys Ala Ile
945                 950                 955                 960
Phe Ala Cys Ile Pro Val Leu Phe Ile Ser Pro Ile Val Thr Asn Trp
                965                 970                 975
Ser His His Asp Val Val Ile Tyr Leu Ile Val Leu Tyr Ile Phe Ile
            980                 985                 990
Gly Leu Leu Leu Leu Ser Leu Arg Ser Val Ala Ser Lys Trp Val Thr
        995                 1000                1005
```

```
Trp Tyr Gln Asn Ile Arg Arg Thr Asp Asp Thr Glu Ile Arg Lys Trp
    1010                1015                1020
Tyr Val Ser Lys Tyr Gly Asn Asn Asp Glu Lys Cys Phe Gly Gly Arg
1025                1030                1035                1040
Ser Asp Pro Ala Val Leu Lys Leu Ser Arg Glu Ala Leu Tyr Arg Asp
                1045                1050                1055
Val Met Ala Glu Val Ser Arg Gly Phe Phe Ser Lys Pro Thr Thr Asp
            1060                1065                1070
Gln Leu Val Leu Glu Leu Ala Arg Asp Trp Glu Ala Thr Asn Phe Leu
        1075                1080                1085
Leu Asp Trp Tyr Cys Arg Tyr Ala Asp Val Pro Arg Pro Ile Pro Phe
    1090                1095                1100
Ser Ser Gly Trp Asn Ile Gln Thr Lys Val Gly Leu Asp Val Leu Arg
1105                1110                1115                1120
Asn Ser Gln Lys Gly Gln Arg Leu His Asn Ala
                1125                1130
```

<210> 36238
<211> 188
<212> PRT
<213> A.fumigatus

```
<400> 36238
Ser Ser Pro Ala Ser Thr Gly Thr Ala Ile Arg Gly Ala Val Leu Leu
1               5                   10                  15
Pro Leu Pro Arg Ala Trp Pro Cys Ser Arg Lys Arg Thr Leu Ser Ser
            20                  25                  30
Arg Ala Ser Ser Glu Asn Ala Ala Arg Ala Ile Trp Leu Arg Ser Pro
        35                  40                  45
Thr Pro Cys Ala Ser Trp Ser Arg Lys Thr Gly Ser Thr Ser Met Pro
    50                  55                  60
Ile Ser Ser Arg Ser Pro Ser Ser Ala Pro Pro Ala Lys Ala Pro Leu
65                  70                  75                  80
Thr Arg Ser Thr Trp Lys Ser Arg Ile Ala Thr Pro Cys Ser Thr Thr
                85                  90                  95
Ser Pro Ile Lys Arg Pro Pro Ser Pro Ser Arg Leu Arg Leu Gly Arg
            100                 105                 110
Ala Ala Lys Pro Thr Ser Thr Ser Arg Pro Ala Pro Ser Gly Ser Cys
        115                 120                 125
Ser Arg Val Asp Ser Asp Asp Thr Thr Arg Thr Gly Asn Cys Arg Thr
    130                 135                 140
Gly Ser Thr Ala Leu Arg Arg Trp Arg Pro Arg Met Pro Gly His Arg
145                 150                 155                 160
Ser Met Ser Thr Arg Thr Thr Arg Ser Ser Pro Cys Gly Gly Thr Ser
                165                 170                 175
Ala Ser Pro Ser Ser Val Ser Leu Arg Cys Pro Pro
            180                 185
```

<210> 36239
<211> 1155
<212> PRT
<213> A.fumigatus

```
<400> 36239
Pro Leu Leu Lys Thr Pro Ser Ala Val Ile Arg Arg Trp Val Gln Ala
1               5                   10                  15
```

```
Gly Gly Pro Gly Asp Glu Ile Arg Ser Phe Asp Val Leu Thr Ser Leu
            20                  25                  30
Asn Pro Phe Gln Leu Ser Arg Lys Glu Arg Glu Glu Leu Tyr Gln Val
        35                  40                  45
Trp Thr Lys Asp Val Thr Asn Leu Val Tyr Asp Lys Val Met Lys Leu
    50                  55                  60
Cys Ser Thr His His Met Ala Lys Ala Asn Leu Asp Asn Val Arg Asp
65                  70                  75                  80
Glu Val Asp Leu Arg Cys Leu Ala Asp Ala Asp Val Ile Gly Val Thr
                85                  90                  95
Thr Ser Gly Leu Ala Arg Asn Leu Asn Met Leu Arg Lys Leu Gln Ser
            100                 105                 110
Lys Val Val Met Cys Glu Glu Ala Gly Glu Val Leu Glu Ala His Leu
        115                 120                 125
Leu Thr Ala Leu Leu Pro Ser Val Glu His Ala Ile Leu Ile Gly Asp
    130                 135                 140
His Leu Gln Leu Arg Pro Gln Val Gln Asn Tyr Glu Leu Ser Arg Glu
145                 150                 155                 160
Asn Pro Arg Gly Gly Glu Lys Tyr Ser Leu Asp Val Ser Leu Phe Glu
                165                 170                 175
Arg Leu Val Glu Ser Gln Ser Ala Met Gly Leu Gly Leu Pro Phe Ser
            180                 185                 190
Thr Leu Glu Thr Gln Arg Arg Met His Pro Ser Ile Ala Gln Leu Val
        195                 200                 205
Arg Asp Thr Leu Tyr Pro Gln Ile Lys Asp Ala Glu Ser Val Ser Ser
    210                 215                 220
Tyr Pro Glu Val Val Gly Met Arg Arg Arg Leu Phe Trp Leu Asp His
225                 230                 235                 240
Arg Glu Gln Glu Ala Asp Ala Ala Asn Thr Gly Pro Leu Ala Ser Ser
                245                 250                 255
His Trp Asn Glu Tyr Glu Ile Gln Met Thr Met Ala Val Val Asn His
            260                 265                 270
Leu Val Arg Gln Gly Arg Tyr His Ser Gly Asp Ile Ala Val Ile Thr
        275                 280                 285
Pro Tyr Leu Gly Gln Leu His Arg Leu Arg Gln Leu Phe Ser Gln His
    290                 295                 300
Phe Ala Val Thr Leu Gly Glu Arg Asp Ala Asp Gln Leu Asp Ser Ala
305                 310                 315                 320
Gly Phe Gly Ala Gly Glu Thr Asp Val Thr Pro Ala Ala Arg Ala Thr
                325                 330                 335
Leu Leu Lys Thr Leu Arg Val Ala Thr Ile Asp Asn Phe Gln Gly Glu
            340                 345                 350
Glu Ala Lys Val Val Val Ile Ser Leu Val Arg Ser Asn Ser Gln Asn
        355                 360                 365
Arg Cys Gly Phe Leu Arg Thr Ser Asn Arg Ile Asn Val Leu Leu Ser
    370                 375                 380
Arg Ala Gln His Gly Met Tyr Ile Ile Gly Asn Ser Glu Thr Cys Ala
385                 390                 395                 400
His Val Pro Met Trp Ala Gln Val Ile Asp Ile Leu Arg His Ser Gly
                405                 410                 415
Asn Ile Gly Ser Gln Leu Glu Leu Gln Cys Pro Arg His Pro Asp Thr
            420                 425                 430
Pro Leu Leu Val Ser Thr Pro His Gln Phe Leu Gln Leu Ser Pro Glu
        435                 440                 445
Gly Gly Cys Asn Leu Arg Cys Ile Asn Arg Leu Pro Cys Gly His Ala
    450                 455                 460
```

```
Cys Glu Gln Lys Cys His Ser Glu Leu Leu His Asn Ala Ala Tyr Cys
465                 470                 475                 480
Pro Gln Pro Cys Pro Arg Pro Arg Lys Gly Cys Thr His Pro Cys Val
                485                 490                 495
Lys Arg Cys Gly Asp Pro Cys Pro Val Arg Cys Met Val Asp Val Tyr
            500                 505                 510
Lys Glu Asp Arg Lys Leu Glu Cys Gly His Ser Met Pro Asn Leu Pro
        515                 520                 525
Cys Trp Gln Asp Gln Asp Leu Ser Thr Val Arg Cys Lys Val Ala Val
    530                 535                 540
Thr Lys Thr Val Glu Arg Cys Lys His Glu Ile Ala Val Lys Cys His
545                 550                 555                 560
Gln Asp Val Ser Leu Ala Thr Phe Lys Cys Thr Ala Gln Cys Asn Ala
                565                 570                 575
Leu Leu Ala Cys Gly His Ala Cys Lys Arg Pro Cys His His Cys Val
            580                 585                 590
Gln Leu Leu Asp Arg Glu Glu Val Arg Ile Asp His Gly Arg Cys Gln
        595                 600                 605
Gln Lys Cys Gly Arg Lys His Ser Thr Cys Ala His Phe Cys Ser Ala
    610                 615                 620
Val Cys His Gly Asp Glu Pro Cys Pro Pro Cys Gly Glu Pro Cys Asp
625                 630                 635                 640
Val Gln Cys Gly His Ser Lys Cys Thr Lys Lys Cys Gly Glu Pro Cys
                645                 650                 655
Thr Pro Cys Ala Glu Glu Arg Cys Phe Ser Arg Cys Pro His Ser Ala
            660                 665                 670
Cys Thr Met Pro Cys Ala Ala Pro Cys Asn His Ile Pro Cys Ser Lys
        675                 680                 685
Arg Cys Asp Gln Lys Leu Gln Cys Gly His Gln Cys Pro Ser Leu Cys
    690                 695                 700
Gly Glu Arg Cys Pro Ser Asp Lys Tyr Cys Gln Thr Cys Ala Ser Glu
705                 710                 715                 720
Glu Ile Lys His Gln Val Val Asp Phe Ile Leu Gly Glu Thr Tyr Glu
                725                 730                 735
Asn Ile Asn Leu Asp Glu Asn Pro Cys Ile Phe Pro Arg Cys Gly His
            740                 745                 750
Phe Leu Thr Met Glu Ser Met Asp Gly Gln Met Ala Leu Gln Glu His
        755                 760                 765
Tyr Glu Leu Asp Glu Gln Gly Arg Pro Met Ser Ile Lys Asp Ala Thr
    770                 775                 780
Arg Pro Phe Ser Met Asn Asp Ile Lys Thr Cys Ala Thr Cys Arg Gly
785                 790                 795                 800
Ser Leu Arg Asp Leu Ala Arg Tyr Gly Arg Leu Val Arg Arg Ala Leu
                805                 810                 815
Leu Asp Glu Ser Thr Lys Lys Phe Ile Leu Tyr Leu Asn Arg Glu Tyr
            820                 825                 830
Val Pro Leu Glu Glu Glu Leu Ala Arg Gln Val Lys Val Met Gln Glu
        835                 840                 845
Thr Glu Val Ala Asn Arg Lys Gly Pro Val Trp Pro Asp His Leu Pro
    850                 855                 860
Leu Glu Gly Ser Ile Gln Gln Asn Ile Arg Thr Met Thr Glu Leu Val
865                 870                 875                 880
His His Thr Ser Pro Gly Arg Trp Lys Asp Ile Thr Lys Leu Arg Ser
                885                 890                 895
Lys Val Val Ala Tyr Arg Lys Arg Val Ala Leu Asp Glu Gln Pro Tyr
            900                 905                 910
```

```
Asp Arg Val Arg Ser Met Val Glu Asn Ala Lys Arg Arg Lys Lys Thr
        915                 920                 925
Asp Gly Asp Phe Asp Phe Asp Asp Thr Ile Leu Gln Ser Lys Gly Leu
    930                 935                 940
Leu Leu Ala Ile Ala Leu Asn Leu Arg Leu Asp Ile Ala Leu Leu Thr
945                 950                 955                 960
Asp Phe Leu Ser Val Lys Asp Arg Ala Ser Ser Gln Thr Gly Lys Ile
                965                 970                 975
Thr Val Ser Ile Ser Leu Gln Asp Ala Arg Asp Glu Cys Ala Thr Leu
            980                 985                 990
Ile Ser Leu Ala Gly Ser Ser Gly Arg Ile Arg Gln Gln Ala Glu Gly
        995                 1000                1005
Tyr Thr Phe Leu Ala His Leu His Ala Leu Glu Arg Ser Gln Ala Ser
    1010                1015                1020
Ser Pro Gln Ala Ala Glu Thr Arg Leu Arg Glu Gly Arg Glu Ala Ala
1025                1030                1035                1040
Ala His Ala Arg Ser Leu Cys Val Gln His Pro Thr Pro Thr Arg Gly
                1045                1050                1055
Leu Leu Pro Asp Ile Glu Thr Ile Asp Arg Met Leu Arg Asp Ser Thr
            1060                1065                1070
Phe Tyr Ala Val Val Thr Asn Glu Glu Arg Met Ala Val Met Ala Ala
        1075                1080                1085
Met Ala Arg Glu Phe His Gly Thr Gly His Trp Tyr Tyr Cys Arg Asn
    1090                1095                1100
Gly His Pro Phe Thr Ile Gly Glu Cys Gly Gly Ala Met Glu Gln Thr
1105                1110                1115                1120
Ala Cys Pro Glu Cys Gly Glu Pro Val Gly Gly Arg Ala His Arg Val
                1125                1130                1135
Ala Glu Gly Val Thr Arg Ala Asp Asp Leu Glu Met Ala Phe Gly Arg
            1140                1145                1150
Met His Leu
        1155

<210> 36240
<211> 176
<212> PRT
<213> A.fumigatus

<400> 36240
Phe Val Gly Ile Asn Ala Leu Ile Tyr Tyr Ser Pro Thr Leu Phe Glu
1               5                   10                  15
Thr Met Gly Leu Asp Tyr Asp Met Gln Leu Leu Met Ser Gly Val Leu
            20                  25                  30
Asn Val Thr Gln Leu Val Gly Val Met Thr Ser Val Trp Thr Met Asp
        35                  40                  45
Ser Leu Gly Arg Arg Val Leu Leu Leu Trp Gly Ala Phe Phe Met Thr
    50                  55                  60
Val Ser His Val Ile Ile Ala Val Leu Val Gly Leu Phe Ser Asn Asn
65                  70                  75                  80
Trp Pro Ala His Arg Pro Gln Gly Trp Val Ser Val Ala Phe Leu Leu
                85                  90                  95
Phe Tyr Met Leu Ser Phe Gly Ala Ser Trp Gly Pro Val Pro Trp Ala
            100                 105                 110
Leu Pro Ser Gly Thr Ser Thr Arg Pro Ser Ile Pro Thr Pro Ser Arg
        115                 120                 125
Ser Gln Val Glu Leu Thr Asn Asn Arg Gly Leu Ser Phe Leu Pro Pro
```

```
    130                 135                 140
Arg Gln Gly Cys Arg Pro Leu His Leu Leu Lys Leu Ala Lys Gln Leu
145                 150                 155                 160
Tyr His Arg Lys Leu Pro Ile Ile Cys Thr Ala Ser Leu Thr Asn Ser
                165                 170                 175
```

<210> 36241
<211> 84
<212> PRT
<213> A.fumigatus

<400> 36241

```
Gly Leu Ile Thr Pro Pro Leu Val Glu Asn Thr Gly Tyr Gly Ala Tyr
1               5                   10                  15
Val Phe Phe Ala Val Phe Cys Leu Leu Ala Leu Val Trp Thr Phe Phe
            20                  25                  30
Phe Ile Pro Glu Thr Lys Gly Arg Thr Leu Glu Gln Met Asp His Val
        35                  40                  45
Phe Lys Asp Asn Ser Ser Glu Ala Glu Lys Ala Arg Arg His Ala Ile
    50                  55                  60
Glu Ala Glu Leu Leu Arg Ala Glu Tyr Glu Tyr Gln Asn Ala Tyr Ala
65                  70                  75                  80
Asn Ala Ala Pro
```

<210> 36242
<211> 169
<212> PRT
<213> A.fumigatus

<400> 36242

```
Arg Ala Cys Leu His Arg Arg Val Glu Lys Phe Cys Ile Val Leu Gly
1               5                   10                  15
Ile Val Ile Ala Tyr Trp Ile Thr Tyr Gly Thr Arg Phe Met Ala Gly
            20                  25                  30
Glu Trp Ser Trp Arg Leu Pro Phe Leu Leu Gln Met Ile Pro Gly Phe
        35                  40                  45
Val Leu Ala Gly Gly Val Leu Ala Leu Pro Phe Ser Pro Arg Trp Leu
    50                  55                  60
Ala Ala Lys Gly Arg Asn Glu Glu Ala Leu Gln Ser Leu Ser Lys Leu
65                  70                  75                  80
Arg Arg Leu Pro Pro Ser Asp Lys Arg Ile Arg Gln Glu Tyr Leu Asp
                85                  90                  95
Ile Gln Ala Glu Val Arg Phe His Gln Glu Leu Asn Ala Glu Lys His
            100                 105                 110
Pro Thr Leu Gln Gly Gly Gly Thr Arg Gln Ser Phe Leu Leu Glu Met
        115                 120                 125
Ala Ser Trp Ala Asp Cys Phe Lys Lys Gly Cys Trp Arg Arg Thr His
    130                 135                 140
Val Gly Met Gly Leu Met Phe Leu Gln Gln Val Ser Pro Pro Ala Phe
145                 150                 155                 160
Leu Ala Leu Ser Pro Phe Gly Pro His
                165
```

<210> 36243
<211> 82

<212> PRT
<213> A.fumigatus

<400> 36243
Ala Arg Gly Asp Val Cys Ile Gln Ile Thr Ser Gly Gln Leu Ser Cys
1 5 10 15
Asn Gln Ile Tyr Lys Val Tyr Asn Thr Val Thr Tyr Ser Thr Met His
20 25 30
Gln Thr Lys Lys Ile Ser Ala Lys Leu Val Gln Ile His Glu Leu Ser
35 40 45
Lys Tyr Lys Thr Thr Arg Leu Lys Arg Cys Leu Asp Met Asn Pro Ile
50 55 60
Ser Leu Gly Ser Tyr Ile Phe Gln His Glu Arg Ser Gly Pro Phe Lys
65 70 75 80
Leu Gln

<210> 36244
<211> 137
<212> PRT
<213> A.fumigatus

<400> 36244
Arg His Ser Leu Ala Leu Thr Gln Leu Leu Asp Phe Asn Gly Pro Asp
1 5 10 15
Thr Gln Pro Pro Thr Tyr Ile Leu Asn His Leu Gln Ser Tyr Met Asn
20 25 30
Ile Trp Thr Asp Ile Val Thr Glu Leu Ala Glu Gly Thr Glu Gly Asp
35 40 45
Pro Asn Asp Pro Arg Ser Gly Asp Tyr Leu Ile Tyr Trp Asn Asn Ala
50 55 60
Pro Asn Ala Lys Tyr Asp Gly Pro Glu Pro Pro Glu Asn Glu Arg Arg
65 70 75 80
Arg His Trp Glu Thr Ser Asp Val Ile His Lys Ile Asn Ile Arg Asp
85 90 95
Phe Val Arg Gln His Leu His Ser Leu Ile Val Gly Cys Gly Gly Glu
100 105 110
Gln Arg Phe Gln Glu Glu Trp Leu Leu Asn Val Asp Arg Glu Val Val
115 120 125
Ala Ala Phe Ala Ala Leu Gly Leu Phe
130 135

<210> 36245
<211> 284
<212> PRT
<213> A.fumigatus

<400> 36245
Ser Ile Phe Met Val Val Ser Gly Glu Glu Met Leu Leu Gln Val Ala
1 5 10 15
Cys Glu Ala His Met Ser Pro Glu Thr Ala Pro Gly Ser Gln Asn Gly
20 25 30
Phe Asp Asn Ser Gly Arg Lys Gly Pro Ile Ala Trp Gln Gln Gly Asp
35 40 45
Thr Val Ser Gln Thr Val Asp Ala Phe Arg Ala Leu Ala Glu Arg Tyr
50 55 60

```
Leu Pro Gln Ser Asp Val Val Thr Ala Ile Glu Ala Leu Asn Glu Pro
65                  70                  75                  80
Asn Ile Pro Gly Gly Val Ser Glu Ala Gly Leu Arg Asn Tyr Tyr Asn
                85                  90                  95
Gln Ile Ala Asp Val Val Arg Gln Ile Asp Pro Asp Thr Ser Val Phe
            100                 105                 110
Leu Ser Asp Gly Phe Leu Ser Thr Glu Ser Trp Asn Gly Phe Lys Thr
        115                 120                 125
Gly Glu Asp Val Val Met Asp Thr His His Tyr Glu Met Phe Asp Asn
    130                 135                 140
Tyr Leu Ile Ser Leu Asp Ile Asp Gly His Val Lys Ser Ala Cys Asp
145                 150                 155                 160
Phe Gly Lys Gln Ile Glu Gly Ser Asp Lys Pro Val Val Val Gly Glu
                165                 170                 175
Trp Ser Gly Ala Val Thr Asp Cys Thr Lys His Leu Asn Gly Lys Gly
            180                 185                 190
Val Ser Thr Arg Tyr Gln Gly Glu Tyr Ala Asn Asn Val Lys Tyr Gly
        195                 200                 205
Asp Cys Ala Asn Thr Thr Gln Gly Ser Val Ala Asp Leu Ser Asp Gln
    210                 215                 220
Glu Arg Thr Asp Thr Arg Arg Phe Ile Glu Ala Gln Leu Asp Ala Tyr
225                 230                 235                 240
Glu Gly Lys Asn Gly Trp Leu Phe Trp Thr Trp Lys Thr Glu Gly Ala
                245                 250                 255
Pro Gly Trp Asp Met Gln Asp Leu Leu Ala Asn Gly Val Phe Pro Ser
            260                 265                 270
Pro Leu Thr Asp Arg Gln Phe Pro Asn Gln Cys Ala
        275                 280
```

<210> 36246
<211> 176
<212> PRT
<213> A.fumigatus

<400> 36246

```
Ile Val Ser Phe His Ser Lys Cys Trp Ile Arg Phe Ala Asp Cys Lys
1               5                   10                  15
Ser Arg Arg Val Val Ser Arg Ala Ser Thr Phe Asp Tyr Asn Gly Ile
            20                  25                  30
Val Arg Gly Val Asn Ile Gly Gly Trp Leu Val Leu Glu Pro Trp Ile
        35                  40                  45
Thr Pro Ser Ile Phe Asp Asn Ala Gly Asp Ala Ala Val Asp Glu Trp
    50                  55                  60
Thr Leu Thr Ala Thr Leu Gly Gln Asp Gln Ala Lys Ala Val Leu Ser
65                  70                  75                  80
Gln His Trp Ser Thr Phe Ile Thr Gln Asp Asp Phe Gln Gln Ile Ala
                85                  90                  95
Gln Ala Gly Met Asn His Val Arg Ile Pro Ile Gly Tyr Trp Ala Val
            100                 105                 110
Ser Ser Leu Pro Asp Glu Pro Tyr Val Asp Gly Gln Leu Glu Tyr Leu
        115                 120                 125
Asp Asn Ala Ile Ser Trp Ala Arg Glu Ala Gly Leu Lys Val Val Ile
    130                 135                 140
Asp Leu His Gly Gly Lys Trp Arg Arg Asn Val Val Ala Ser Arg Met
145                 150                 155                 160
Arg Ser Ser Tyr Val Pro Arg Asn Ser Pro Arg Ile Pro Glu Trp Leu
```

165 170 175

<210> 36247
<211> 380
<212> PRT
<213> A.fumigatus

<400> 36247
Gln Val Met Thr Asp Arg Phe Ala Arg Pro Ala Gly Ser Ser Asp Ala
1 5 10 15
Pro Cys Asp Pro Glu Arg Tyr Cys Gly Gly Ser Trp Thr Gly Ile Ile
20 25 30
Asp Lys Leu Asp Tyr Ile Gln Asp Leu Gly Phe Thr Ala Ile Gln Ile
35 40 45
Ser Pro Val Val Glu Asn Ile Pro Asp Asn Thr Lys Tyr Gly Glu Ala
50 55 60
Tyr His Gly Tyr Trp Pro Lys Asn Leu Tyr Ala Leu Asn Glu His Phe
65 70 75 80
Gly Thr Ala Asp Glu Leu Arg Arg Leu Val Ser Glu Val His Arg Arg
85 90 95
Asp Met Tyr Leu Ile Val Asp Val Met Ile Asn Asp Met Ala Gln Ala
100 105 110
Val Asn Gly Ser Met Lys Asp Asp Pro Ser Leu Lys Ile Asp Tyr Ser
115 120 125
Gln Leu Phe Pro Phe Asp Asp Glu Lys Tyr Tyr His Pro Phe Cys Ala
130 135 140
Ile Thr Asp Trp Thr Asp Pro Lys Ile Tyr Lys Asn Cys Trp Phe Ala
145 150 155 160
Val Glu Thr Val Ala Leu Pro Asp Leu Asn Thr Gly Asp Ala Ser Val
165 170 175
Ala Thr Met Ile Gly Asp Trp Ile Lys Gln Phe Val Gly Asn Tyr Ser
180 185 190
Ile Asp Gly Leu Arg Ile Asp Ala Ala Leu His Met Asp Asp Asp Tyr
195 200 205
Val Glu Gly Phe Ser Lys Ala Ala Gly Leu Phe Thr Ile Gly Glu Val
210 215 220
Ser Asn Gly Asp Thr Ser Leu Val Cys Lys Tyr Glu Asn Leu Val Ser
225 230 235 240
Ser Val Leu Asn Tyr Pro Leu Tyr Tyr Ala Leu Ile Gln Ala Phe Thr
245 250 255
Ala Gly Asn Met Leu Gly Leu Ala Glu Ser Ile Arg Ala Val Gln Lys
260 265 270
Asp Cys Lys Asp Phe Thr Leu Leu Glu Thr Phe Val Glu Asn His Asp
275 280 285
Leu Pro Arg Leu Ala Ser Leu Thr Asn Asp Thr Thr Val Gly Leu Asp
290 295 300
Asp Cys Thr Arg His Phe Thr Ser Ala Asp Arg Tyr Glu Leu Val Gly
305 310 315 320
Lys Glu Arg Asp Gly Phe Gln His Thr Leu Arg Trp His Pro Pro Arg
325 330 335
His Val Pro Arg His Asp Pro Gly Gly Pro Gln Ala Ala Leu Ile Asp
340 345 350
Thr Thr Ser Ile Pro Arg Pro Arg Ala Ala His Val Gly Gln Leu Tyr
355 360 365
Ala Phe Gln Pro Arg Arg Pro Leu Asp Asn Glu Leu
370 375 380

<210> 36248
<211> 102
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (54),(89),(91)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36248
Thr Gln Pro Val Tyr Gln Gly Gln Glu Gln His Met Ser Gly Asn Tyr
1 5 10 15
Thr Pro Phe Asn Arg Gly Ala Leu Trp Thr Thr Asn Tyr Asp Thr Thr
20 25 30
Ser Pro Leu Phe Lys Leu Thr Ala Thr Leu Asn Lys Leu His Asn His
35 40 45
Ala Leu Ser Ile Asp Xaa His Tyr Val Thr Asn Pro Ser Ile Glu Leu
50 55 60
His Ser Asp Asn Ser Asn Val Arg His Gln Gly Lys Ala Ala Arg Asp
65 70 75 80
Cys Arg Leu Val Ser Val Leu Pro Xaa Pro Xaa Ala Pro Met Val Gly
85 90 95
Lys Leu Pro Thr Cys Arg
100

<210> 36249
<211> 495
<212> PRT
<213> A.fumigatus

<400> 36249
Glu Tyr Leu Gly Phe Leu Ser Trp Ala Thr Pro Phe Leu Tyr Ser Ile
1 5 10 15
Ser Phe Ser Leu Lys Ser Pro Ser Ala Arg Phe Pro Thr Ser Ser Asn
20 25 30
Asn Asp Met Thr Glu Pro Thr His Ile Ile Asp Thr Glu Gly Glu Val
35 40 45
Ile Ile Phe Leu Lys Cys Pro Glu Ser Pro Phe Ala Pro Trp Asn Asp
50 55 60
Asp Val Ala Glu Pro Glu Pro Leu Lys Ser His Gly Asp Val Gln Lys
65 70 75 80
Arg Asp Asn Gly Asp Asn Ala Thr Gln Glu Gly Phe Asn Lys Lys Val
85 90 95
Thr Lys Lys Arg Leu Lys Lys Lys Asn Lys Arg Gly Asn Pro Met Pro
100 105 110
Leu Gln Ser Glu Met Asp Glu Ser Ala Asp Asn Pro Ala Gly Thr Pro
115 120 125
Glu Pro Ala Asp Thr Ala Met Val Ser Ala Asp Glu Thr Val Asp Asp
130 135 140
Ser Val Thr Glu Ser Ala Asn Gly Pro Thr Thr Glu Pro Leu Glu Glu
145 150 155 160
Gln Leu Gln Glu Ala Gln Pro Asn Ala Ser Leu Asp Gly Pro Arg Glu
165 170 175
Asn Gly Ser Glu Ile Asp Cys Glu Gly Ala Leu Gln Glu Pro Ala Ser

```
            180                 185                 190
Asp Val His Met Arg Gly Asp Cys Phe Arg Ile Gln Val Ser Ala Lys
        195                 200                 205
His Leu Thr Leu Ala Ser Pro Ile Phe Lys Glu Thr Leu Ser Gly Arg
    210                 215                 220
Trp Lys Glu Gly Leu Arg Leu Leu Lys Glu Gly Ser Val Glu Ile Pro
225                 230                 235                 240
Ile Arg Asp Trp Asp Leu Glu Ala Phe Leu Ile Leu Met Asp Ile Phe
                245                 250                 255
His Cys Gln Ala Gln Asn Leu Pro Arg Glu Ile Cys Leu Glu Leu Leu
            260                 265                 270
Ala Lys Ile Ala Val Leu Ala Asp Cys Tyr Gln Cys Gln Pro Leu Val
        275                 280                 285
Arg Phe Phe Ala Glu Ile Trp Ile Gly Gln Leu Arg Arg Lys Ile Phe
    290                 295                 300
Pro Thr Ile Tyr Ser Arg Asp Ser Met Leu Trp Val Trp Val Ser Trp
305                 310                 315                 320
Asn Phe Arg Gln Leu Phe Glu Phe Glu Lys Ser Thr Ser Ile Ala Ile
                325                 330                 335
Ser Gln Ser Asn Gly Leu Ile Thr Ser Leu Asp Leu Pro Ile Pro Ala
            340                 345                 350
Lys Val Ile Ser Lys Cys Gln Ala Leu Tyr Pro Arg Glu Pro Ile Ile
        355                 360                 365
Thr Ala Pro Val Gly Glu Met Asn Arg Arg Arg Asn Asp Ala Ile Ser
    370                 375                 380
Ala Val Leu Ser Ser Leu Ala Glu Leu Arg Asp Ala Phe Leu Asp Gly
385                 390                 395                 400
Ser Arg Gly Cys Cys Phe Glu Cys Ser Ser Ile Met Leu Gly Ala Leu
                405                 410                 415
Thr Lys His Met His Ser Ser Gly Leu Leu Ser Pro Glu Pro Ala Ala
            420                 425                 430
Pro Phe Pro Gly Leu Ser Tyr Cys Gln Leu Val Glu Thr Val Arg Gly
        435                 440                 445
Phe Arg Ser Pro Gln Trp His Ser Asp Ser Gly Tyr Ser Arg Tyr Ser
    450                 455                 460
Trp His Thr Cys Gly Glu Ala Ser Phe Ser Ser Leu Ile Thr Val Pro
465                 470                 475                 480
Glu Thr Tyr Val Lys Gly Leu Ser Leu Ile Ala Phe Ser Phe Pro
                485                 490                 495
```

<210> 36250
<211> 76
<212> PRT
<213> A.fumigatus

<400> 36250

```
Gly Arg Arg Ala Gly Ser Ser Ser Asp Gly Asp Asp Glu Glu Gly Ala
1               5                   10                  15
Gly Cys Gly Ala Ser Leu His Ser Asp His His Ala Asn Leu Ala Phe
            20                  25                  30
Thr Trp Lys Glu Gln Gly Arg Ile Ala Glu Ala Leu Ala Leu Met Asn
        35                  40                  45
Asp Cys Val Gln Leu Gln Ser Lys Ile Leu Gly Val Asp His Pro Asp
    50                  55                  60
Thr Leu Ile Leu Cys Tyr Ile Asp Arg Leu Ala Asp
65                  70                  75
```

<210> 36251
<211> 151
<212> PRT
<213> A.fumigatus

<400> 36251
Met Arg Asn Phe Pro Gln Glu Ser Met Arg Ile Gly Cys Ser Val Lys
1 5 10 15
Tyr Phe Ser Arg Met Gln Thr Ser Ala Ala Ser Gln Arg Pro His Glu
20 25 30
Arg Asp Ser Leu Leu Glu Trp Ala Ala Val Cys Lys Ala Ala Trp Tyr
35 40 45
Asp Met Gln Lys Gly Asn Gly Ala Glu Gly Glu Arg Leu Ser Val Lys
50 55 60
Ala Met Glu Ala Leu Thr Lys His Leu Gly Pro Glu His Glu Asp Thr
65 70 75 80
Leu Glu Ser Gly His Met Val Gly Leu Ile Tyr Thr Leu Glu Asp Arg
85 90 95
Arg Lys Glu Ala Glu Glu Leu Gln Met Gln Val Met Lys Met Arg Lys
100 105 110
Lys Leu Leu Cys Val Glu His Pro Asp Thr Leu Val Ser Met Gly Asn
115 120 125
Leu Ala Trp Thr Tyr Arg Asn Gln Gly Ile Lys Gly Asp Gly Met Arg
130 135 140
Gln Lys Ser Trp Glu Phe Lys
145 150

<210> 36252
<211> 554
<212> PRT
<213> A.fumigatus

<400> 36252
Trp Pro Gly Asp Ile Gly Ser Gln Glu Gly Ser Ser Asp Asp Glu Met
1 5 10 15
Glu Asp Ala Leu Arg Asp Ala Asp Glu Ala Gly Asn Asp Asn Asp Ala
20 25 30
Asp Gly Asp Ala Glu Ala Asp Gln Asp Ala Glu Ser Pro Ser Asn Thr
35 40 45
Ser His Ala Ser Glu Gly Pro Gly Ile Ala Ser Gln Ala Asn Pro Asp
50 55 60
Met Pro Val Thr Ser Pro Asp Ser Thr Asn Ile Ile Ser Asp Leu Thr
65 70 75 80
Ser Val Phe His Pro Pro Val Arg Pro Glu Cys Leu Thr Ala Ser Thr
85 90 95
Tyr Asp Ile Val Pro Thr Thr Ala Ala Pro His Ser Thr Ser Ile Asn
100 105 110
Ala Val Thr Ala Thr Ala Asp Met Arg Trp Val Phe Ser Gly Gly Ser
115 120 125
Asp Gly Tyr Val Arg Lys Phe Asn Trp Val Asp Ser Ile Asn Ser Lys
130 135 140
Leu Met Leu Thr Val Ala Gln Arg His Pro Phe Val Asp Ser Val Met
145 150 155 160
Lys Ala Gly Val Leu Met Thr Tyr Trp Glu Cys Met Asp Gly Asn Ala
165 170 175

```
Val Ser Pro Val Tyr Ser Leu Ala Ser His Ser Glu Gly Leu Trp Leu
            180                 185                 190
Leu Ser Gly Leu Glu Ser Gly Ser Ile Arg Leu Gln Ser Val Arg His
        195                 200                 205
Asp Glu Gly Lys Glu Ile Ala Leu Leu Gln Gln His Thr Ser Ala Val
    210                 215                 220
Ser Val Leu Gln Leu Thr Pro Asp Glu Lys Ser Leu Leu Ser Gly Ser
225                 230                 235                 240
Trp Asp Lys Arg Val Phe Asp Trp Asp Leu Asn Thr Gly Gln Thr Arg
                245                 250                 255
Arg Val Phe Gly Ala Ser Ala Gly Gln Ile Ala Ala Ile Glu Ile Arg
            260                 265                 270
Pro Glu Ser Thr Ile Pro Val Pro Thr Asp Thr Leu Glu Leu Pro Gln
        275                 280                 285
Thr Asn Gly Thr Tyr Ser Ser Asn Tyr His Ala Ser Gly Thr Asp Ser
    290                 295                 300
Phe Asn Phe Met Asp Thr Ser Asn Asp Leu Gly Glu Gly Gly Ala Ala
305                 310                 315                 320
Ala Asn Leu Gln Ala Gly Ser Pro Ala Asp Ser Leu Phe Gly Ala Ala
                325                 330                 335
Asp Ser Leu Phe Gly Asp Ala Asp Gly Gly Gly Gly Glu Gly Gly Gly
            340                 345                 350
Ala Ser Gly Asn Ala Phe Gly Ile Asp Glu Asp Asp Glu Phe Gly Lys
        355                 360                 365
Ala Leu Ala Asn Gly Ile Leu Pro Asp Ala Asp Ala Asp Ala Asp Ala
    370                 375                 380
Pro Gly Glu Pro Asp Val Met Asp Gln Gln Asn Gly Thr Thr Glu Gly
385                 390                 395                 400
Asn Ala Ser Ala Asp Ala Thr Met Thr Asn Pro Lys Ser Glu Ser Leu
                405                 410                 415
Asp Thr Ser Ile Asn Ala Pro Ser Gln Pro Val Thr Asn Gly Leu Pro
            420                 425                 430
His Ala Glu Glu Leu Lys Pro Pro Ser Gln Ala Gln Glu Ser Ala Ala
        435                 440                 445
Ser Thr Gln Gln Glu Ser Ser Val Val Thr Asp His Thr Phe Leu Ala
    450                 455                 460
Ala Ser Ile Asp Gly Thr Ile Arg Val Trp Asp Arg Arg Gln Ala Asp
465                 470                 475                 480
Pro Ile Ala Arg Ile Thr Pro Tyr Asn Ser Pro Pro Trp Cys Met Asn
                485                 490                 495
Ala Cys Trp Ser Pro Asp Gly Asn Tyr Ile Tyr Ala Gly Arg Arg Asn
            500                 505                 510
Gly Thr Val Glu Glu Phe Ser Leu His Lys Gly Leu Arg Glu Pro Glu
        515                 520                 525
Arg Thr Phe Lys Phe Pro Gln Gly Ser Gly Pro Val Thr Ala Leu Lys
    530                 535                 540
Ala Met Pro Asn Gly Arg His Ile Val Trp
545                 550
```

<210> 36253
<211> 81
<212> PRT
<213> A.fumigatus

<400> 36253
His Leu Leu Thr Ile Cys Ser Ser Ala Ser His Asp Ile Leu Arg Leu

```
1               5                   10                  15
Tyr Asp Leu Lys His Glu Gln Val Ser Arg His Ser Thr Val Pro Phe
            20                  25                  30
Leu Ile Ile Pro Gly His Arg Thr Gly Thr Ile Ser Gln Leu Tyr Ile
        35                  40                  45
Asp Gln Ala Cys Arg Phe Met Ile Ser Thr Ser Gly Asn Arg Gly Trp
    50                  55                  60
Glu Gly Asn Thr Thr Glu Val Leu Leu Gly Tyr Glu Ile Asn Val Pro
65                  70                  75                  80
Arg
```

<210> 36254
<211> 273
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (262)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36254

```
Lys Val Phe Asp Leu Lys Pro Pro Asn Leu Leu Ile Ala Asp Leu Arg
1               5                   10                  15
His Val Ala Ser Pro Ala Ser Pro Leu Thr Phe Gly Leu Val Val Gly
            20                  25                  30
Ala Thr Ile Asp Lys Ser Pro Ser Trp His Ser Leu Arg Ala Thr Pro
        35                  40                  45
Cys Gln Pro Gln Leu Val Phe Leu Leu Phe Ile Lys Leu Pro Ser Phe
    50                  55                  60
Ser Ser Trp Ala Thr Leu Lys Ser Ile Phe Arg Phe Phe Ser Thr Ser
65                  70                  75                  80
Arg Pro Leu Val Leu Met Arg Val Pro Phe Trp Asp Asn Arg Gly Tyr
                85                  90                  95
Ser Gly Pro Leu Val Arg Gly Val Asn Pro Ala Thr Leu Phe Glu Lys
            100                 105                 110
Ala Val Arg Asp Arg Ile Thr Asp Ser Tyr Tyr Trp Lys Glu Gln Cys
        115                 120                 125
Phe Gly Leu Asn Ala Ala Thr Leu Cys Asp Arg Ala Val Glu Leu Thr
    130                 135                 140
Ser Ile Gly Gly Thr Tyr Gly Val Ala Glu Glu Pro Thr Pro Phe Leu
145                 150                 155                 160
Cys Leu Ala Phe Lys Leu Leu Gln Leu Asn Pro Glu Arg Glu Ile Ile
                165                 170                 175
Leu Glu Tyr Leu Asn Tyr Thr Asp Pro Gly Ser Asp Gly Glu Thr Glu
            180                 185                 190
Ala Thr Ala Glu Gly Gln Ala Arg Asn Gly Val Leu Gly Gln Arg Gly
        195                 200                 205
Asp Cys Lys Tyr Leu Arg Ala Leu Ala Ala Phe Tyr Val Arg Leu Thr
    210                 215                 220
Phe Asp Pro Val Asp Val Tyr Lys Thr Leu Glu Pro Leu Leu Leu Asp
225                 230                 235                 240
Tyr Arg Lys Leu Lys Arg Arg Val Arg Ala Thr Phe Val Leu Thr Tyr
                245                 250                 255
Met Asp Pro Phe Val Xaa Leu Ser Gln Arg Arg Arg Ile Arg Ala Ile
```

260 265 270
Cys

<210> 36255
<211> 385
<212> PRT
<213> A.fumigatus

<400> 36255
Ser Cys Val Ala Lys Ile His Val Pro Leu Ser Phe Val His Leu Arg
1 5 10 15
Asn Ile Lys Pro His Tyr His Ala His Phe Lys Leu His Thr Ile Met
20 25 30
Val Leu Leu Thr Ser Ser Thr Val Ser Val Ile Leu Ser Thr Gly Val
35 40 45
Val Cys Leu Phe Thr Leu Leu Leu Phe Leu Ser Gly Tyr Val Leu Gln
50 55 60
Gln Gln Ser Val Arg Ser Ile Gln Ser Ala Leu Arg Pro Pro Gly Val
65 70 75 80
Pro Asp Pro Val Thr Gly His Gly Ser Ala Gly Ser Ser Phe Gln Lys
85 90 95
Arg Glu Gln Ser Thr Leu Ser Asn Leu Ile Pro Glu Glu Gln Gln Lys
100 105 110
His Val Ala His His Ala Gln Pro Gly Ala Gly Gly Asn Tyr Ala Tyr
115 120 125
Leu Gln Leu Leu Ser Ser Pro Asn Pro Ser Asp Ile Cys Ser Ala Ile
130 135 140
Leu Phe Phe Lys Gln Leu Ala Thr Lys Gly Thr Ala Ile Asn Asp Arg
145 150 155 160
Leu Phe Met Tyr Pro Arg Asp Trp Asp Leu Leu Ser Ser Asp Lys Val
165 170 175
Ser Asp Ser Val Arg Thr Ala Leu Ser Leu Leu Arg Ala Ala Ser Ile
180 185 190
Lys Tyr Asn Val Trp Leu Leu Pro Ile Asp Met Thr Ala Val Thr Ser
195 200 205
Ala Gly Tyr Glu Pro Thr Asp Thr Lys Leu Leu Arg Leu Gly Gln Ile
210 215 220
Gln Phe Met Gln Tyr Asp Ser Val Leu Tyr Val Arg Thr Pro Gly Leu
225 230 235 240
Leu Leu Asp Thr Gly Lys Leu Asp Glu Met Leu Leu Ser Arg Pro Leu
245 250 255
Pro Leu Lys Tyr Asp Lys Asp Arg Pro Glu Ser Phe Asn Asn Glu Ala
260 265 270
Trp Ile Pro Met Pro Leu Arg Ala Asp Arg Asp Ala Asn Leu Pro Pro
275 280 285
Val Tyr Leu Ile Thr Val Asn Asn Val Lys Asn Gly Gln Ile Glu Ala
290 295 300
Arg Gly His Ile Pro Asn Val Ala Leu Pro Gly Phe Gly Gly Leu Leu
305 310 315 320
Thr Ser Pro Arg Gly Val His Thr Leu Glu Asn Lys Gly Asn Asp Pro
325 330 335
Ala Asp Glu Pro Gly Tyr Val Phe Phe Glu Gln Asp Gly Glu Gly His
340 345 350
Val Gln Trp Ala Gln Asn Pro Leu Phe Gly Ala Trp Arg Ala Gln Gln
355 360 365

```
His Glu Val Cys Glu Gly Val Asp Phe Asp Glu Val Ala Tyr Asp His
    370                 375                 380
Asp
385
```

<210> 36256
<211> 244
<212> PRT
<213> A.fumigatus

<400> 36256

```
Val Val Ser Pro Phe Gln Ala Ile Leu Asp Tyr Glu Ile Ala Asn Asn
1               5                  10                  15
Ile Pro Lys Gly Trp Val Asn Phe Ser Ile Ser Arg Thr Ser Pro Asn
            20                  25                  30
Gly Ser Trp His Arg Leu Glu Arg Gly Glu Ile Lys Leu Asp Ala Asp
        35                  40                  45
Phe Phe Lys Ala Phe Asn Arg Asp Leu Arg Asn Pro Tyr Leu Trp Lys
    50                  55                  60
Lys Phe His Glu Arg Leu Gln Lys Lys Gln Thr Thr Gly Val Pro Ile
65                  70                  75                  80
Ser Ala Pro Pro Leu Pro Glu Ile Asp Ala Glu Trp Leu Phe Trp Glu
                85                  90                  95
Met Met Arg Val Ser Arg Thr Pro Asp Pro Tyr Met Tyr Pro Ala Leu
            100                 105                 110
Gln Lys Leu Lys Ala Ser Gly Gln Phe Ile Ile Gly Ala Leu Ser Asn
        115                 120                 125
Thr Val Ile Phe Pro Asp Gly His Pro Tyr Asn Ser Asp Ser Asn Gly
    130                 135                 140
Val Lys Ser Gln Phe Asp Phe Phe Ile Ser Ser Ala His Thr Gly Leu
145                 150                 155                 160
Arg Lys Pro Asp Pro Lys Ile Tyr Ala Ala Ala Leu Arg Glu Met Asp
                165                 170                 175
Thr Leu Ala Lys Lys Arg Gly Leu Gln Gly Val Glu Pro Ser Asp Val
            180                 185                 190
Val Phe Leu Asp Asp Ile Gly Glu Asn Leu Lys Ala Ala Lys Asn Ala
        195                 200                 205
Gly Leu Arg Thr Ile Lys Val Asn Leu Gly Arg Thr Gln Asp Ala Ile
    210                 215                 220
Arg Glu Leu Glu Lys Ile Thr Gly Leu Gln Leu Leu Asp Thr Gly Asp
225                 230                 235                 240
Lys Ala Lys Leu
```

<210> 36257
<211> 74
<212> PRT
<213> A.fumigatus

<400> 36257

```
Tyr Phe Ser Asn Val Leu Pro Thr Leu Arg Ser Val Val Tyr Thr Gly
1               5                  10                  15
Tyr Phe Val Val Val Val Pro Pro Leu Val Ala Asn Leu Asn Leu Arg
            20                  25                  30
Trp Asp Ala Ala Thr Leu Ser Glu Thr Ile His Lys Val Ser Pro Gln
        35                  40                  45
```

```
Asn Phe Gln Pro Leu Gln Ser Ser Ser Ala Ala Asn Val Asp Asn Ser
    50                  55                  60
Val Phe Asn Leu Arg Gln Gln Ser Arg Trp
65                  70
```

<210> 36258
<211> 301
<212> PRT
<213> A.fumigatus

<400> 36258

```
Asn His His Leu Cys Val Arg Arg Thr Asn Asn Leu Tyr His Ser Arg
1               5                   10                  15
Tyr Gln Thr Lys Tyr Arg Arg Arg Arg Glu Gly Lys Thr Asp Tyr Tyr
            20                  25                  30
Ala Arg Lys Arg Leu Ile Thr Gln Ala Lys Asn Lys Tyr Asn Ala Pro
        35                  40                  45
Lys Tyr Arg Leu Val Val Arg Phe Thr Asn Arg Asp Ile Ile Thr Gln
    50                  55                  60
Ile Val Tyr Ser Glu Ile Thr Gly Asp Lys Val Phe Ala Ser Ala Tyr
65                  70                  75                  80
Ser His Glu Leu Lys Arg Tyr Gly Ile Thr Gln Gly Leu Thr Asn Trp
                85                  90                  95
Ala Ala Ala Tyr Ala Thr Gly Leu Leu Leu Ala Arg Arg Thr Leu Lys
            100                 105                 110
Lys Leu Gly Leu Asp Glu Gln Phe Thr Gly Val Glu Glu Pro Asp Gly
        115                 120                 125
Glu Tyr Lys Leu Thr Glu Ala Val Glu Thr Asp Asp Gly Thr Arg Arg
    130                 135                 140
Pro Phe Lys Ala Phe Leu Asp Val Gly Leu Val Arg Thr Ser Thr Gly
145                 150                 155                 160
Ala Arg Val Phe Gly Ala Met Lys Gly Ala Ser Asp Gly Gly Ile Phe
                165                 170                 175
Ile Pro His Ser Glu Asn Arg Phe Pro Gly Tyr Asp Ile Glu Ser Glu
            180                 185                 190
Glu Leu Asp Ala Glu Thr Leu Arg Asn Tyr Ile Phe Gly Gly His Val
        195                 200                 205
Ser Glu Tyr Met Glu Thr Leu Ala Asp Asp Asp Glu Glu Arg Tyr Arg
    210                 215                 220
Ser Gln Phe Ala Lys Tyr Ile Glu Asn Glu Ile Asp Ala Gly Asp Leu
225                 230                 235                 240
Glu Glu Ile Tyr Ala Glu Ala His Lys Ala Ile Arg Glu Asp Pro Phe
                245                 250                 255
Lys Lys Asp Glu Asp Glu Lys Pro Lys Lys Ser Lys Glu Glu Trp Lys
            260                 265                 270
Ala Glu Ser Lys Lys Tyr Lys Lys Ala Lys Leu Ser Arg Glu Glu Lys
        275                 280                 285
Lys Ala Arg Val Glu Gln Lys Ile Arg Glu Leu Ala Ala
    290                 295                 300
```

<210> 36259
<211> 139
<212> PRT
<213> A.fumigatus

<400> 36259

```
Arg Val Leu Pro Thr Val Val Ser Ser Ser Pro Thr Pro Arg Thr Ala
1               5                  10                  15
Ser Pro Val Thr Thr Ser Ser Leu Arg Ser Ser Thr Leu Arg Pro Ser
            20                  25                  30
Ala Thr Thr Ser Ser Val Ala Thr Ser Leu Ser Thr Trp Arg Pro Ser
        35                  40                  45
Pro Thr Thr Met Arg Ser Ala Thr Ala Ala Ser Ser Pro Asn Thr Ser
    50                  55                  60
Arg Thr Arg Ser Met Pro Val Thr Ser Arg Arg Phe Met Leu Arg Leu
65                  70                  75                  80
Thr Arg Pro Ser Val Arg Thr Pro Ser Arg Arg Thr Arg Thr Arg Ser
                85                  90                  95
Pro Arg Ser Pro Arg Arg Ser Gly Arg Pro Arg Ala Arg Ser Thr Arg
            100                 105                 110
Arg Pro Ser Cys Leu Ala Arg Arg Arg Arg Leu Ala Leu Ser Arg Arg
        115                 120                 125
Ser Val Ser Leu Leu Leu Lys Cys Val Ser Val
    130                 135
```

<210> 36260
<211> 561
<212> PRT
<213> A.fumigatus

<400> 36260

```
Thr Ser Trp Ala Lys Val Val Tyr Arg Phe Leu Met Lys Ile Gly Thr
1               5                  10                  15
Pro Ser Val Gly Gln Ile Arg Glu Lys Met Pro Gln Phe Ser His Thr
            20                  25                  30
Lys Arg Ala Ile Asn Val Ser Ala Gln Asp Val His Ala Arg Ala Val
        35                  40                  45
Ala Trp Tyr Asn Leu Gly Trp Ala Glu Tyr Arg Ala Gln Arg Cys Val
    50                  55                  60
Gln Val His Ser Gly Thr Lys Gly Lys Lys Pro Ala Arg Arg Phe Leu
65                  70                  75                  80
Lys Thr Ala Met Arg Cys Phe Lys Arg Ala Ile Glu Leu Glu Ala Gly
                85                  90                  95
Asn Ser Glu Phe Trp Asn Ala Leu Gly Val Ala Thr Thr Ser Met Ser
            100                 105                 110
Pro Lys Val Ala Gln His Ala Phe Val Arg Ser Leu His Leu Asn Glu
        115                 120                 125
Arg Ser Ala Gln Val Trp Thr Asn Leu Gly Thr Leu Tyr Leu Ile His
    130                 135                 140
Asn Asp Ile Gln Leu Ala Asn Glu Ala Phe Thr Arg Ala Gln Ser Thr
145                 150                 155                 160
Asp Pro Asp Tyr Ser Leu Ala Trp Val Gly Gln Gly Phe Leu Ala Leu
                165                 170                 175
Leu Phe Gly Asp Pro Leu Glu Ala Arg Gly Leu Phe Glu His Ala Phe
            180                 185                 190
Asp Ile Ser Asn Ser Ser Ser Thr Leu Pro Arg Arg Gln Tyr Thr Leu
        195                 200                 205
Thr Leu Phe Asp Arg Leu Leu Ser Asp Ser Ser Ala Ser Asn Glu Ile
    210                 215                 220
Ser Gln Leu Ile Gln Pro Leu Phe Ala Leu Leu Gln Leu Ser Ser Gln
225                 230                 235                 240
Asp Pro Ser Asn Leu Gln Phe Met His Leu Thr Ala Leu Met Ala Glu
```

```
                245                 250                 255
Arg Ile Gly Glu Leu Ser Asp Ala Glu Thr Ser Leu His Val Val Cys
            260                 265                 270
Ser Gly Val Glu Ala Glu Tyr Glu Val Ser Glu Ser Ser Ser Ser Leu
        275                 280                 285
Ser Arg Tyr Ala Gln Ser Asn Ala Asp Met Ala Arg Val Leu Leu Ala
    290                 295                 300
Arg Gln Glu Phe Glu Gln Ala Val Glu Lys Ala Glu Val Ala Leu Thr
305                 310                 315                 320
Leu Ser Gly Glu Glu Asp Ala Glu Lys Phe Asp Pro Glu Ala Asn Arg
                325                 330                 335
Lys Leu Arg Leu Ser Ala His Leu Thr Ala Gly Leu Ala His Tyr Tyr
            340                 345                 350
Leu Lys Ser Met Asp Asn Ala Ile Asp Met Phe Arg Asp Ala Leu Gln
        355                 360                 365
Glu Ala Asp Asn Ala Pro Glu Val Val Cys Leu Leu Ala Gln Val Leu
    370                 375                 380
Trp Ala Lys Gly Gly Asp Glu Glu Arg Thr Val Ala Arg Gln Gln Leu
385                 390                 395                 400
Phe Asp Cys Val Glu Glu His Pro Asp His Val Gly Ala Val Ser Leu
                405                 410                 415
Leu Gly Ala Ile Ala Leu Leu Asp Asp Asp Lys Asp Val Ile Glu Ala
            420                 425                 430
Val Ala Ser Asp Leu Gln Asn Met Ile Met Arg Asp Asp Ile Asp Ile
        435                 440                 445
His Asp Arg Thr Arg Leu Thr Lys Leu Leu Thr Ala Ile Ser Thr Leu
    450                 455                 460
Gly Leu Thr Glu Asp Ser Gln Ile Pro Glu Asp Val Arg Arg Leu Gly
465                 470                 475                 480
Glu Ala Thr Ala Ala Val Met Arg Ser Pro Gly Gln Pro Gln Gly Trp
                485                 490                 495
Gln Glu Leu Ala Ala Ala Ser Gln Asp Leu Tyr Pro Ala Glu Met Ala
            500                 505                 510
Val Asp Arg Ala Leu Arg Ser Val Pro Pro Arg Ser Asn Leu Asp Ala
        515                 520                 525
Val Asp Leu Cys Glu Ala Tyr Ala Gln Thr Gly Lys Ala Gly Asp Ala
    530                 535                 540
Ile Lys Ala Ile Met Val Ala Pro Trp Lys Gln Met Trp Met Gly Arg
545                 550                 555                 560
Ala
```

<210> 36261
<211> 320
<212> PRT
<213> A.fumigatus

<400> 36261

```
Leu His Leu Leu Ser Phe Thr Phe Leu Pro Pro Thr Val Ile Ser Phe
1               5                   10                  15
Gln Lys Ser Leu Trp Cys Leu Ser Leu Ala Thr Arg Lys Phe Cys Thr
            20                  25                  30
Ala Phe Ile Met Ser Thr Leu Ser Ser Pro Arg Pro Ser Ile Ala Ser
        35                  40                  45
Ser Arg Ala His Ser Pro Thr Pro Ala Ser Ser Arg Arg Pro Ser Leu
    50                  55                  60
```

```
Asp Thr Leu Asn Ser Asn Val Gly Gly Gly Leu Ser Ala Ser Ser Thr
65                  70                  75                  80
Pro Ser Thr Val Arg Ala Val Ser Pro Ser Leu His Pro Arg Arg Asn
                85                  90                  95
Arg Ala Ala Leu Arg Asp Tyr Tyr Asn Leu Arg Pro Ser Ala Ala Asp
            100                 105                 110
Pro Leu Gly Asn Gly Ser Asn Phe Arg Ser Arg Ser Ile Pro Arg His
        115                 120                 125
Thr Asp Ala Gly Asp Met Ser Ser Pro Ser Ser Val Val Ala Thr Gly
    130                 135                 140
Thr Glu Leu Asp Ser Pro Asp Phe Asp Pro Gln Arg Tyr Val Asn His
145                 150                 155                 160
Leu Leu Ala Thr Ser Ser Leu Ala Thr Val Leu Lys Ala Glu Asn Thr
                165                 170                 175
Leu Val Gly Asp Ile Lys Thr Leu Asp Ser Glu Arg Lys Ala Leu Val
            180                 185                 190
Tyr Asp Asn Tyr Ser Lys Leu Ile Arg Ala Val Glu Thr Ile Gly Lys
        195                 200                 205
Met Arg Arg Ser Met Asp Glu Arg Gly Ala Pro Leu Thr Met Thr Lys
    210                 215                 220
Thr Leu Gly Pro Ala Ile Ala Phe Val Ala Glu Thr Ala Thr Gly Leu
225                 230                 235                 240
Ile Gln Glu Gly Glu Glu Gln Gln Arg Arg Met Arg Glu Ala Lys Ala
                245                 250                 255
Thr Asp Gly Thr Asp Arg Arg Lys Ala Glu Lys Glu Thr Val Lys Trp
            260                 265                 270
Val Leu Gly Ala Pro Ser Arg Leu Glu Lys Leu Leu Ser Glu Gly Lys
        275                 280                 285
Asp Asp Glu Ala Thr Asn Asp Trp Glu Glu Ile Arg Asn Met Leu Asp
    290                 295                 300
Lys Trp Gln Gly Val Lys Gly Val Ala Lys Val Arg Gln Ala Cys Glu
305                 310                 315                 320
```

<210> 36262
<211> 74
<212> PRT
<213> A.fumigatus

<400> 36262

```
Cys Asn Arg Ala Leu Ile Asn Ile Lys Leu Ser Thr Glu Gln Glu Ala
1               5                   10                  15
Ala Leu Ile Lys Tyr Ile Asn Ile Leu Ile Lys Leu Asp Ile Pro Leu
            20                  25                  30
Trp Leu Lys Ala Ile Ser Asn Ile Val Asn Leu Ile Leu Phe Tyr Arg
        35                  40                  45
Tyr Thr Asn Leu Ile Thr Pro Pro Pro Leu Ile Ser Met His Trp Ile
    50                  55                  60
Lys Tyr Phe Leu Lys His Tyr Pro Glu Tyr
65                  70
```

<210> 36263
<211> 314
<212> PRT
<213> A.fumigatus

<400> 36263

```
Phe Ser Gly His Leu Gly Trp Cys Gly Ser Leu Ala Val Glu Pro Asn
1               5                  10                  15
Asn Glu Trp Phe Ala Ser Gly Ala Gly Asp Arg Thr Ile Lys Ile Trp
            20                  25                  30
Asn Leu Ala Thr Gly Ala Leu Arg Leu Thr Leu Thr Gly His Ile Ser
        35                  40                  45
Thr Val Arg Gly Leu Ala Val Ser Arg Arg His Pro Tyr Leu Phe Ser
    50                  55                  60
Cys Gly Glu Asp Lys Met Val Lys Cys Trp Asp Leu Glu Thr Asn Lys
65                  70                  75                  80
Val Ile Arg His Tyr His Gly His Leu Ser Gly Val Tyr Thr Leu Ala
                85                  90                  95
Leu His Pro Arg Leu Asp Leu Leu Val Thr Gly Gly Arg Asp Gly Val
            100                 105                 110
Ala Arg Val Trp Asp Met Arg Thr Arg Ser Asn Ile His Val Leu Ser
        115                 120                 125
Gly His Lys Gly Thr Val Ala Asp Leu Lys Cys Gln Glu Ala Asp Pro
    130                 135                 140
Gln Ile Ile Thr Gly Ser Leu Asp Ala Thr Val Arg Leu Trp Asp Leu
145                 150                 155                 160
Ala Ala Gly Lys Thr Met Gly Val Leu Thr His His Lys Lys Gly Val
                165                 170                 175
Arg Asn Leu Ala Ile His Pro Arg Glu Phe Thr Phe Ala Ser Ala Ser
            180                 185                 190
Thr Gly Ser Ile Lys Gln Trp Lys Cys Pro Glu Gly Asp Phe Met Gln
        195                 200                 205
Asn Phe Glu Gly His Asn Ala Val Ile Asn Ser Leu Ala Val Asn Glu
    210                 215                 220
Asp Asn Val Leu Phe Ser Gly Gly Asp Asn Gly Ser Met Cys Phe Trp
225                 230                 235                 240
Asp Trp Lys Thr Gly Tyr Lys Phe Gln Ser Ile Asp Thr Met Ala Gln
                245                 250                 255
Pro Gly Ser Leu Asp Ala Glu Ala Gly Ile Met Ser Ala Thr Phe Asp
            260                 265                 270
Arg Thr Gly Leu Arg Leu Ile Thr Gly Glu Ala Asp Lys Thr Ile Lys
        275                 280                 285
Val Trp Lys Pro Asp Asp Glu Ala Thr Pro Glu Ser His Pro Val Thr
    290                 295                 300
Trp Ala Pro Thr Leu Gly Arg Gln Arg Tyr
305                 310
```

<210> 36264
<211> 528
<212> PRT
<213> A.fumigatus

<400> 36264

```
Pro Pro Met Leu Leu Pro Asn Arg Asp Val Arg Lys Leu Leu Leu Arg
1               5                  10                  15
Arg Arg Thr Arg Gly Met Asp Ser Cys Leu Asn Leu Trp Gly Lys Val
            20                  25                  30
Asp Lys Leu Leu Asn Arg Ile Val Val Lys Lys Pro Leu Glu Phe Thr
        35                  40                  45
Pro Leu Gly Thr Arg Val Leu Pro Pro Ser His Phe Asp Ser Pro Tyr
    50                  55                  60
Arg Gln Ala Arg Thr Leu Leu His Val Ser Thr Val Pro Thr Ser Leu
```

```
65                  70                  75                  80
Pro Cys Arg Lys Thr Glu Phe Asp Thr Val Tyr Asn His Leu Ser Ala
                85                  90                  95
Ala Ile Met Glu Gly Asn Gly Thr Cys Ile Tyr Ile Ser Gly Thr Pro
            100                 105                 110
Gly Thr Gly Lys Thr Ala Thr Val Arg Glu Val Val Ala Gln Leu Asn
        115                 120                 125
Ala Ala Val Leu Ala Glu Glu Leu Asp Asp Phe Ile Phe Val Glu Ile
    130                 135                 140
Asn Gly Met Lys Val Thr Glu Pro His Gln Ser Tyr Ser Leu Leu Trp
145                 150                 155                 160
Glu Ala Leu Lys Gly Asp Arg Val Ser Pro Ser His Ala Leu Asp Leu
                165                 170                 175
Leu Glu Arg Asp Phe Ser His Pro Ser Pro Arg Arg Val Ser Cys Val
            180                 185                 190
Val Leu Met Asp Glu Leu Asp Gln Leu Val Thr Lys Asn Gln Ser Val
        195                 200                 205
Met Tyr Asn Phe Phe Asn Trp Pro Ala Leu Arg His Ser Arg Leu Ile
    210                 215                 220
Val Leu Ala Val Ala Asn Thr Met Asp Leu Pro Glu Arg Thr Leu Ser
225                 230                 235                 240
Asn Lys Ile Ser Ser Arg Leu Gly Leu Thr Arg Ile Thr Phe Pro Gly
                245                 250                 255
Tyr Lys His Thr Asp Leu Met Glu Ile Ile Ser Thr Arg Leu Ala Asn
            260                 265                 270
Val Pro Gly Asn Ile Val Asp Ala Asp Ala Ile Gln Phe Ala Ser Arg
        275                 280                 285
Lys Val Ala Ala Val Ser Gly Asp Ala Arg Arg Ala Leu Asp Ile Cys
    290                 295                 300
Arg Arg Ala Val Glu Ile Ala Glu Gln Ser Ser Glu Thr Ala Lys Ile
305                 310                 315                 320
Glu Asp Met Asp Ala Glu Gln Asn Gly Asp Glu Thr Glu Ser Leu Pro
                325                 330                 335
Pro Thr Pro Ser Lys Thr Pro Ala Arg Arg Gln Lys Pro Thr Ser Lys
            340                 345                 350
His Thr Val Lys Leu Glu Ser Pro Gln Lys Asn Ala Ala Gln Lys Gln
        355                 360                 365
Thr Ala Gly Arg Val Thr Ile Ala Thr Ile Lys Gln Ala Ile Gln Glu
    370                 375                 380
Ala Thr Ser Thr Pro Leu Gln Gln Ser Leu Arg Ser Leu Pro Leu Ser
385                 390                 395                 400
Ala Lys Leu Phe Leu Ala Ala Leu Leu Ala Arg Val Lys Arg Thr Gly
                405                 410                 415
Ile Thr Glu Ser Thr Phe Gly Asp Val Ile Asp Glu Ala Lys Arg Ile
            420                 425                 430
Ala Asp Ala Ala Ala Ala Gly Ala Ser Thr Gly Ile Arg Asp Phe Leu
        435                 440                 445
Leu Ala Gly Asn Asn Gly Ala Arg Val Arg Ala Leu Gly Phe Ala Ala
    450                 455                 460
Met Glu Leu Met Asn Ser Gly Val Leu Ala Leu Glu Asn Gly Ala Gly
465                 470                 475                 480
Val Lys Gly Pro Leu Gly Gly Ser Val Ile Pro Ser Arg Gly Asp Arg
                485                 490                 495
Ser Gly Lys Val Arg Leu Arg Val Ala Pro Glu Asp Val Arg Ala Ala
            500                 505                 510
Phe Arg Glu Asp Ile Glu Ala Lys Gly Leu Gly Leu Gly Met Asp Gln
```

515 520 525

<210> 36265
<211> 235
<212> PRT
<213> A.fumigatus

<400> 36265
Arg Val Leu Asn Ser Phe Phe Ser Phe Asn Ala Glu Ser Arg Pro Glu
1 5 10 15
Leu Ala Asn Pro Phe Pro Leu Thr Pro Gln Leu Lys Glu Met Ala Val
20 25 30
Ala Ser Val Asp Glu His Glu Ser Thr Pro Ser Arg Arg Arg Ser Ala
35 40 45
Arg Gln Arg Ala Gln Leu Trp Met Thr Lys Gly Gly Leu Val Arg Asp
50 55 60
Asp Ser Asp Asp Glu Leu Gly Asp Glu Asp Leu Pro Trp His Trp Ile
65 70 75 80
Tyr Asp Thr Glu Glu Glu Asp Thr Glu Asn Lys Glu Thr Thr Ser Ala
85 90 95
Thr Asp Glu Ala Glu Thr Lys Ser Ala Arg Arg Arg Ala Ala Arg Pro
100 105 110
Ser Val Lys Arg Arg Arg Asn Ile Ile Gly Ala Arg Met Gly Ser Phe
115 120 125
Glu Cys Arg Leu Gly Gln Val Val Leu Leu Lys Ser Pro Glu Pro Gly
130 135 140
Lys Asp Trp Val Gly Ile Ile Thr Glu Phe Leu Glu Glu Asp Asp Glu
145 150 155 160
Glu Ala Glu Asp Gly Val Val Lys Ser Ala Asn Ile Met Trp Phe Ala
165 170 175
Ser Pro Asp Glu Phe Met Ser Thr Lys Asn Lys Arg Arg Ala Asp Ala
180 185 190
Leu Pro Asn Glu Gln Tyr Leu Thr Ala Asp Phe Asn Val Asn Pro Leu
195 200 205
Thr Ser Ile Asn Gly Ile Ala Thr Val Met Ser Lys Asp Val Leu Phe
210 215 220
Ala Lys Tyr Pro Asn Gly Thr Pro Pro Lys Gly
225 230 235

<210> 36266
<211> 72
<212> PRT
<213> A.fumigatus

<400> 36266
Glu Glu Leu Ala Glu Phe Asn Lys Cys Ile Ile Cys Arg Arg Gly Val
1 5 10 15
Asn Gln Leu Gln Gly Arg Tyr Thr Asp Glu Phe Ile Trp Glu Asp Val
20 25 30
Tyr Arg Glu Asp Lys Ile His Asp Leu Ile Thr Met Val Lys Asp Gly
35 40 45
Leu Arg Ala Ala Lys Lys Arg Lys Gln Val Asp Asp Asp Val Ser Phe
50 55 60
Ser Ala Arg Val Arg Asn Gly Cys
65 70

<210> 36267
<211> 303
<212> PRT
<213> A.fumigatus

<400> 36267
Arg Ala Phe Arg Lys Phe Asp Met Gly Ser Ile Ser Glu Val Glu Val
1 5 10 15
Met Lys Pro Ala Leu Asn Val Pro Leu Asp Ser Gln Ala Ala Leu Leu
20 25 30
Arg Asp Arg Thr Glu Arg Pro Gly Ala Val Pro Gly Leu Arg Leu Asn
35 40 45
Thr Val Gln His Arg Gln Arg Ile Ser Thr Ala Asp Gln Ile Asp Phe
50 55 60
Arg Val Lys Leu Leu Arg Ser Leu Arg Leu Gly Trp Glu Lys Asp Asp
65 70 75 80
Thr Glu Ala Lys Phe Leu Lys Leu Val Asp Met Val Glu Ser Asp Gly
85 90 95
Cys Ala Leu Phe Gly Gly Leu Ile Asp Pro Ala Ile Phe Glu Asn Leu
100 105 110
Val Ala Lys Tyr Asp Lys Val Gln Ser Arg Ser Gly Asn Asn Ala Phe
115 120 125
Met His Ser Tyr Val Asn Leu Ala Thr Glu His Asp Phe Phe Leu Gly
130 135 140
Gly Asn Tyr Ile Glu Ala Phe Ser His Pro Leu Leu Ile Ala Leu Val
145 150 155 160
Ser Tyr Leu Leu Gly Gly Ser Ile Arg Ile Val Asp Phe Arg Gly Lys
165 170 175
Asp Asn Asp Pro Met Ser Ile Asn Ala Gln Asp Asn Met Leu His Val
180 185 190
Asp Asn Thr Pro Phe Lys Glu Glu Tyr Lys Val Leu Leu Asn Trp Arg
195 200 205
Arg Gly Gln Val Lys Gly Pro Ser Gly Gln Asn Phe Thr Phe Leu Pro
210 215 220
Trp Thr His Lys Gly Asn Arg Asp Val Leu Val Asp Glu Glu Gly Leu
225 230 235 240
Pro Trp Ser Thr Glu Arg Asp Ser Leu Phe Val Ser His Asp Ala Ile
245 250 255
Asp Gly Leu Leu Asn Phe Gln Lys Glu Ile Lys Gly Ile Ser Arg Val
260 265 270
Val Glu Ala Lys His Pro Asp Gln Pro Leu Ala Val Leu Phe Pro Ala
275 280 285
Gly Ala Leu Val His His Arg Tyr Arg Thr Thr Glu Gly Asp Pro
290 295 300

<210> 36268
<211> 143
<212> PRT
<213> A.fumigatus

<400> 36268
Ile Phe Leu Ser Arg Gly Gly Pro Val Phe Glu Leu Arg Asn Gly Asn
1 5 10 15
Val Asn Phe Ser Pro Ile Gly Gln Gly Val Asn Tyr Ala Glu Met Glu
20 25 30
Glu Ile Gln Arg Tyr Asp Lys Ala His Gly Ile Arg Lys Lys Met Ile

```
        35                  40                  45
Glu Ala Leu Glu Thr Arg Phe Ser Asp Leu Glu Leu Lys Tyr Ala Ile
    50                  55                  60
Gly Gly Gln Thr Cys Phe Asp Ala Phe Pro Val Gly Trp Asp Lys Thr
65                  70                  75                  80
Tyr Cys Leu Arg His Ile Glu Ala Glu Lys Asp Arg Ser Gly Ile Val
                85                  90                  95
Tyr Lys Glu Ile His Phe Phe Gly Asp Lys Ile Tyr Glu Gly Gly Asn
            100                 105                 110
Asp Phe Glu Leu Tyr Glu Asp Glu Arg Thr Ile Gly His Phe Val Lys
        115                 120                 125
Gly Pro Glu Asp Thr Met Arg Gln Ile Arg Glu Leu Phe Asp Val
    130                 135                 140
```

<210> 36269
<211> 928
<212> PRT
<213> A.fumigatus

<400> 36269

```
Ser Gly Ile Gly Val Lys Gly Lys Val His Thr Thr Val Glu Glu Ser
1               5                   10                  15
Met Met Val Ser Ser Asp Ser Glu Ser Glu Ser Glu Ser Glu Asp Glu
            20                  25                  30
Leu Asp Lys Glu Leu Phe Gly Pro Lys Ala Arg Ser Gln Pro Asp Ala
        35                  40                  45
Ile Lys Ala Tyr Glu Glu Ser Lys Lys Leu Ser Leu Lys Gln Gln Gly
    50                  55                  60
Pro Val Lys Lys Ile Lys Gln Val Arg Ser Ala Lys Asp Met Arg Ala
65                  70                  75                  80
Arg Leu Ala Pro Asp Leu Ser Ser Leu His Arg Thr Ile Leu Ala Trp
                85                  90                  95
Asp Phe Phe Ala Asn Gly Asp Leu Pro Pro Asn Ser Gly Arg Thr Asp
            100                 105                 110
Tyr Ser Leu Val Ser Asn Thr Phe Lys Asp Pro Leu Glu Tyr Gln Lys
        115                 120                 125
Thr Phe Glu Pro Leu Leu Ile Leu Glu Ala Trp Gln Gly Phe Asn Ser
    130                 135                 140
Thr Lys Asp Glu Gly Thr Phe Arg Pro Phe Glu Ile Lys Val Ala Thr
145                 150                 155                 160
Arg Leu Ser Val Asp Ser Phe Val Glu Val Ser Thr Val Leu Pro Ser
                165                 170                 175
Leu Glu Val Lys Asp Leu Gly Leu Ser Glu Ala Asp Ile Val Leu Leu
            180                 185                 190
Ser Lys Ser Ser Arg Pro Thr Ser Asp Ser Ser Ala Pro His Cys Phe
        195                 200                 205
Ala Arg Val Ala Gly Ile Asn Lys Lys Arg Gly Thr Val Glu Ile Ser
    210                 215                 220
Tyr Arg Val Asn Pro Gly Ser Pro Phe Ile Asn Ser Leu Gly Pro Gly
225                 230                 235                 240
Val Thr Ile Trp Gly Ala Lys Ile Thr Ser Leu Thr Pro Leu Glu Arg
                245                 250                 255
Glu Tyr Gly Ala Leu Met Ala Leu Gln Tyr Tyr Asp Leu Cys Glu Glu
            260                 265                 270
Val Ile Lys Ala Lys Pro Ser Pro Ile Leu His Tyr Ser Asp Ala Ser
        275                 280                 285
```

```
Leu Lys Pro Ile Ala Asp Asn Tyr Asn Val Asn Pro Ala Gln Ala Lys
    290                 295                 300
Ala Ile Lys Ser Ala Leu Asp Asn Asp Ala Phe Thr Leu Ile Gln Gly
305                 310                 315                 320
Pro Pro Gly Ser Gly Lys Thr Lys Thr Ile Val Ala Leu Val Gly Ala
                325                 330                 335
Leu Leu Ser Lys Phe Leu Gly Asp Lys Gly Val Thr Ile Ser Arg Pro
            340                 345                 350
Thr Gly Val Thr Asn Pro Arg Val Pro Gly Arg Thr Thr Thr Ser Lys
        355                 360                 365
Lys Leu Leu Val Cys Ala Pro Ser Asn Ala Ala Val Asp Glu Leu Val
    370                 375                 380
Met Arg Phe Lys Glu Gly Val Lys Thr Ile His Gly Arg His Glu Lys
385                 390                 395                 400
Leu Asn Val Ile Arg Leu Gly Arg Ser Asp Ala Ile Asn Thr Asn Val
                405                 410                 415
Leu Asp Val Thr Leu Asp Glu Leu Val Asn Ala Arg Leu Ser Gln Asn
            420                 425                 430
Pro Arg Lys Asp Ser Gly Glu Arg Asp Leu Gln Thr Ile Tyr Met Glu
        435                 440                 445
His Lys Ala Ala Asp Thr Ala Phe Lys Glu Thr Arg Ala Lys Ile Asp
    450                 455                 460
Gln Cys Arg Ala Gln Gly Leu Pro Val Pro Glu Glu Leu Glu Arg Glu
465                 470                 475                 480
Phe Asp Leu Leu Lys Lys Lys Lys Thr Gln Leu Ser Gln Glu Ile Asp
                485                 490                 495
Thr Ala Arg Asp Lys Asn His Ser Ala Ala Arg Asp Ala Asp Leu Asn
            500                 505                 510
Arg Arg Arg Ile Gln Gln Glu Ile Ile Asn Asn Ala His Val Ile Cys
        515                 520                 525
Ala Thr Leu Ser Gly Ser Gly His Glu Met Phe Gln Asn Leu Ser Ile
    530                 535                 540
Glu Phe Glu Thr Val Val Ile Asp Glu Ala Ala Gln Ser Ile Glu Leu
545                 550                 555                 560
Ser Ala Leu Ile Pro Leu Lys Tyr Gly Cys Ser Lys Cys Ile Leu Val
                565                 570                 575
Gly Asp Pro Lys Gln Leu Pro Pro Thr Val Leu Ser Lys Val Ala Ser
            580                 585                 590
Lys Phe Gln Tyr Glu Gln Ser Leu Phe Val Arg Met Gln Ala Asn His
        595                 600                 605
Pro Lys Asp Val His Val Leu Asp Thr Gln Tyr Arg Met His Pro Glu
    610                 615                 620
Ile Ser Val Tyr Pro Ser Ala Ala Phe Tyr Asp Gly Lys Leu Lys Asp
625                 630                 635                 640
Gly Pro Asn Met Ala Lys Leu Arg Ala Arg Pro Trp His Gln Ser Glu
                645                 650                 655
Leu Leu Gly Pro Tyr Arg Phe Phe Asp Val Gln Gly Leu His Gln Asn
            660                 665                 670
Thr Thr Lys Gly His Ser Leu Ile Asn Leu Ala Glu Leu Arg Val Ala
        675                 680                 685
Met Gln Leu Tyr Glu Arg Leu Ile Thr Asp Phe Arg Glu Tyr Asp Phe
    690                 695                 700
Ser Gly Lys Ile Gly Ile Ile Thr Pro Tyr Lys Gly Gln Leu Arg Glu
705                 710                 715                 720
Leu Lys Thr Gln Phe Ala Ala Arg Tyr Gly Asn Ala Ile Phe Asn Met
                725                 730                 735
```

```
Val Asp Phe Asn Thr Thr Asp Ala Phe Gln Gly Arg Glu Ser Glu Val
            740                 745                 750
Ile Ile Phe Ser Cys Val Arg Ala Ser Asn Lys Gly Ile Gly Phe Leu
        755                 760                 765
Ala Asp Ile Arg Arg Met Asn Val Gly Leu Thr Arg Ala Lys Ser Ser
    770                 775                 780
Leu Trp Val Leu Gly Asn Ser Gln Ser Leu Val Gln Gly Glu Phe Trp
785                 790                 795                 800
Asn Gly Leu Ile Lys Asp Ala Arg Arg Arg Asn Val Tyr Thr Asp Gly
                805                 810                 815
Asp Ile Leu Gly Ile Leu Gln Arg Pro Gln Phe Thr Gly Tyr Lys Asn
            820                 825                 830
Ile Asp Met Met Asp Ala Glu Ser Leu Asn Pro Thr Ala Ser Leu Lys
        835                 840                 845
Ala Ala Gly Ser Glu Pro Ala Ser Arg Pro Thr Ser Ala Ser Phe Asp
    850                 855                 860
Arg Pro Thr Ser Glu Ser Ser Ile Ser Thr Ser Val Ser Arg Arg Gly
865                 870                 875                 880
Thr Pro Thr Glu Pro Pro Pro Asp Leu Pro Ser Gly Gly Pro Asn Gly
                885                 890                 895
Leu Asp Asp Thr Arg Thr Cys Gly Tyr Cys Gly Ser Phe Ala His Met
            900                 905                 910
Thr His Asn Cys Asp Asn Ile Asp Ala Lys Glu Ala Ser Arg Gly Thr
        915                 920                 925
```

<210> 36270
<211> 152
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (120)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36270

```
Tyr Arg Cys Gly Arg Ser Gly His Thr Arg Val Val Cys Met Ala Glu
1               5                   10                  15
Arg Cys Leu Gln Cys Gly Glu Phe Gly His Asp Ala Gln Arg Cys Gln
            20                  25                  30
Ser Ala Arg Glu Leu Ser Lys Lys Glu Lys Ser Arg Ile Ala Arg Glu
        35                  40                  45
Glu His Gln His Ala Gln Met Lys Lys Gln Arg Thr Glu Arg Gln Arg
    50                  55                  60
Gln Lys Gln Leu Gly Gly His Asp Pro Lys Val Pro Val Leu Gln Val
65                  70                  75                  80
Ser Ser Asp Pro Pro Pro Arg Glu Asp Lys Lys Pro Glu Lys Arg Lys
                85                  90                  95
Pro Asp Gln Ser Asn Ala Pro Gly Lys Arg Lys Arg Thr Gly Ser Glu
            100                 105                 110
Ser Pro Asp Thr Ser Lys Val Xaa Lys Pro Arg Ser Ser Asp Ser Val
        115                 120                 125
Pro Asn Pro Pro Lys Gly Pro Arg Arg Lys Ile Asp Ala Asn Val Pro
    130                 135                 140
Thr Asn Thr Ala Val Gly Leu Asp
145                 150
```

<210> 36271
<211> 78
<212> PRT
<213> A.fumigatus

<400> 36271
Gly Glu Asp Ser Phe Arg Thr Ser Leu Thr Ser Ala Ser Ser Val Ser
1 5 10 15
Phe Gly Leu Thr Gln Gln Thr Arg Ser Phe Ser Ala Ser Ala Ser Leu
20 25 30
Ala Gly Lys Arg Ala Thr Tyr Asn Pro Ser Arg Arg Val Gln Lys Arg
35 40 45
Arg His Gly Phe Leu Ala Arg Leu Arg Thr Arg Gly Gly Arg Lys Val
50 55 60
Leu Gln His Arg Arg Ala Lys Gly Arg Lys Ser Leu Ser Trp
65 70 75

<210> 36272
<211> 172
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36272
Met Asn Ala Val Glu Gly Pro Ile Trp Val Ala Val Arg Gly Lys Gly
1 5 10 15
Leu Ala Tyr Gly Thr Asn Phe Ala Tyr Asn Ile Asp Thr Gly Phe Val
20 25 30
Asn Phe Asp Val Tyr Arg Ser Pro Asn Ala His Lys Ala Phe Glu Ser
35 40 45
Arg Xaa Lys Gln Ile Val Glu Asp His Leu Ser Gly Ala Ile Pro Phe
50 55 60
Asp Pro Leu Met Leu Glu Gly Ala Ile Ser Ser Ile Val Val Ser Phe
65 70 75 80
Ala Asn Glu Gln Ser Thr Ile Ala Ser Ala Ala Gln Gly Ser Phe Ile
85 90 95
Arg Gln Val Ile Arg Asn Leu Pro Ser Asp Tyr Lys Glu Lys Thr Leu
100 105 110
Lys Gln Val Arg Val Thr Gly Val Glu Asp Val Lys Ala Ala Leu Arg
115 120 125
Glu Ile Ile Leu Pro Leu Phe Ala Pro Asp Lys Ala Asn Leu Val Val
130 135 140
Thr Cys Ala Pro Val Leu Glu Glu Val Arg Val Pro Leu His Val Gln
145 150 155 160
Asn Glu Val Val Ser Tyr Ser Tyr Leu Leu Ser Ile
165 170

<210> 36273
<211> 67
<212> PRT
<213> A.fumigatus

<400> 36273
Thr Ile Lys Gln Gly Leu Glu Ala Ala Arg Phe Thr Pro Val Val Gln
1 5 10 15
Pro Leu Lys Asp Phe Glu Asp Asp Tyr Gly Leu Lys Asn Asp Gly Asp
20 25 30
Asp Asp Glu Glu Ser Asp Glu Glu Glu Asp Asp Asp Asp Asp Asp Asn
35 40 45
Asp Glu Asp Asp Asp Val Ser Glu Ser Glu Glu Asp Glu Glu Ser Asp
50 55 60
Asp Asn Glu
65

<210> 36274
<211> 101
<212> PRT
<213> A.fumigatus

<400> 36274
Leu Ser Pro Ser Leu Asn His Asp Glu His Arg Asn Asn Ala Asp Lys
1 5 10 15
Ser Gly Glu Asp Arg Asp Cys Ile Val Ser Ile Ser Thr Glu Thr Cys
20 25 30
His Pro Ala Arg His Ser Pro Arg Arg Phe Pro Asn Glu Ser Leu Glu
35 40 45
Asn His Asp His Arg Lys Lys Glu Asn Asn His Thr Thr Ser Ser Glu
50 55 60
Thr Ser Val Pro Ser Leu Ser Gly Ala Gly Glu Pro Phe Ser Leu Pro
65 70 75 80
Ser Ser Ala Thr Ala Gln Glu Thr His Gly Asp Val Ser Ala Leu Tyr
85 90 95
Ala Arg Asp Cys Arg
100

<210> 36275
<211> 607
<212> PRT
<213> A.fumigatus

<400> 36275
Lys Ser Pro Cys Gln Leu Ile Ile Ser Pro Phe Leu Lys His Ser Val
1 5 10 15
Arg Tyr Phe Phe Ala Val Cys Thr Met Ala Met Ala Leu Ala Val Gly
20 25 30
Ala Pro Ser Glu Gln Arg Gly Asn Leu Pro Tyr Asn Thr Leu Lys Asp
35 40 45
Gly Pro Thr Val Asp Ser Met Lys Ala Thr Thr Asp Gly Lys Asn Gly
50 55 60
Gln Gly Glu Ser Ala Phe Trp Asp Thr Cys Val His Thr Val Phe Arg
65 70 75 80
Glu His Cys Gln Arg Ala Pro Asn Ser Pro Ala Val Asn Ala Trp Asp
85 90 95
Gly Ser Phe Thr Tyr Ala Glu Leu Asp Ser Leu Ser Asp Ala Ile Ala
100 105 110
Ser Val Leu Ile Leu Ser Gly Val Gly Pro Glu Ser Ile Ile Pro Ile
115 120 125

```
Tyr Met Gln Lys Ser Arg Trp Thr Thr Val Ala Ile Leu Gly Val Leu
    130                 135                 140
Lys Ser Gly Gly Ala Phe Thr Leu Leu Asp Pro Ser His Pro Arg Ser
145                 150                 155                 160
Arg Val Glu Glu Ile Ser Lys Glu Ile Gln Ala Arg Phe Ile Leu Thr
                165                 170                 175
Ser Glu Lys Leu Ser Lys Gln Cys Leu Glu Met Phe Ser Val Leu Val
            180                 185                 190
Val Glu His Leu Ser Arg Ala Cys Leu Pro Arg Pro Gly Gln Ala Gly
        195                 200                 205
His Thr Arg Ser Arg Pro Glu Asn Ala Ala Tyr Ile Ala Phe Thr Ser
    210                 215                 220
Gly Ser Thr Gly Lys Pro Lys Gly Ile Val Ile Glu His Arg Ser Tyr
225                 230                 235                 240
Cys Ser Gly Ala Arg Ser His Leu Lys Val Phe Gly Ile Asp Ser Thr
                245                 250                 255
Ser Arg Val Leu Gln Phe Ala Ser Tyr Ala Phe Asp Val Ser Ile Met
            260                 265                 270
Glu Thr Leu Ser Thr Leu Met Ala Gly Gly Cys Leu Cys Val Met Ser
        275                 280                 285
Glu Ser Glu Arg Ser Asp Pro Asn Leu Phe Val Val Ser Tyr Lys Asn
    290                 295                 300
Leu Arg Ile Ser His Cys Phe Met Thr Pro Ser Phe Ala Arg Thr Val
305                 310                 315                 320
Pro Trp Thr Glu Cys Cys Asn Pro Pro Pro Thr Leu Ile Val Gly Gly
                325                 330                 335
Glu Leu Met Arg Pro Ser Asp Ala Arg Ala Tyr Lys Glu Met Gly Ile
            340                 345                 350
Arg Cys Met Asn Ala Tyr Gly Pro Ala Glu Cys Ser Val Asn Val Ser
        355                 360                 365
Val Gln Ser Arg Val Glu Ala Ala Val Asp Pro Arg Asn Ile Gly Tyr
    370                 375                 380
Thr Thr Gly Ala Thr Ala Trp Ile Ile Ser Pro Glu Asn Pro Glu Glu
385                 390                 395                 400
Leu Met Pro Thr Gly Thr Val Gly Glu Leu Leu Val Glu Gly Pro Ile
                405                 410                 415
Val Gly Arg Gly Tyr Leu Asn Asp Pro Lys Ala Thr Arg Gln Ala Phe
            420                 425                 430
Ile Asp Thr Pro Ala Trp Leu Arg Arg His Arg Lys Gly Thr Ser Tyr
        435                 440                 445
Gln His Arg Val Tyr Arg Thr Gly Asp Leu Ala Ser Leu Asp Ser Ile
    450                 455                 460
Thr Gly Ala Leu Leu Leu His Gly Arg Lys Asp Ala Gln Val Lys Ile
465                 470                 475                 480
Arg Gly Gln Arg Val Glu Leu Pro Asp Ile Glu His His Leu Gln Leu
                485                 490                 495
Thr Leu Pro Asn Asp Asn Ala Glu Val Ile Val Glu Lys Val Thr Phe
            500                 505                 510
Ser Asp Asp Gly Ser Glu Lys Leu Ile Ala Phe Val Leu Val Arg Pro
        515                 520                 525
Ser Asn Thr Asp Ser Val Ile Gly Asn Thr Gly Asp Arg Leu Phe Leu
    530                 535                 540
Ala Pro Gln Ser Gln Ile Met Glu Gln Phe Ala Ile Ser Lys Lys His
545                 550                 555                 560
Leu Gln Thr His Leu Pro Ser Tyr Met Val Pro Asp Ile Phe Ile Pro
                565                 570                 575
```

```
Ile Ser Thr Leu Pro Gln Thr Ala Ser Gly Lys Thr Asp Arg Lys Ala
            580                 585                 590
Leu Arg Thr Arg Ala Val Phe Thr Ser Glu Trp Thr Asp Ser Ala
        595                 600                 605
```

<210> 36276
<211> 60
<212> PRT
<213> A.fumigatus

<400> 36276

```
Cys Val Arg Pro Leu Leu Ser Ser Gly Phe Gln Thr Ala Lys Arg Leu
1               5                   10                  15
Pro Asn Trp Asp Ala Arg Gln Ala Phe Pro Arg Val Gln Thr Leu Met
            20                  25                  30
Ile Asp Ile Arg Leu Ser Leu Glu Asp Ile Cys Phe Ala Tyr Phe Ala
        35                  40                  45
Leu Arg Val Ser Pro Cys Gly Ala His Gln His Phe
    50                  55                  60
```

<210> 36277
<211> 63
<212> PRT
<213> A.fumigatus

<400> 36277

```
His Leu Gly Phe Asp Tyr Asp Gln Val Asn Ala Ser Arg Val Thr Leu
1               5                   10                  15
Leu Thr Leu Gln Asn Lys Leu Asn Ala Gly Lys Pro Asn Tyr Tyr Trp
            20                  25                  30
Lys Ser Leu Asn Asn Asn Asn Asn Cys Asp Cys Ser Ser Ser Thr Pro
        35                  40                  45
Ser Leu Asp Arg Gln Met Ser Cys Ala Ile Ser Ser Ser Ser Thr
    50                  55                  60
```

<210> 36278
<211> 200
<212> PRT
<213> A.fumigatus

<400> 36278

```
Ser Ala Gly Trp Lys Cys Cys Lys Thr Arg Val Leu Thr Phe Glu Glu
1               5                   10                  15
Phe Leu Thr Ile Pro Pro Cys Thr Thr Gly Lys His Ser Thr Val Asp
            20                  25                  30
Asp Thr Pro Ala Glu Pro Glu Lys Glu Ser Asp Ala Ser Ser Val Leu
        35                  40                  45
Glu Gln Gln Val Ala Ala Ala Ser Pro Ala Pro Ala Pro Pro Arg Pro
    50                  55                  60
Ala Val Ser Pro Ala Ile Ala Pro Pro Ser Asn Ala Ala Thr Pro Ala
65                  70                  75                  80
Val Glu Asp Thr Glu Glu Asp Asp Pro Ala Leu Glu Ile Pro Ala Asn
                85                  90                  95
Ala Thr Cys Arg Arg Arg Gly Cys Asn Lys Gly Tyr Asp Pro Ser Ile
            100                 105                 110
Ser Arg Asp Glu Glu Lys Cys Val Tyr His Pro Gly Gln Pro Ile Phe
```

```
        115                 120                 125
His Glu Gly Ser Lys Gly Trp Ser Cys Cys Lys Arg Arg Val Leu Glu
    130                 135                 140
Phe Asp Glu Phe Met Lys Ile Gln Gly Cys Lys Glu Lys Thr Arg His
145                 150                 155                 160
Leu Phe Val Gly Lys Gly Lys Pro Ala Gly Glu Glu Lys Val Glu Thr
                165                 170                 175
Val Arg Tyr Ala Ile Phe Tyr Glu Pro Thr Thr Ile Ser Arg Asp Lys
            180                 185                 190
Ala Asp Gly Ala Val Val Gln Glu
        195                 200
```

<210> 36279
<211> 71
<212> PRT
<213> A.fumigatus

<400> 36279

```
Phe Ile Tyr Ser Ile Lys Met Gly Ser Ala Gly Glu Met Lys Asp Glu
1               5                   10                  15
Thr Leu Leu Pro Leu Arg Phe Ile Pro Leu Ser Tyr Asn His Ala Asp
            20                  25                  30
Ser Gln Ala Ser Ala Leu Arg Leu Val Leu Thr Leu Asn Pro Gln Trp
        35                  40                  45
Glu Gly Pro Asp Asn Lys Ile Glu Phe Val Arg Phe Thr Asp Gly Ile
    50                  55                  60
Thr Asn Thr Val Cys Phe Phe
65                  70
```

<210> 36280
<211> 139
<212> PRT
<213> A.fumigatus

<400> 36280

```
Glu Arg Glu Ser Pro Leu Val Arg Arg Arg Ser Arg Arg Ser Gly Met
1               5                   10                  15
Gln Ser Ser Thr Asn Gln Gln Arg Phe Gln Glu Thr Lys Leu Met Val
            20                  25                  30
Leu Ser Cys Arg Asn Asp Phe Tyr Gln Thr Pro Ser Thr Val Asn Val
        35                  40                  45
Ser Leu Tyr Leu Lys Lys Ile Asp Lys Asp Asn Ala Lys Val Thr Phe
    50                  55                  60
Ser Ser Thr Ser Val Glu Phe Asp Leu Pro Thr Thr Asp Asn Lys Arg
65                  70                  75                  80
Tyr Lys Asp Thr Tyr Pro Leu Phe Ala Pro Ile Asp Pro Glu Gly Ser
                85                  90                  95
Ser Phe Lys Val Leu Gly Thr Lys Leu Glu Leu Lys Leu Val Lys Ala
            100                 105                 110
Asp Gly Thr Ser Trp Pro Val Leu Arg Ser Asp Asp Lys Trp Thr Gly
        115                 120                 125
Glu Arg Ile Gln Val Gly Gln Ala Gly Arg Ala
    130                 135
```

<210> 36281
<211> 65

<212> PRT
<213> A.fumigatus

<400> 36281
Leu Tyr Ile Phe Leu Ser Cys Gly Phe Tyr Pro Asp Leu Ile Tyr Ser
1 5 10 15
Cys Trp Ile Gly Ala Ser Ile Ala Gly Gln Phe Met Leu Leu Thr Thr
20 25 30
Phe Cys Glu Asp Asn His Pro Leu Gly Ala Arg Leu Leu Ile Val Thr
35 40 45
Glu Tyr Lys Gly Ala Gly Thr Lys Cys Thr Gly Ser Ser Pro Ser Val
50 55 60
Ala
65

<210> 36282
<211> 102
<212> PRT
<213> A.fumigatus

<400> 36282
Tyr Ala Arg Gly Pro Phe Ser Leu Ala Glu Cys Asp Leu Leu Ser Arg
1 5 10 15
Tyr Ala Leu Ser Ile Gly Glu Thr Thr Ser His Ala Leu Leu Ala Ser
20 25 30
Arg Gly Leu Ala Pro Ser Leu Leu Ala Arg Phe Gln Asn Gly Leu Leu
35 40 45
Tyr Arg Phe Ile Arg Gly Arg Pro Ala Thr His Leu Asp Leu Val Lys
50 55 60
Pro Pro Leu Trp Arg Gly Val Ala Gln Arg Leu Gly Gln Trp His Ala
65 70 75 80
Val Leu Pro Ile Asn Gly His Ser Ala Ser Ser Ser Ser Ala Lys Glu
85 90 95
Leu Pro Leu Ser His Gln
100

<210> 36283
<211> 64
<212> PRT
<213> A.fumigatus

<400> 36283
Tyr Asn Ser Pro Leu Val His Leu Gln Ser Leu Thr Cys Arg Ile Tyr
1 5 10 15
Leu Tyr Thr Cys Ala Ser Ile Ala Leu Asp Val Lys Lys Gly Thr Arg
20 25 30
His Gln Asn Tyr Lys Ala Tyr Thr Leu Val Arg Leu Gly Thr His Ser
35 40 45
Gln Gln Leu His Val Ile Leu Asn His Val Thr Leu Gly Pro Ala Lys
50 55 60

<210> 36284
<211> 60
<212> PRT
<213> A.fumigatus

<400> 36284
Ser Arg Asp Ala Ser Pro Asn Cys His His Val Ser Leu His Thr Leu
1 5 10 15
Thr Leu Thr Lys Thr His Leu Gly Ile Leu Thr Ser Pro Glu Pro Ala
20 25 30
Ser Ala Lys Leu Leu Ile Thr Tyr Lys Lys Thr Cys Ser Ala Ala Leu
35 40 45
Leu Leu Phe Pro Phe Leu Phe Phe Pro His His Gln
50 55 60

<210> 36285
<211> 106
<212> PRT
<213> A.fumigatus

<400> 36285
Arg Gln Ala Ser Asp His Leu Gln Lys Asp Leu Phe Ser Gly Ala Ser
1 5 10 15
Thr Leu Ser Phe Ser Phe Leu Ser Ser Ser Ser Val Glu Val Tyr Ile
20 25 30
Asp His Val Asn Phe Asn Pro Gly Ala Gln Ser Lys Tyr Cys Ser Leu
35 40 45
Lys Val Ile Leu Ala Gly Phe Phe Ser Leu Met Gly Phe Leu Pro Phe
50 55 60
Pro Ala Leu Glu Ser Ser Val Asp Ser Leu Cys Val Arg Pro Ser Phe
65 70 75 80
Ser Leu His Asn Thr Trp Leu Ser Glu Gly Phe Phe Arg Lys Val Lys
85 90 95
Ala Pro Cys Ala Tyr Ala Val Glu Gly Ala
100 105

<210> 36286
<211> 71
<212> PRT
<213> A.fumigatus

<400> 36286
Thr Thr Cys Thr Ser Ser Gln Arg Ser Ser Pro Cys Leu Ser Ile His
1 5 10 15
Ile Arg Asn Pro Thr Tyr Lys Ile Tyr Phe Ser Val Leu Thr Pro Gly
20 25 30
Gly Glu Lys Ile Thr Val Cys Tyr Pro Gln Asn Ala Leu Pro Pro Asn
35 40 45
Asn Asp Pro Asn Pro Ile His Pro Pro Lys Arg Pro Phe Gln His Pro
50 55 60
Arg Pro Asn His Arg Pro Ala
65 70

<210> 36287
<211> 183
<212> PRT
<213> A.fumigatus

<400> 36287
Gly Pro Phe Thr Leu Asn Thr Leu Ala Leu Leu Gln Phe Leu Thr Tyr
1 5 10 15

```
Ala Ile Ile Ile Val Pro Ile Asn Phe Ser Trp Gln Lys Tyr Leu Glu
            20                  25                  30
Ala Arg Trp Pro Gly Phe Pro Gly Arg Lys Gly Arg Ser Thr Pro Thr
        35                  40                  45
Ala Val Ala Gly Ala Glu Ala Lys Thr Gly Ala Val Val Val Thr Val
    50                  55                  60
Glu Ser Ala Asp Leu Leu Pro Val Lys Glu Lys Val Glu Glu Lys Gln
65                  70                  75                  80
Arg Val Ser Ala Ala Arg Pro Arg Pro Arg Ser Arg Trp Arg Trp Arg
                85                  90                  95
Ser Arg Ser Arg Leu Arg Ser Arg Ser Gly Leu Gly Asn Phe Leu Met
            100                 105                 110
Lys Phe Val Leu Asp Gln Thr Val Gly Ser Val Met Asn Ile Leu Leu
        115                 120                 125
Phe Ile Val Leu Ile Asn Val Leu Lys Gly Val Gly Trp Ser Arg Ile
    130                 135                 140
Gly Glu Leu Ile Tyr Glu Val Arg Leu Val His Phe Val Ile Gly Pro
145                 150                 155                 160
Phe His Gly Glu Lys Met Val Ile Glu Val Met Arg Val Gly Leu Trp
                165                 170                 175
Ala Asp His Gly Cys Ala Ala
            180
```

<210> 36288
<211> 198
<212> PRT
<213> A.fumigatus

<400> 36288

```
Pro Gly Leu Gly Ala Ala Gly Leu Phe Thr Gly Ser Ile Leu Ile Ile
1               5                   10                  15
Ala Gln Ser Val Pro Leu Gln Lys Arg Pro Ile Tyr Thr Gly Val Leu
            20                  25                  30
Gly Gly Met Tyr Gly Ile Ser Ser Val Ala Gly Pro Leu Met Gly Gly
        35                  40                  45
Ala Phe Thr Asp His Val Thr Trp Arg Trp Cys Phe Tyr Ile Asn Leu
    50                  55                  60
Pro Ile Gly Gly Val Thr Trp Leu Phe Val Leu Leu Phe Phe Lys Ala
65                  70                  75                  80
Pro Lys Ser Tyr Lys Asp Asn Ser Gly Leu Lys Asp Gln Val Ser Arg
                85                  90                  95
Leu Asp Leu Pro Gly Leu Phe Val Phe Leu Pro Ala Ile Ile Ser Met
            100                 105                 110
Leu Leu Ala Leu Gln Trp Gly Gly Thr Lys Tyr Asn Trp Gly Asn Ala
        115                 120                 125
Arg Ile Ile Ala Leu Phe Val Val Phe Gly Val Leu Ile Val Ile Phe
    130                 135                 140
Ala Ala Arg Gln His Trp Ala Gln Glu Asn Ala Thr Val Pro Pro Arg
145                 150                 155                 160
Ile Leu Lys Asn Arg Asn Val Trp Gly Ala Ala Phe Tyr Ser Phe Ser
                165                 170                 175
Val Ser Ala Ala Phe Met Leu Phe Val Tyr Tyr Val Arg Val Gln Ile
            180                 185                 190
Asp Ser Leu Ala Leu Ile
        195
```

<210> 36289
<211> 262
<212> PRT
<213> A.fumigatus

<400> 36289
Leu Pro Ile Trp Phe Gln Ala Ile Lys Asp Val Ser Ala Thr Lys Ser
1 5 10 15
Gly Ile Met Asn Leu Pro Met Leu Leu Gly Thr Val Leu Met Ser Leu
20 25 30
Val Ser Gly Phe Leu Val Ser Ala Ile Gly Tyr Tyr Thr Pro Phe Met
35 40 45
Leu Ile Ser Ser Val Ile Met Thr Ile Gly Ala Gly Leu Leu Ser Thr
50 55 60
Leu Lys Val Asp Ser Gly His Pro Ala Trp Ile Gly Tyr Gln Ala Leu
65 70 75 80
Thr Gly Ile Gly Ile Gly Val Gly Leu Gln Gln Ala Met Ile Val Val
85 90 95
Gln Thr Ala Val Gln Asp Thr Asp Val Pro Ser Ala Thr Ala Ile Val
100 105 110
Met Phe Thr Gln Ser Leu Gly Gly Ala Leu Phe Val Ser Val Gly Gln
115 120 125
Asn Val Phe Gln Asn Gln Leu Phe Lys Asn Leu Ala Ile Glu Ala Pro
130 135 140
Ser Val Asn Ala Ala Gln Val Ala Gly Thr Gly Ala Thr Met Leu Arg
145 150 155 160
His Val Val Ser Glu Asp Val Leu Pro Ala Val Leu Val Ala Tyr Ser
165 170 175
Asn Ala Ile Thr Glu Ser Phe Tyr Val Ala Val Ala Met Ala Ala Ile
180 185 190
Ser Ile Ile Gly Val Leu Pro Val Gln Trp Leu Ser Pro Glu Gly Lys
195 200 205
Glu Asp Arg Ser Thr Pro Cys Leu Asp Leu Ile Ala Ala Arg Gly Tyr
210 215 220
Arg Leu Phe Ile Ala Ser Lys Leu Ile Ala Glu Leu Met Gln Ala Leu
225 230 235 240
Ala Trp Gly Arg Asp Thr Cys Leu Gln Gly Gly Cys Leu Ser Leu Ser
245 250 255
Phe Arg Trp Pro Val Ala
260

<210> 36290
<211> 174
<212> PRT
<213> A.fumigatus

<400> 36290
Pro Gln Ser Phe Arg Lys Asp Asn Thr Ile Leu Ala Thr Ala Ile Pro
1 5 10 15
Lys Ile Thr Asp Gln Phe Asn Ser Leu Asp Asp Val Gly Trp Tyr Gly
20 25 30
Ser Ser Tyr Leu Leu Thr Thr Cys Ser Leu Val Leu Pro Tyr Gly Lys
35 40 45
Leu Tyr Thr Phe Tyr Ser Thr Lys Trp Val Tyr Leu Thr Ala Ile Ala
50 55 60
Ile Phe Glu Ile Gly Ser Leu Ile Cys Gly Val Ala Pro Asn Ser Val

```
65                  70                  75                  80
Ala Leu Ile Ile Gly Arg Ala Val Ala Arg Phe Gly Cys Cys Trp Ile
                85                  90                  95
Ile Tyr Arg Phe Asp Pro Asp Tyr Arg Pro Val Arg Ala Ala Ala Glu
            100                 105                 110
Ala Ser Asn Leu His Arg Cys Ala Gly Trp Tyr Val Trp His Phe Gln
        115                 120                 125
Cys Gly Trp Ala Ser Asp Gly Trp Cys Leu His Arg Pro Cys His Leu
    130                 135                 140
Glu Met Val Phe Leu Tyr Gln Leu Ala Tyr Arg Gly Gly Asp Leu Ala
145                 150                 155                 160
Leu Arg Pro Phe Val Phe Gln Gly Ala Lys Ile Ile Gln Gly
                165                 170
```

<210> 36291
<211> 170
<212> PRT
<213> A.fumigatus

<400> 36291

```
Gln Val Thr Gly Ser Asn Phe Pro Cys Lys Gly Tyr Gln Thr Asn Thr
1               5                   10                  15
Pro Trp Arg Ala Thr Ala Gln Tyr Thr Ala Gly Gln Thr Tyr Asn Met
            20                  25                  30
Thr Ile Thr Gly Ser Ala Thr His Gly Gly Gly Ser Cys Gln Leu Ser
        35                  40                  45
Leu Ser Tyr Asp Asn Gly Lys Thr Phe Lys Val Ile Gln Ser Met Glu
    50                  55                  60
Gly Gly Cys Pro Leu Val Ser Lys Tyr Asn Phe Lys Ile Pro Gly Asp
65                  70                  75                  80
Val Ala Asn Gly Gln Ala Leu Phe Ala Trp Thr Trp Tyr Asn Leu Ile
                85                  90                  95
Gly Asn Arg Glu Leu Tyr Met Asn Cys Ala Asp Val Val Ile Ser Gly
            100                 105                 110
Gly Thr Gly Thr Pro Ser Ser Phe Glu Ser Ala Tyr Pro Asp Leu Phe
        115                 120                 125
Val Ala Asn Val Gly Asn Gly Cys Ser Thr Val Glu Gly Arg Glu Thr
    130                 135                 140
Val Phe Ala Asn Pro Gly Asp Gln Val Ile Tyr Gly Gly Thr Val Thr
145                 150                 155                 160
Pro Ser Ser Pro Ala Phe Pro Ile Cys His
                165                 170
```

<210> 36292
<211> 63
<212> PRT
<213> A.fumigatus

<400> 36292

```
Pro Ser Tyr Arg Gly Tyr Arg Phe Lys Met Leu Ile Ser Phe Lys Ser
1               5                   10                  15
Pro Phe Ser Cys Thr Ala Leu Tyr Lys Ser Asn Gln Thr Lys Ala Ser
            20                  25                  30
Ala Ser His Glu Ser Lys Ala Asn Gly Asp Lys Tyr Asp Lys Ser Leu
        35                  40                  45
Gly Gln Asn Arg Asn Asn Asp Ser Arg Ser Phe Met Ser Ser Thr
```

50 55 60

<210> 36293
<211> 446
<212> PRT
<213> A.fumigatus

<400> 36293
Ser Gly Pro Pro Arg Arg His Pro Ser Ile Phe Gly Ala Ala Ala Ala
1 5 10 15
Pro Phe Ser Thr Arg Lys Leu Tyr Gly Leu Val Leu Thr Glu Leu Asn
20 25 30
Met Thr Leu Asp Asp Phe Glu Lys Ser Leu Val Glu Asp Gln Glu Arg
35 40 45
Arg Arg Glu Arg Ser Gly Arg Glu Lys His Gln His Arg Asp Arg Asp
50 55 60
Arg Asp Arg Ser Lys Glu Arg Ser Arg His His Arg His His His His
65 70 75 80
His Arg Arg His Ser Ser Arg Ser Arg Glu Arg Glu Pro Gly Arg Pro
85 90 95
Arg Glu Ser His Ala Asp Glu Glu Asn Ser His Arg His Lys Arg Ser
100 105 110
Arg His Ser Thr Asp His Ser Asp Asp Arg Asp His Ser His Lys Arg
115 120 125
Arg His Arg Arg Glu Ser Lys Asp Asn Glu Ser Glu Ser Thr Ala Pro
130 135 140
Val Lys Glu Ile Val Gln Glu Glu Pro Lys Gln Leu Arg Arg Asp Ala
145 150 155 160
Trp Met Glu Ala Pro Ser Ala Leu Asp Val Asp Tyr Ile His Arg Arg
165 170 175
Asp Thr Thr Arg Leu Glu Glu Glu Pro Lys Ala Lys Met Leu Gln Ala
180 185 190
Asp Phe Glu Leu Lys Ile His Asp Arg Glu Leu Asn Gln His Leu Arg
195 200 205
Asp Leu Lys Glu Glu Lys Gly Leu Ala Glu Val Glu Glu Lys Pro Val
210 215 220
Gln His Glu Val Asp Tyr Thr Phe Gly Asp Ala Gly Ser Gln Trp Arg
225 230 235 240
Met Thr Lys Leu Arg Gly Val Tyr Arg Glu Ala Glu Glu Ser Gly Lys
245 250 255
Pro Val Glu Glu Val Ala Ile Glu Arg Phe Gly Asp Leu Arg Ser Phe
260 265 270
Asp Asp Ala Arg Glu Glu Glu Ala Glu Leu Asp Arg Arg Thr Arg Tyr
275 280 285
Gly Glu Gly Tyr Val Gly Lys Glu Lys Pro Thr Gly Asp Leu Phe Gln
290 295 300
Glu Arg Lys Leu Glu Gln Gly Val His Arg Glu Pro Leu Glu His His
305 310 315 320
Arg Asp Pro Glu Gln Lys Leu Ala Ala Arg Gly Gln Gly Gln Lys Ile
325 330 335
Asp Thr Ala Pro Pro Ser Gly Ala Thr Gln His Leu Asp Leu Thr Ala
340 345 350
Leu Asn Arg Leu Lys Ala Gln Met Met Lys Ala Lys Leu Lys Gly Ser
355 360 365
Ala Glu Ala Ala Glu Leu Glu Glu Arg Tyr Asn Ala Ala Ala Ala Ala
370 375 380

```
Met Ala Asn Arg Lys Glu Ser Asp Val Val Val Leu Gly Val Met Glu
385                 390                 395                 400
Asn Arg Met Leu Ala Gly Gln Arg Asn Glu Ala Lys Pro Val Glu Thr
                405                 410                 415
Arg Arg Gly Arg Glu Arg Gly Gln Leu Glu Glu Asn Glu Asp Leu Thr
            420                 425                 430
Ile Glu Asp Met Val Arg Glu Glu Arg Arg Thr Arg Asp Gln
        435                 440                 445
```

<210> 36294
<211> 398
<212> PRT
<213> A.fumigatus

<400> 36294

```
Cys His Phe Thr Leu Gly Ser Gly Lys Thr Thr Phe Met Gln Arg Ile
1               5                   10                  15
Asn Ala Tyr Leu His Ser Lys Lys Lys Ile Pro Tyr Val Leu Asn Leu
            20                  25                  30
Asp Pro Ala Val Tyr Ser Val Pro Phe Glu Ser Asn Ile Asp Ile Arg
        35                  40                  45
Asp Ser Ile Asn Tyr Lys Glu Val Met Lys Gln Tyr Asn Leu Gly Pro
    50                  55                  60
Asn Gly Gly Ile Leu Thr Ser Leu Asn Leu Phe Ala Thr Lys Val Asp
65                  70                  75                  80
Gln Ile Ile Ser Leu Leu Glu Lys Arg Thr Ala Pro Asn Pro Glu Asn
                85                  90                  95
Pro Ser Ala Lys Pro Ile Glu His Ile Leu Val Asp Thr Pro Gly Gln
            100                 105                 110
Ile Glu Val Phe Val Trp Ser Ala Ser Gly Ser Ile Leu Leu Glu Thr
        115                 120                 125
Leu Ala Ser Ser Phe Pro Thr Val Ile Ala Tyr Val Ile Asp Thr Pro
    130                 135                 140
Arg Thr Thr Ser Thr Ser Thr Phe Met Ser Asn Met Leu Tyr Ala Cys
145                 150                 155                 160
Ser Ile Leu Tyr Lys Thr Lys Leu Pro Met Ile Leu Val Phe Asn Lys
                165                 170                 175
Thr Asp Val Gln Asp Ala Glu Phe Ala Lys Glu Trp Met Thr Asp Phe
            180                 185                 190
Asp Ala Phe Gln Gln Ala Leu Arg Asp Glu Glu Glu Ser Gly Ala Phe
        195                 200                 205
Gly Gly Glu Gly Ser Thr Ala Gly Phe Gly Ala Gly Ser Gly Tyr Met
    210                 215                 220
Gly Ser Leu Leu Asn Ser Met Ser Leu Met Leu Glu Glu Phe Tyr Arg
225                 230                 235                 240
His Leu Ser Val Val Gly Val Ser Ser Met Thr Gly Asp Gly Ile Asp
                245                 250                 255
Glu Phe Phe Gln Ala Val Glu Glu Lys Arg Gln Glu Phe Glu Arg Asp
            260                 265                 270
Tyr Lys Pro Glu Leu Glu Arg Lys Lys Lys Glu Arg Glu Glu Thr Lys
        275                 280                 285
Ala Ala Gln Arg Glu Leu Glu Leu Gly Lys Leu Met Lys Asp Met Ser
    290                 295                 300
Val Ser Gly Ser Ser Arg Lys Pro Arg Pro Ala Asn Glu Ala Glu Thr
305                 310                 315                 320
Val Ser Glu Ala Glu Glu Glu Glu Glu Glu Ala Ala Ala Ala Ala Ser
```

```
                325                 330                 335
Lys Gly Asp Leu Glu Phe Ser Glu Asn Asp Asp Asp Thr Asp Asp Asp
            340                 345                 350
Glu Gly Gly Val Pro Pro Ala Gly Asp Glu Ala Gly Leu Ser Gln Arg
        355                 360                 365
Tyr Lys Glu Ala Leu Ser Glu Ser Gln Gly Gly Pro Asn Asp Ala Asp
    370                 375                 380
Leu Ser Phe Ala Arg Tyr Leu Arg Ser Ser Asn Ile Asn Arg
385                 390                 395
```

<210> 36295
<211> 188
<212> PRT
<213> A.fumigatus

<400> 36295

```
Thr Tyr Gln Arg Gln Val Leu Met Ala Ser Cys Ser Val Gly Gln Asn
1               5                   10                  15
Pro Ala Arg Gln Cys Ala Leu Gly Ala Gly Leu Glu Glu Ser Thr Ile
            20                  25                  30
Cys Thr Thr Val Asn Lys Val Cys Ala Ser Gly Leu Lys Ala Ile Ile
        35                  40                  45
Leu Gly Ala Gln Thr Ile Met Thr Gly Asn Ala Asp Val Val Val Ala
    50                  55                  60
Gly Gly Thr Glu Ser Met Ser Asn Ala Pro His Tyr Leu Pro Asn Leu
65                  70                  75                  80
Arg Thr Gly Ala Lys Tyr Gly His Gln Ser Leu Val Asp Gly Ile Met
                85                  90                  95
Lys Asp Gly Leu Thr Asp Ala Gly Lys Gln Glu Leu Met Gly Leu Gln
            100                 105                 110
Ala Glu Glu Cys Ala Gln Asp His Gly Phe Ser Arg Glu Gln Gln Asp
        115                 120                 125
Glu Tyr Ala Ile Arg Thr Tyr Glu Lys Ala Gln Ala Ala Gln Lys Ala
    130                 135                 140
Gly Leu Phe Asp Glu Glu Ile Ala Pro Ile Gln Leu Pro Gly Phe Arg
145                 150                 155                 160
Gly Lys Pro Asp Val Thr Val Thr Gln Asp Glu Glu Pro Lys Asn Val
                165                 170                 175
Ser Thr Ser Ile Arg Arg Thr Met Phe Met Ser Asp
            180                 185
```

<210> 36296
<211> 171
<212> PRT
<213> A.fumigatus

<400> 36296

```
Leu Asn Pro Glu Lys Leu Arg Ala Ile Lys Pro Ala Phe Ile Pro Gly
1               5                   10                  15
Ser Gly Thr Val Thr Ala Pro Asn Ser Ser Pro Leu Asn Asp Gly Ala
            20                  25                  30
Ala Ala Val Val Leu Val Ser Glu Ala Lys Leu Lys Glu Leu Asn Leu
        35                  40                  45
Lys Pro Val Ala Lys Ile Leu Gly Trp Gly Asp Ala Ala Gln Gln Pro
    50                  55                  60
Ser Lys Phe Thr Thr Ala Pro Ala Leu Ala Ile Pro Lys Ala Leu Lys
```

```
65                  70                  75                  80
His Ala Gly Val Gly Gln Asp Ala Ile Asp Ala Phe Glu Ile Asn Glu
                85                  90                  95
Ala Phe Ser Val Val Ala Leu Ala Asn Met Lys Leu Leu Gly Ile Pro
            100                 105                 110
Glu Glu Lys Val Asn Leu His Gly Gly Ala Val Ala Ile Gly His Pro
        115                 120                 125
Ile Gly Ala Ser Gly Ala Arg Ile Leu Thr Thr Leu Leu Gly Val Leu
    130                 135                 140
Lys Ala Lys Lys Gly Lys Leu Gly Cys Ala Gly Ile Cys Asn Gly Gly
145                 150                 155                 160
Gly Gly Ala Ser Ala Leu Val Val Glu Leu Leu
                165                 170
```

<210> 36297
<211> 400
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (35)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36297

```
Gly Thr Arg Gln Lys Trp Ser Trp Lys Ile Arg Ile Leu Asp Gly Lys
1               5                   10                  15
Phe Asn Ser Arg Phe Leu His Asp Asp Phe Leu Gly Tyr Arg Ile Pro
            20                  25                  30
Gly His Xaa Leu Leu Ile Leu Pro Gly Ile Trp Gly Thr Gly Val Leu
        35                  40                  45
Ile Ala Thr Ala Phe Val His Leu Leu Pro Thr Ala Phe Val Ser Leu
    50                  55                  60
Thr Asp Pro Cys Leu Pro Arg Phe Trp Ser Glu Thr Tyr Arg Ala Met
65                  70                  75                  80
Ala Gly Phe Val Ala Met Ile Ser Val Phe Leu Val Val Val Val Glu
                85                  90                  95
Met Phe Phe Ala Thr Lys Gly Ala Gly His Val His Gly Ser Glu Tyr
            100                 105                 110
Asp His Leu Ile Gly Ser Val Gly Arg Gly Ser Ser Glu Ser Val Arg
        115                 120                 125
Asp Asp Ala Asn Tyr Leu Arg Leu Gly Arg His His Ser Thr Glu Asn
    130                 135                 140
Leu Arg Leu Asn Leu Ile Gln Ala Asn Ile Tyr Ala Asp Gly Ala Gln
145                 150                 155                 160
Glu Gln Ser Ser Ser Leu Ser Arg Met Ser Thr Asp Gly Val Glu Gln
                165                 170                 175
Ser Arg Ser Lys Lys Met Glu Pro Tyr Gly Glu Thr Gly Asp Ala Glu
            180                 185                 190
Phe Gly Gly Ile Asp Ser Leu Asp Asn His Ser His Ser Pro Val Ser
        195                 200                 205
Asp Ser His Pro Arg Tyr Leu Pro Ser Gln Gln Arg Asp Leu His Pro
    210                 215                 220
Lys Ser Ser Pro Val Leu Pro Met Gln Ser Pro Gln Arg Gln Leu Leu
225                 230                 235                 240
Gln Cys Leu Leu Leu Glu Ala Gly Ile Leu Phe His Ser Ile Phe Ile
```

```
                245                 250                 255
Gly Met Ala Leu Ser Val Ala Thr Gly Thr Ser Phe Val Val Leu Leu
            260                 265                 270
Val Ala Ile Cys Phe His Gln Thr Phe Glu Gly Phe Ala Leu Gly Ser
        275                 280                 285
Arg Ile Ala Ser Leu Ile Pro Asp Leu Phe Ser Pro Ser Ser Pro Lys
    290                 295                 300
Pro Trp Leu Met Ser Leu Ala Tyr Gly Thr Thr Thr Pro Val Gly Gln
305                 310                 315                 320
Ala Ile Gly Leu Val Leu His Asn Leu Tyr Asp Pro Ala Ser Thr Thr
                325                 330                 335
Gly Leu Leu Met Val Gly Ile Thr Asn Ala Val Ser Ser Gly Leu Leu
            340                 345                 350
Leu Phe Ala Gly Leu Val Glu Leu Leu Ala Glu Asp Phe Leu Ser Glu
        355                 360                 365
Ser Ser Tyr Ala Thr Leu Arg Gly Arg Arg Arg Ile Glu Ala Cys Ile
    370                 375                 380
Ala Val Ala Ser Gly Ala Leu Leu Met Ala Phe Val Gly Ala Phe Ala
385                 390                 395                 400
```

<210> 36298
<211> 61
<212> PRT
<213> A.fumigatus

<400> 36298

```
Leu Asn His Gln Ser Thr Ser Ser Ala Ala Ala Val Thr Asp Ala Ser
1               5                   10                  15
Thr Ala Lys Phe Ser Phe Leu Gly Leu Gln Asn Thr Glu Gln Gly Gly
            20                  25                  30
Gln Asn Thr Arg Thr Thr Ser Thr Asp Arg Val Thr Asp Ser Asn Ser
        35                  40                  45
Ser Thr Met Lys Val Asn Leu Phe Leu Arg Asn Ala Lys
    50                  55                  60
```

<210> 36299
<211> 139
<212> PRT
<213> A.fumigatus

<400> 36299

```
Gly Cys Ile Ala Pro Phe Pro Ser Ser Ser Lys Ser Asp Lys Thr Val
1               5                   10                  15
Asp Glu Ser His Glu Lys Ala Glu Asp His Ser Ile Ser Ala Tyr Gln
            20                  25                  30
Ala His Val Leu Tyr Val Ser Ala Thr Gln Val Gly Asn Ile Arg Ile
        35                  40                  45
Gly Ala Ser Ile Leu His Pro Asp Asn Val Leu Val Thr Thr Arg Ser
    50                  55                  60
Gly Ser Asn His Ser Ser Ile Tyr Ile Asn Ala Lys Pro His Pro Tyr
65                  70                  75                  80
Tyr Thr Leu Gly Asp Val Lys Phe Glu Arg Glu Asn Thr Val His Gly
                85                  90                  95
Ala Ile Gln Gly Ser Ile Gly Val Phe Ser Ser Ile Ala Gln Val Gly
            100                 105                 110
Pro Arg Gln Leu Leu Pro Tyr Gln Gln Glu Ile Ser Phe Gln Asp Gly
```

```
        115                 120                 125
Gln Cys Leu Trp His Ser Ala Lys Arg Thr Gly
    130                 135

<210> 36300
<211> 75
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (63),(71),(73)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36300
Arg Gly Pro Thr Met Gln Val Asp Ser Pro Gly Arg Ala Glu Gly Glu
1               5                   10                  15
Pro Asp Pro Val Ser Asp Arg Thr Gly Glu Arg Glu Ala Arg Arg Trp
            20                  25                  30
Gly Arg Thr Arg Ser Gly Cys Leu Asn Cys Arg Lys Lys Arg Arg Lys
        35                  40                  45
Cys Asp Glu Gly Lys Pro Thr Cys Leu Phe Ser Thr Thr Glu Xaa Ala
    50                  55                  60
Lys Asp Pro Lys Arg Ser Xaa Cys Xaa Arg Asn
65                  70                  75

<210> 36301
<211> 237
<212> PRT
<213> A.fumigatus

<400> 36301
Gly Ala Arg Cys Asn Arg Gln Cys His Pro Lys His Arg Pro Lys Arg
1               5                   10                  15
Val Pro Phe Leu Arg His Val Phe Phe Gly Val Ile Ala Ala Asn Ser
            20                  25                  30
Lys Thr Ser Ser Ser Glu Asp Trp Leu Asn Thr Gly Ile Thr Thr Thr
        35                  40                  45
Gly Trp Lys Pro Pro Phe Leu Ser Ile Asp Asp Val Tyr Thr Ile Ser
    50                  55                  60
Leu Gln Asp Phe Tyr Asn Gly Ile Gly Ser Ala Cys Ala Gln Tyr Asp
65                  70                  75                  80
Ser Tyr Phe Gln Ser Ser Ala Ser Lys Tyr Gly Val Asn Pro Val Ile
                85                  90                  95
Leu Ala Val Ile Ala Met Gln Glu Ser Ser Cys Asn Ala Asn Ala Gly
            100                 105                 110
Gly Pro Thr Pro Gly Leu Met Gln Val Ser Cys Asp Asn Tyr Pro Asn
        115                 120                 125
Gly Gln Cys Thr Asp Ser Ile Gln Asp Asn Val Asp Ala Gly Thr His
    130                 135                 140
Tyr Leu Lys Ser Gln Leu Asp Ala Ser Gly Gly Asn Ala Ile Lys Ala
145                 150                 155                 160
Leu Gly Ala Tyr Asn Gly Trp Phe Thr Ala Gly Ser Gly Leu Asn Gly
                165                 170                 175
Asn Arg Gly Leu Thr Lys Asp Tyr Pro Cys Ser Ala Glu Gly Lys Ala
            180                 185                 190
```

```
His Gly Met Pro Gln Asn Leu Asp Tyr Leu His Gln Val Leu Asn Gly
        195                 200                 205
Trp Met Met Gly Leu Asp Val Tyr Gly Lys Asp Asn Trp Ile Gly Thr
    210                 215                 220
Tyr His Cys Asp Gln Ser Cys Ser Asp Gly Ser Leu Cys
225                 230                 235
```

<210> 36302
<211> 105
<212> PRT
<213> A.fumigatus

<400> 36302

```
Val Phe Phe Pro Val Ser Leu Lys Trp Asp Gln Asp Asn Tyr Tyr Leu
1               5                   10                  15
Thr Ser Lys Arg Tyr Pro Phe Lys Met Ala Ser Val Tyr Gly Thr Gln
            20                  25                  30
Gln Asn Gly Gln Gly Glu Val Gly Lys Gln His Cys Tyr Ala Ile Gly
        35                  40                  45
Ser Ile Lys Ser Asn Arg Leu Val Ile Cys Leu Ala Asp Arg Leu Arg
    50                  55                  60
Thr Ile Gln Glu Lys Tyr Gly Val Lys Lys Arg Tyr Ile Cys Asn Gly
65                  70                  75                  80
Arg Gly Leu Ser Gln Tyr Pro Gly Gln Leu Lys Gly Asp Ile Phe Val
                85                  90                  95
Asn Cys Tyr Ser Leu Glu Asp Pro Gly
            100                 105
```

<210> 36303
<211> 159
<212> PRT
<213> A.fumigatus

<400> 36303

```
Ile Thr Pro Gln Lys Thr Ala Arg Glu Ile Met Ala Val Phe Lys Ser
1               5                   10                  15
Ile Thr Leu Thr Ser Leu Ala Leu Ala Ile Gly Ala Thr Ala Gln Ser
            20                  25                  30
Ala Asn Pro Gly Val Gly Lys Asn Pro Lys Ala Gln Gly Ala Thr Asp
        35                  40                  45
Asn Val Thr Pro Ser Thr Gly Pro Asn Gly Tyr Arg Ser Phe Ala Thr
    50                  55                  60
Tyr Phe Leu Glu Ser Leu Leu Leu Thr Val Lys His Leu Ala Pro Lys
65                  70                  75                  80
Thr Gly Ser Thr Pro Ala Ser Pro Pro Pro Ala Gly Ser Leu Pro Ser
                85                  90                  95
Ser Pro Ser Thr Thr Ser Thr Pro Ser Ala Phe Lys Thr Ser Thr Thr
            100                 105                 110
Ala Leu Val Pro Pro Ala Pro Ser Thr Thr Ala Thr Ser Lys Ala Ala
        115                 120                 125
His Pro Ser Thr Val Ser Thr Arg Ser Phe Ser Pro Ser Ser Leu Cys
    130                 135                 140
Arg Ser Pro Pro Ala Met Pro Thr Arg Glu Val Pro His Arg Ala
145                 150                 155
```

<210> 36304

<211> 65
<212> PRT
<213> A.fumigatus

<400> 36304
Val Ser Gln Arg Arg Ile Ile Pro Met Gln His Lys Asp Ile Ser Asn
1 5 10 15
Ala Thr Lys Ser Glu Gln Ser Val Asp Ile Lys Gln Arg Gln Gly Val
20 25 30
Glu Thr Leu Ser Thr Met Ile Glu Tyr Ile Tyr Thr Phe Phe Tyr Gln
35 40 45
Gln His Thr Gly Trp Leu Tyr Asp Phe Glu Pro Ile Gly Ser Phe Ser
50 55 60
Phe
65

<210> 36305
<211> 344
<212> PRT
<213> A.fumigatus

<400> 36305
Gln Leu Gln Phe Cys Tyr His Leu Cys Pro Asp Ala His Met Leu Ser
1 5 10 15
Asn Lys Leu Ala Ile Ala Ser Leu Ser Leu Gly Gln His Pro Ser His
20 25 30
His Leu Asp His Lys Ile Gln Ala Ala Ala Glu Ala Gly Tyr Lys Gly
35 40 45
Ile Glu Ile Val Tyr Phe Glu Leu Glu Ala Phe Ser Gln Ala Gln His
50 55 60
Ile Ser Ile Leu Glu Gly Ala Glu Lys Ile Arg Leu Ile Cys Gln Lys
65 70 75 80
Leu Asn Leu Asp Ile Leu Ser Leu Ala Pro Phe Glu Asn Tyr Glu Gly
85 90 95
Asp Arg Ser Pro Leu Ser Asp Arg Leu Gln Asn Ala Arg His Trp Ile
100 105 110
Ser Val Ala Arg Val Leu Asn Ala Ser Tyr Leu Gln Val Pro Ser Asn
115 120 125
Tyr Lys Leu Asp Ala Ile Gly Asp Lys Asp Val Val Ile Ser Glu Leu
130 135 140
Lys Gln Leu Ala Asp Ile Gly Ser Ala Glu Gln Pro Val Val Ser Ile
145 150 155 160
Ala Tyr Glu Tyr Leu Ser Trp Gly Thr His Cys Ser Thr Trp Glu Val
165 170 175
Ala Leu Gln Tyr Val Asn Gly Val Asp Arg Pro Asn Phe Gly Leu Cys
180 185 190
Leu Asp Thr Phe His Glu Ala Thr Lys Leu Trp Ala Asp Pro Phe Ala
195 200 205
Ser Ser Gly Arg Phe Pro Asp Ser Asp Arg Ser Leu Arg Glu Ser Leu
210 215 220
Asn Arg Phe Val Ser Thr Cys Pro Val Glu Lys Ile Phe Phe Ile Gln
225 230 235 240
Leu Ser Asp Gly Glu Arg Phe Asp Pro Ala Phe Ser Lys Gly His Pro
245 250 255
Trp Tyr Val Gln Gly Glu Ala Pro Gln Phe Thr Trp Ser Lys His Ala
260 265 270

```
Arg Leu Phe Pro Leu Glu His Asp His Gly Ala Tyr Leu Pro Ile Thr
        275                 280                 285
Glu Ile Ala Glu Ala Trp Ile His Gly Val Gly Phe Lys Gly Trp Val
    290                 295                 300
Ser Met Glu Ile Phe Asp Arg Arg Met Arg Asp Arg Arg Thr Gln Pro
305                 310                 315                 320
Glu Thr Ala Ala Met Arg Gly Leu Arg Ser Trp Arg Thr Leu Arg Arg
                325                 330                 335
Glu Leu Glu Pro Val Ser Lys Val
            340
```

<210> 36306
<211> 97
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (50)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36306

```
Ser Cys Cys Pro Thr Asp Glu Pro His Thr Thr His Gln Asn Leu Pro
1               5                   10                  15
Leu Leu Arg Pro Ala Pro Leu Asp Tyr Pro Ile His Asn Arg Pro Gly
            20                  25                  30
Thr Asn Pro Ser Phe Leu Leu Leu Gln Pro Ser Pro Pro Ala Ala Pro
        35                  40                  45
Thr Xaa Lys Leu Pro Leu Ser Thr Pro Thr Pro Pro Pro Pro Leu Pro
    50                  55                  60
Ser Ser Pro Arg Ala Ala Pro Ser Leu Thr Pro Arg Lys Leu Ala Ser
65                  70                  75                  80
Leu Trp Pro Leu Gln Lys Thr Cys Pro Pro Pro Phe Pro Pro Ser Asn
                85                  90                  95
Phe
```

<210> 36307
<211> 572
<212> PRT
<213> A.fumigatus

<400> 36307

```
Gly Thr Gly Ala Asp Leu Asp Ile Tyr Asn Ser Leu Thr Pro Thr Pro
1               5                   10                  15
Met Leu Ser Ser Gly Leu Leu Pro Arg Arg Phe Val Gly Trp Ile Thr
            20                  25                  30
Trp Arg Asp Asn Cys Val Cys Ile Met Ser Cys Gly Trp Arg Ile Asn
        35                  40                  45
Ala Leu Arg Gly Ser Cys Trp Leu Trp Trp Trp Trp His Arg Val Asp
    50                  55                  60
Ile His Asp Leu Leu Ala Gly Tyr Phe Gln Ala Gln Met Asp Lys Ala
65                  70                  75                  80
Gly Ile Pro Met Arg Ser Ser Thr Glu Phe Ser Asp Thr Leu Ala Ala
                85                  90                  95
Pro Leu Ala Ser Glu Ile Asp Glu Leu Ala Glu Arg Ser Glu Ser Leu
```

```
            100                 105                 110
Glu Gln Arg Ile Ala Ser Leu Asn Asp Ser Tyr Glu Thr Leu Lys Lys
        115                 120                 125
Arg Glu Val Glu Leu Thr Glu Trp Arg Trp Val Leu Arg Glu Ala Gly
    130                 135                 140
Gly Phe Phe Asp Arg Ala His Thr His Thr Asp Glu Ile Arg Gln Ser
145                 150                 155                 160
Phe Asp Asn Asp Glu Ala Pro Leu Leu Arg Asp Val Glu His Gln Pro
                165                 170                 175
Ser Arg Gly Pro Asn Gly Asp Ala Gln Ala His Gln Ser Phe Leu Glu
            180                 185                 190
Met Asn Ile Gly Phe Val Ala Gly Val Ile Pro Arg Asp Arg Ile Gly
        195                 200                 205
Ala Phe Glu Arg Ile Leu Trp Arg Thr Leu Arg Gly Asn Leu Tyr Met
    210                 215                 220
Asn Gln Ser Glu Ile Pro Glu Pro Ile Ile Asp Pro Thr Thr Asn Glu
225                 230                 235                 240
Glu Ser His Lys Asn Val Phe Val Ile Phe Ala His Gly Lys His Ile
                245                 250                 255
Ile Ser Lys Ile Arg Lys Ile Ser Glu Ser Leu Gly Ala Ser Leu Tyr
            260                 265                 270
Gly Val Asp Glu Asn Ser Glu Leu Arg Arg Asp Gln Ile His Glu Val
        275                 280                 285
Asn Thr Arg Leu Ser Asp Val Gly Asn Val Leu Arg Asn Thr Lys Asn
    290                 295                 300
Thr Leu Asp Ala Glu Leu Thr Gln Ile Ala Arg Ser Leu Ala Ala Trp
305                 310                 315                 320
Met Ile Ile Val Lys Lys Glu Lys Ala Val Tyr Asp Thr Leu Asn Lys
                325                 330                 335
Phe Ser Tyr Asp Gln Ala Arg Lys Thr Leu Ile Ala Glu Ala Trp Cys
            340                 345                 350
Pro Thr Asn Ser Leu Ala Leu Ile Lys Ser Thr Leu Gln Asp Val Asn
        355                 360                 365
Asp Arg Ala Gly Leu Ser Val Pro Thr Ile Val Asn Gln Ile Arg Thr
    370                 375                 380
Asn Lys Thr Pro Pro Thr Tyr Val Lys Thr Asn Lys Phe Thr Glu Ala
385                 390                 395                 400
Phe Gln Thr Ile Val Asn Ala Tyr Gly Ile Pro Lys Tyr Ser Glu Ala
                405                 410                 415
Asn Pro Gly Leu Tyr Thr Val Val Thr Phe Pro Phe Leu Phe Ala Val
            420                 425                 430
Met Phe Gly Asp Phe Gly His Gly Ala Leu Met Ala Met Ala Ala Ser
        435                 440                 445
Ala Met Ile Phe Trp Glu Arg Lys Leu Gln Lys Thr Lys Leu Asp Glu
    450                 455                 460
Leu Thr Tyr Met Ala Phe Tyr Gly Arg Tyr Ile Met Leu Met Met Gly
465                 470                 475                 480
Leu Phe Ser Met Tyr Thr Gly Leu Ile Tyr Asn Asp Val Phe Ser Lys
                485                 490                 495
Ser Phe Thr Val Phe Pro Ser Gln Trp Lys Trp Pro Asp Ser Ile Lys
            500                 505                 510
Lys Gly Gln Thr Val Glu Ala Ser Leu Thr Asn Ser Tyr Arg Tyr Pro
        515                 520                 525
Phe Gly Leu Asp Trp Asn Trp His Glu Ala Glu Asn Ser Leu Leu Phe
    530                 535                 540
Thr Asn Ser Met Lys Met Lys Met Ser Ile Ile Leu Gly Trp Ala His
```

545 550 555 560
Val Ser Asp Ile Leu Leu Leu Val Lys Trp Pro Gly
565 570

<210> 36308
<211> 68
<212> PRT
<213> A.fumigatus

<400> 36308
Ser Ser Leu Trp Trp Lys Glu Pro Ala Ala Gly Ser Asp Ala Phe Thr
1 5 10 15
Met Ala Pro Arg Asp Thr Phe Phe Arg Ser Ser Asp Met Ser Leu Thr
20 25 30
Gln Leu Tyr Ile Ala Asn Glu Ile Gly Arg Glu Val Val Ser Ala Leu
35 40 45
Gly Glu Leu Gly Gln Val Gln Phe Arg Asp Val Ser Cys Thr Val Pro
50 55 60
Ala Arg Gly Gly
65

<210> 36309
<211> 166
<212> PRT
<213> A.fumigatus

<400> 36309
Met Thr Tyr Ala Leu Cys Leu Gln Tyr Val Asn Ala Arg His Phe Lys
1 5 10 15
Ser Lys Val Asp Ile Ile Gly Asn Phe Ile Pro Gly Met Ile Phe Phe
20 25 30
Gln Ser Ile Phe Gly Tyr Leu Val Leu Thr Ile Ile Tyr Lys Trp Ser
35 40 45
Val Asn Trp Glu Ala Arg Gly Gln Ser Pro Pro Gly Leu Leu Asn Met
50 55 60
Leu Ile Phe Met Phe Leu Ser Pro Gly Thr Val Glu Glu Gln Leu Tyr
65 70 75 80
Lys Gly Gln Ala Gly Val Gln Val Val Leu Leu Leu Leu Ala Val Val
85 90 95
Gln Val Pro Ile Met Leu Phe Phe Lys Pro Phe Tyr Leu Arg Trp Glu
100 105 110
His Asn Arg Ala Arg Ala Leu Gly Tyr Arg Gly Leu Gly Glu His Ala
115 120 125
Arg Val Ser Ala Leu Glu Asp Asp Thr Asp Met Asn Gly Gly Val Ser
130 135 140
Arg Pro Arg Asp Ser Met Ala Ser Asp Gly Glu Gly Val Ala Met Ile
145 150 155 160
Ala Gln Asp Leu Gly Asp
165

<210> 36310
<211> 1016
<212> PRT
<213> A.fumigatus

<400> 36310

```
Ser Thr Ile Ala Phe Pro Leu Lys Ser Ile Leu Lys Pro Thr Ile Pro
1               5                  10                  15
Val Ser Pro Val Arg Asn Ile Pro Ser Phe Glu Glu Thr Arg Lys His
            20                  25                  30
Thr Pro Ala Arg Gly Ala Gln Gln Asp Gly Val His Gly Asp Asn Lys
        35                  40                  45
Asp Lys Gly Lys Gly Asp Leu Leu Val Asp Ile Glu Thr Pro Ala Gln
    50                  55                  60
Pro Ser Ala Ser Gly Pro Glu Asp Pro Ala Asn Pro Phe Asp Ser Phe
65                  70                  75                  80
Asn Ala Ser Ser Ala Ile Ala Ala Ala Arg Glu Gln Glu Glu Lys Glu
                85                  90                  95
Arg Arg Glu Arg Glu Arg Gln Ile Ile Leu Glu Lys Arg Glu Ala Arg
            100                 105                 110
Arg Lys Ser Met Gly Lys Ser Ala Ser Ser Ser Glu Ile Ile Pro Leu
        115                 120                 125
Ala Lys Thr Cys Leu Arg Lys Ala Asn Arg Arg Val Ser Phe Ala Pro
    130                 135                 140
Glu Ala Thr Leu His Thr Trp Asn Val Val Glu Ile Pro Asp Asp Ser
145                 150                 155                 160
Thr Ser Ser Ser Ala Ser Asn Ser Thr Arg Arg Ala Ser Ser Leu Ala
                165                 170                 175
Glu Asn Gln Ala Pro Thr Pro Ala Ala Ile Gln Arg Glu Pro Pro Ser
            180                 185                 190
Thr Pro Asp Thr Val Ala Glu Ser Asp Ile Ala Phe Ser Pro Val Glu
        195                 200                 205
Tyr Pro Asp Leu Gln Glu Leu Arg Asn Arg Ser Phe Ser Ala Tyr Asp
    210                 215                 220
Glu His Ala Thr Ser Gln Asp Leu Ser Ser Ser Pro Phe Ser Gly Gly
225                 230                 235                 240
Ser Ala Asp Gly Leu Glu Asp Thr Ser Leu Gln Asp Val Pro Arg Glu
                245                 250                 255
Gly Asp Asp Asp Asp Asp Asp Asp Asn Ser Ser Gly Ser Gly Phe Asp
            260                 265                 270
Gly Glu Ser Thr Ala Met Ser Met Asp Asn Met Thr Val His Ser Thr
        275                 280                 285
Ala Ser Ala Arg Ser Asp Arg Ser Ser Ser Ser Thr Ser Ser Ser Ala
    290                 295                 300
Arg Leu Asn Glu Ala Leu Arg Gln Ala Ala Lys Glu Ala Gly Thr Arg
305                 310                 315                 320
Gly Ile Asp Tyr Asp Glu Asp Gly Glu Met Ser Met Glu Ile Ala Asp
                325                 330                 335
Gln Glu Ile Thr Gly Ala Phe Gln Pro Trp Ile Lys Lys Gly Gln Arg
            340                 345                 350
Gln Ser Phe Glu Trp Glu Asp Ile Ser Ala Leu His Asp Gln Glu Asn
        355                 360                 365
Ile Asn Pro Ser His Asn Ser Ile Gln Ser Ser Thr Val Pro Asn Asp
    370                 375                 380
Ser Ala Asp Ile Ala Asp Asp Asp Leu Ser Met Glu Val Thr Asn Ala
385                 390                 395                 400
Ile Gly Arg Ile Ile Gln Pro Ser Arg Arg Gln Ser Thr Val Arg Arg
                405                 410                 415
Lys Ser Met Ser Glu Glu Thr Asn Tyr Asp Glu Gln Thr Met Glu Phe
            420                 425                 430
Thr Asn Val Ile Gly Gly Ile Lys Gln Ser Ala Ser Pro Thr Arg Ser
        435                 440                 445
```

```
Ala Gly Gly Glu Ser Asn Ala Ser Asp Glu Glu Met Thr Met Glu Phe
    450                 455                 460
Thr Ser Val Val Gly Gly Val Leu Asn Lys Pro Phe Gln Thr Gln His
465                 470                 475                 480
Ser Glu Glu Ala Asn Thr Gly Gly Trp Asn Asp Glu Asp Asp Gly Gly
                485                 490                 495
Ser Met Glu Gly Glu Ala Asp Met Glu Met Thr Gly Ala Val Gly Gly
            500                 505                 510
Ile Leu Ser Ala Thr Gly Thr Arg Asp Gly Gln Asp Glu Asp Gln Thr
        515                 520                 525
Val Gly Met Glu Leu Thr Thr Ala Met Gly Arg Ile Leu Pro Ala Thr
    530                 535                 540
Val Asp Gln Asn Gln Glu Arg Arg Asp Ala Asn Ser Glu Ser Glu Asn
545                 550                 555                 560
Glu Gln Pro Gln Ser Ser Pro Phe Gln Glu Asn Val Arg Gln Ser Pro
                565                 570                 575
Ser Lys Ser Pro Val Ser Phe His Leu Ala Ala Ile Ala Ser Glu Ser
            580                 585                 590
Gly Ser Pro Ser Leu Ala Ser Val Arg Pro Arg Ser Thr Arg Gln Ser
        595                 600                 605
Leu Ser Arg Arg Met Ser Asn Thr Pro Ser Ala His Ser Pro His Gln
    610                 615                 620
Ser Pro Val Lys Asn Thr Leu Thr Ser Pro Lys Asp Ser Thr Pro Gln
625                 630                 635                 640
Ala Ser Gln Ser Met Thr Pro Ser Lys Thr Pro Leu Ser Met Thr Asn
                645                 650                 655
Asn Arg Ser Ala Ser Pro Arg Lys Leu Phe Gln Ser Glu Thr His Leu
            660                 665                 670
Ser Ala Ser Lys Asp Lys Ser Leu Gly Arg Lys Ser Leu Phe Gly Ser
        675                 680                 685
Thr Ala Val Thr Gly Glu Ala Val Pro Leu Phe Val Leu Arg Pro His
    690                 695                 700
Glu Lys Arg Arg Ser Ser Gly Leu Gly Ile Asp Lys Glu Gly Leu Gly
705                 710                 715                 720
Ser Pro Arg Val Ala Ala Met Leu Asp Lys Arg Arg Ser Ile Gly Glu
                725                 730                 735
Asp Ala Pro Arg Phe Val Pro Gln Glu Gln Pro Lys Ser Gly Val Arg
            740                 745                 750
Phe Glu Asp Pro Leu Lys Leu Gln Glu Glu Val Asp Met Glu Arg Glu
        755                 760                 765
Glu Glu Glu Lys Arg Glu Asp Gly His Ile Pro Pro Leu Gln Leu Asp
    770                 775                 780
Pro Thr Ala Asn Leu Lys Asp Met Ile Ser Ser Leu Thr Pro Lys Lys
785                 790                 795                 800
Asn Lys Leu Arg Gly Arg Lys Ser Leu His Val Gly Ala Ala Arg Gly
                805                 810                 815
Leu Leu Gly Lys Arg Pro Val Glu Leu Asp Gln Asp Asp Glu Glu Glu
            820                 825                 830
Ala Asp Asn Thr Pro Lys Arg Leu Lys Gly Arg Asn Ala Ser Pro Val
        835                 840                 845
Lys Ser Ile Lys Leu Pro Ala Pro Pro Thr Lys Asp Glu Thr Val Gly
    850                 855                 860
His Leu Lys Arg Ser Pro Thr Arg Arg Ser Val Val Ala Pro Pro Ile
865                 870                 875                 880
Glu Gly Ser Thr Thr Pro Ser Gln Glu Pro Lys Thr Ser Ser Leu Ser
                885                 890                 895
```

```
Leu Thr Pro Ala Lys Asp Val Ser Glu Ser Phe Asn Ser Ser Thr Glu
            900                 905                 910
Ser Thr Ser Thr Glu Glu Gly Asn Val Ala Pro Gln Asp Ser Glu Pro
        915                 920                 925
Glu Phe Glu Pro Ile Gln Leu Gln Asp Phe Leu Asn Met Thr Asn Ile
    930                 935                 940
His Phe Met Glu Leu Thr Thr Thr Lys Arg Arg His Thr Thr Ala Pro
945                 950                 955                 960
Gly Ser Val Ser Lys Arg Thr Ala Arg Leu Ser Ala Glu Ser Lys Ala
                965                 970                 975
Ala Thr Ala Ser Phe Glu Asp Cys Val Ala Ala Gly Phe Cys Thr Val
            980                 985                 990
Pro Met Leu Glu Leu Tyr Gln His Val Ser Cys Leu Leu Ser Val Arg
        995                 1000                1005
Pro Arg Cys Leu Leu Thr Pro Ser
    1010                1015

<210> 36311
<211> 233
<212> PRT
<213> A.fumigatus

<400> 36311
Ser Cys Arg Glu Leu Lys Ser Tyr Ile Ser Glu Gly Arg Gln Val Ile
1               5                   10                  15
Arg Ser Ile Glu Ala Glu Thr Tyr Ala Glu Asn Pro Pro Leu Phe Arg
            20                  25                  30
Glu Tyr Ala Thr Ala Pro Pro Asp Ile Arg Leu Leu Met Asp Asn Gln
        35                  40                  45
Phe Arg Asn Val Lys Thr His Ala Arg Leu Gln Ser Lys Ala Thr Trp
    50                  55                  60
Tyr Glu Trp Arg Met Lys Leu Leu Glu Gly Leu Lys Glu Gly Leu Tyr
65                  70                  75                  80
Arg His Val Asp Glu Met Lys Ala Asp Gly Asp Leu Leu Thr Lys Tyr
                85                  90                  95
Glu Thr Leu Leu Asp Gly Ile Val Pro Ala Leu Val Glu Lys Gln Ser
            100                 105                 110
Ala Leu Gln Glu Glu Ala Ala Asn Leu Gln Gln Leu Thr Asp Glu Met
        115                 120                 125
Glu Ser Cys Asp Gln Asp Glu Leu Arg Asn Ala Arg Glu Lys Leu Ser
    130                 135                 140
Ser Leu Glu Asp Glu Ile Glu Leu Lys Lys Lys Gln Leu Gln Glu Leu
145                 150                 155                 160
Gln Gly Gln Val Gln Glu Lys Thr Asn Ser Leu Glu Ser Gly Ala Glu
                165                 170                 175
Leu Lys Ala Glu Phe Leu Ala Gln Ile Lys Glu Ala Glu Arg Val Lys
            180                 185                 190
Glu Glu Cys His Gly Trp Ser Ala Lys Glu Ile Ser Glu Leu Thr Gly
        195                 200                 205
Lys Ile Thr Arg Ser Leu Glu Tyr Tyr Ala Cys Ser Thr Ile Ala His
    210                 215                 220
Asn Leu Asp Arg Ile Arg Ser Glu Asn
225                 230

<210> 36312
<211> 69
```

<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (49),(66)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36312
Arg Glu Arg Gln Pro Ala Ser Leu Ser Glu Ile Pro Pro Arg Lys Arg
1 5 10 15
Arg Gln Val Asp Gly Thr Ser Ala Ala Ala Val Ser Tyr Arg Leu Ala
20 25 30
Lys Ser Gln Ile Ser Ser Glu Ala Pro Gln Asn Leu Glu His Lys Thr
35 40 45
Xaa Pro Ile Ser Ser Lys Gln Phe Leu Arg Phe Ile Ser Met Pro Gly
50 55 60
Thr Xaa Gly Ser Ala
65

<210> 36313
<211> 70
<212> PRT
<213> A.fumigatus

<400> 36313
Asp Thr Arg Cys Ile Ala Ala Leu Lys Leu Ala Ala Phe Gly Ile Asp
1 5 10 15
Ser Gln Trp Leu Thr Gly Phe Pro Ser Pro Gly Phe Arg Asn Thr Leu
20 25 30
Ala Ala His Pro Ala Asp Asn Ser Leu Gly Pro Lys Pro Ser Gly Phe
35 40 45
His Asp Ser Arg Ile Arg Thr Cys His Ser Cys Ser Arg Thr Asp Ala
50 55 60
Phe Ser Ser Met Arg Cys
65 70

<210> 36314
<211> 540
<212> PRT
<213> A.fumigatus

<400> 36314
Met Ile Ser Thr Ala Met Thr Glu Gln His Lys Lys Gly Ser Leu Asp
1 5 10 15
Glu Ser Ser Gly Gly His Gln Asp Thr Gln Thr Thr Met Asp Ser Pro
20 25 30
Arg Lys Asp Thr Ile Gln Asn Asp Lys Val Ser Thr Gln Pro Lys Arg
35 40 45
Thr Leu Phe Val Arg Ser Leu Pro Thr Ser Ala Thr Thr Glu Ser Leu
50 55 60
Thr Glu Tyr Phe Ser Gln Ser Tyr Val Ile Lys His Ala Ile Val Val
65 70 75 80
Asn Asp Pro Glu Thr Lys Leu Cys Lys Gly Tyr Gly Phe Val Thr Phe
85 90 95
Ala Asp Leu Glu Asp Ala Gln Ala Ala Leu Lys Glu Phe Asn Gly Ser

```
            100                 105                 110
Val Phe Glu Gly Lys Thr Ile Arg Val Asp Tyr Ala Gln Pro Arg His
        115                 120                 125
Arg Glu Ile Asp Glu Asn Leu Gly Lys Ser Val Pro Ala Pro Ala Ala
    130                 135                 140
Leu Glu Leu Lys Lys Gln Arg Gln Gln Gln Lys Thr Ser Thr Gln Pro
145                 150                 155                 160
Pro Lys Leu Ile Val Arg Asn Leu Pro Trp Ser Ile Lys Glu Pro Glu
                165                 170                 175
Asp Leu Ala Val His Phe Arg Ser Phe Gly Lys Val Lys Tyr Val Thr
            180                 185                 190
Leu Pro Lys Lys Gly Asp Lys Leu Ala Gly Phe Gly Phe Val Val Leu
        195                 200                 205
Arg Gly Lys Lys Asn Ala Glu Lys Ala Leu Gln Ala Val Asn Gly Lys
    210                 215                 220
Glu Val Asp Gly Arg Thr Leu Ala Val Asp Trp Ala Val Glu Lys Glu
225                 230                 235                 240
Val Trp Glu Asn Leu Lys Lys Glu Ser Glu Lys Lys Glu Asp Thr Gln
                245                 250                 255
Glu Glu Ala Gly Ser Ser Asp Val Glu Met Ala Asp Asp Ala Glu Thr
            260                 265                 270
Thr Ser Asp Asn Glu Gly Val Glu Ser Asp Asp Asp Asp Glu Asp Glu
        275                 280                 285
Asp Met Asp Asp Asp Asp Glu Glu Asp Glu Glu Asp Met Asp Glu Glu
    290                 295                 300
Glu Asp Glu Asp Glu Gly Asn Glu Asp Glu Arg Gln Glu Lys Glu Asp
305                 310                 315                 320
Glu Arg Asn Ala Cys Thr Ile Phe Ile Arg Asn Leu Pro Phe Ser Cys
                325                 330                 335
Thr Asp Glu Ala Leu Tyr Glu His Phe Thr Gln Phe Gly Pro Leu Arg
            340                 345                 350
Tyr Ala Arg Ile Val Val Asp Pro Glu Thr Glu Arg Pro Arg Gly Thr
        355                 360                 365
Gly Phe Val Cys Phe Trp Lys Val Glu Asp Ala Ala Leu Cys Val Arg
    370                 375                 380
Glu Ala Pro Lys Gln Gln Asp Thr Leu Ile Ala Glu Lys Asp Lys Gly
385                 390                 395                 400
Lys Lys Ser Ser Thr Ala Leu Lys His Ser Ile Leu Gln Asn Glu Asn
                405                 410                 415
Ser Asp Pro Ser Gly Arg Tyr Thr Leu Asp Gly Arg Val Leu Gln Val
            420                 425                 430
Ala Arg Ala Val Ser Lys Ser Gln Ala Ala Lys Leu Glu Glu Glu Gly
        435                 440                 445
Val Ser Lys Arg Leu Val Arg Asp Thr Asp Lys Arg Arg Leu Phe Leu
    450                 455                 460
Leu Gln Glu Gly Thr Ile Ser Pro Asn Ser Pro Leu Tyr His Lys Leu
465                 470                 475                 480
Ser Pro Ser Glu Ile Lys Met Arg Glu Asp Ser Phe Lys Gln Arg Gln
                485                 490                 495
Asn Phe Ile Arg Lys Asn Pro Ala Leu His Phe Ser Leu Thr Arg Leu
            500                 505                 510
Ser Val Arg Asn Ile Pro Arg His Val Thr Ser Lys Asp Leu Lys Gln
        515                 520                 525
Leu Ala Arg Gln Ala Val Val Gly Phe Ala Lys Asp
    530                 535                 540
```

<210> 36315
<211> 66
<212> PRT
<213> A.fumigatus

<400> 36315
Ser Glu Tyr Ser Ser Ile Asn Tyr Ser Thr Ser Val Phe Pro Lys Ser
1 5 10 15
Arg Lys Gly Cys Ala Asn Ala Phe Thr His Phe Leu Leu Ile Gly Leu
20 25 30
Pro Trp Ser Val Asp Phe Trp Gly Ser Phe Phe Arg Ile His Pro Thr
35 40 45
Pro Leu Ser Arg Phe Arg Lys Val Gln Gly Cys Phe Ile Phe Val Ser
50 55 60
Arg Ile
65

<210> 36316
<211> 213
<212> PRT
<213> A.fumigatus

<400> 36316
Ser Ala Ser Ser Val His Glu Lys Gly Arg Phe Arg Met Lys Ile Val
1 5 10 15
Gln Ala Phe Arg Ser Ser Ser Phe Ser Cys Leu Ser Ser Ser Leu Pro
20 25 30
Ser Ser Ser Ser Ser Ser Ser Ser Ile Ser Ser Ser Ser Ser Ser Ser
35 40 45
Ser Ser Ser Ile Ser Ser Ser Ser Ser Ser Ser Ser Asp Ser Thr Pro
50 55 60
Ser Leu Ser Asp Val Val Ser Ala Ser Ser Ala Ile Ser Thr Ser Leu
65 70 75 80
Asp Pro Ala Ser Ser Trp Val Ser Ser Phe Phe Ser Asp Ser Phe Phe
85 90 95
Lys Phe Ser His Thr Ser Phe Ser Thr Ala Gln Ser Thr Ala Ser Val
100 105 110
Leu Pro Ser Thr Ser Leu Pro Leu Thr Ala Cys Ser Ala Phe Ser Ala
115 120 125
Phe Phe Phe Pro Arg Lys Thr Thr Lys Pro Asn Pro Ala Ser Leu Ser
130 135 140
Pro Phe Leu Gly Ser Val Thr Tyr Leu Thr Leu Pro Lys Leu Leu Lys
145 150 155 160
Cys Thr Ala Arg Ser Ser Gly Ser Leu Met Leu Gln Gly Lys Phe Arg
165 170 175
Thr Met Ser Phe Gly Gly Trp Val Asp Val Phe Cys Cys Cys Arg Cys
180 185 190
Phe Leu Ser Ser Arg Ala Ala Gly Ala Gly Thr Leu Phe Pro Arg Phe
195 200 205
Ser Ser Ile Ser Arg
210

<210> 36317
<211> 352
<212> PRT
<213> A.fumigatus

<400> 36317
Gln His Tyr Arg Ser Leu Glu Asp Cys Ala Lys Met Ala Lys Asp Ile
1 5 10 15
Asp Thr Asn Asn Ala Asp Pro Asp His Gly Leu Pro Glu Arg Ser Ala
20 25 30
Thr Pro Arg Ala Ala Gly Gly Thr Pro Asn Ser Ala Thr Ala Gln Ser
35 40 45
Thr Ala Pro Lys Val Gln Gln Pro Lys Pro Gln Ala Leu Ala Asn Arg
50 55 60
Thr Gly Pro Ser Ala Ile Leu Val Ser Thr Arg Gln Lys Gly Asn Pro
65 70 75 80
Ile Leu Asn His Ile Lys Leu Leu Pro Trp Glu Tyr Ala Asp Ile Pro
85 90 95
Ala Asp Tyr Val Val Gly Ala Thr Thr Cys Ala Leu Phe Leu Ser Leu
100 105 110
Lys Tyr His Arg Leu His Pro Glu Tyr Ile Tyr Ser Arg Ile Lys Ala
115 120 125
Leu Gly Gly Lys Tyr Met Leu Arg Ile Ile Leu Val Met Val Asp Ile
130 135 140
Glu Asn His Glu Asp Ser Leu Lys Glu Leu Ser Lys Thr Ser Ile Ile
145 150 155 160
Asn Asn Tyr Thr Leu Met Leu Cys Trp Ser Ala Pro Glu Ala Ala His
165 170 175
Tyr Leu Glu Leu Tyr Lys Ser Ser Glu Asn Ala Gln Pro Thr Ala Ile
180 185 190
Arg Thr Gln Gln Ala Gln Ser Tyr Lys Glu Ser Leu Val Glu Phe Val
195 200 205
Thr Thr Pro Arg Ser Ile Asn Lys Ser Asp Ala Ala Ser Leu Ile Ser
210 215 220
Thr Phe Gly Ser Leu Gln Asn Ala Ile Asn Ala Gln Pro Glu Gln Ile
225 230 235 240
Ser Ala Val Pro Gly Trp Gly Glu Lys Lys Val Arg Gln Trp Thr Asn
245 250 255
Ala Val Arg Glu Asp Phe Arg Val Glu Asn Ala Lys Lys Ala Lys Ala
260 265 270
Pro Glu Arg Asn Ile Glu His Asp Gln Asn Pro Ser Gly Leu Gly Ile
275 280 285
Val Ser Gln Thr Gly Pro Ser Asn Thr Ala Asp Glu Asp Glu Ala Ala
290 295 300
Leu Tyr Leu Ser Glu Ala Gly Gln Arg Ser Gly Val Asp Ala Lys Lys
305 310 315 320
Gly Ala Pro Glu Val Asp Thr Pro Arg Gln Ser Asn Gln Glu Glu Met
325 330 335
Ser Glu Gly Ile Ser Ala Ala Leu Ala Arg Leu Arg Glu Asn Gly Gly
340 345 350

<210> 36318
<211> 256
<212> PRT
<213> A.fumigatus

<400> 36318
Pro Ser Ile Leu Arg Val Thr Ile Val Asp Pro Ser Val Gly His Val
1 5 10 15
Val Ser Thr Ile Ser Ala Glu Asn Val Phe Glu Leu Gly Phe Ser Pro

```
            20                  25                  30
Leu Gly Thr Tyr Leu Ile Thr Trp Gln Arg Pro Ser Lys Asp Ala Asn
        35                  40                  45
Gly Asp Ala Val Lys Asn Leu Lys Val Trp Lys Val Ile Glu Thr Ser
    50                  55                  60
Pro Glu Ser Asn Gly Asp Glu His Thr Val Val Gly Ser Phe Val Gln
65                  70                  75                  80
Lys Ser Gln Thr Gly Trp Asn Leu Gln Tyr Thr Phe Asp Glu Ser Leu
                85                  90                  95
Cys Ala Arg Val Val Thr Asn Glu Val Gln Phe Phe Gln Ser Asp Asn
            100                 105                 110
Leu Ser Lys Val Trp Asn Lys Leu Arg Val Glu Gly Val Ser Asp Phe
        115                 120                 125
Ala Leu Ser Pro Gly Lys Asn Asn Ser Ile Ala Val Phe Ile Pro Glu
    130                 135                 140
Arg Lys Val Gly Phe Leu Phe Phe Arg Phe Asp Arg Gly Ser Phe Thr
145                 150                 155                 160
Lys Ile Tyr Ser Arg Leu Thr Trp Phe Phe Ala Ser Arg Val Asn Gln
                165                 170                 175
Gln Arg Ser Arg Cys Ser Thr Cys Leu Ser Ser Glu Arg Pro Ser Pro
            180                 185                 190
Arg Arg Ala Phe Ser Arg Val Thr Arg Ser Ser Ser Ser Gly Thr Ala
        195                 200                 205
Met Glu Arg Leu Cys Trp Cys Leu Arg Arg Pro Arg Ser Ile Ala Ala
    210                 215                 220
Ala Arg Val Thr Thr Glu Lys Gln Leu Cys Thr Cys Leu Ala Pro Met
225                 230                 235                 240
Val Ala Leu Ile Arg Val Trp Thr Leu Val Ser Leu Ser Gly Val Ser
                245                 250                 255
```

<210> 36319
<211> 274
<212> PRT
<213> A.fumigatus

<400> 36319

```
Arg Val Leu Leu Cys Tyr Arg Gly Thr Pro Asn Ser Gly Thr Thr Ser
1               5                   10                  15
Leu Ser Ala Leu Ser Thr Thr Ala Ile Lys Asp Gly His Gln Gly Gln
            20                  25                  30
Pro Leu Pro His Arg Arg His Ala His His Ser Ser Ser Ala Ser Ala
        35                  40                  45
Thr Ser Thr Ser Thr Leu Glu Ala Glu Arg Ala Asp Arg Ile Ser Arg
    50                  55                  60
Leu Ala Gly Leu Glu Arg Val Ala Thr Ala Arg Ala Gly Gly Val Pro
65                  70                  75                  80
Gln Ser Asn Leu Met Phe Ala Thr Ala His Gly Pro Gly Tyr Phe Asp
                85                  90                  95
Gly Gly Ser Gly Phe Lys Glu Arg Ser Thr Val Gly Ser Ala Ser Ala
            100                 105                 110
Thr Gly Ser Val Gly Ala Arg Thr Thr Trp Ala Ser Gly Ser Asp Ala
        115                 120                 125
Leu Asp Ala Asp Lys Met Ser Glu Asp Thr Asn Asp Asp Asp Glu Thr
    130                 135                 140
Ser Ser Val Gly Asn Ile Ser Glu Gly Asp Ala Ser Leu Val Ala Phe
145                 150                 155                 160
```

```
Gly Glu Gly Ala Ser Thr Ile Ser Gly Pro Ile Ser His Pro Thr Leu
                165                 170                 175
Asn Arg Met Ser Ser Gly Gly Arg Pro Ser Ser Leu Gly Ala Gly Ser
            180                 185                 190
Pro Asn Met Ser Arg Ala Asn Pro Leu Thr Ser Tyr Gln Pro Gly Val
        195                 200                 205
Glu Asp Ser Ala Ala Val Ser Ser Ser Leu Ser Pro Ala Gly Ser Asn
    210                 215                 220
Met Pro Glu Gln Met His Asp Ala Arg Met Leu Asp Gly Val Thr Tyr
225                 230                 235                 240
Asp Ser Asp Val Val Asp Thr Thr Val Arg Thr Pro Arg Ala Gly Pro
                245                 250                 255
Pro His Pro Ala Met Ala Ser Leu Pro Thr Gly Thr Met Thr Arg Glu
            260                 265                 270
Gly Asn
```

<210> 36320
<211> 72
<212> PRT
<213> A.fumigatus

<400> 36320

```
Leu His Arg Thr Asp Lys Glu Gly Pro Ile His Asp Val Ser Trp Asn
1               5                   10                  15
Pro Asn Ser Lys Glu Phe Gly Val Val Tyr Gly Tyr Met Pro Ala Lys
            20                  25                  30
Thr Thr Ile Phe Asn Phe Arg Gly Val Ala Lys His Ser Phe Pro Leu
        35                  40                  45
Ala Pro Arg Asn Thr Ile Leu Phe Ser Pro His Gly Arg Phe Val Leu
    50                  55                  60
Val Ala Val Phe Thr Thr Gly Asn
65                  70
```

<210> 36321
<211> 191
<212> PRT
<213> A.fumigatus

<400> 36321

```
Ser Trp Ile Phe His Lys Asp Leu Gln Pro Thr Tyr Leu Val Leu Cys
1               5                   10                  15
Val Gln Gly Gln Pro Ala Ala Val Lys Val Phe Asn Val Pro Gln Phe
            20                  25                  30
Gly Ala Pro Ile Ser Gln Lys Ser Phe Phe Lys Gly Asp Lys Val Gln
        35                  40                  45
Leu Lys Trp Asn Ser Asn Gly Thr Thr Leu Leu Val Leu Ala Gln Thr
    50                  55                  60
Glu Val Asp Arg Ser Gly Lys Ser Tyr Tyr Gly Glu Thr Thr Leu Tyr
65                  70                  75                  80
Leu Leu Ser Ala Asn Gly Gly Phe Asp Ser Arg Val Asp Leu Gly Lys
                85                  90                  95
Ser Phe Arg Cys Val Leu Ala His Arg Thr Phe Ala Asp Ser Thr Val
            100                 105                 110
Gln Thr Arg Lys Val Arg Phe Thr Met Cys Pro Gly Ile Pro Thr Pro
        115                 120                 125
```

```
Arg Asn Leu Ala Leu Cys Met Asp Ile Cys Gln Arg Lys Pro Pro Ser
    130                 135                 140
Ser Thr Ser Gly Glu Trp Pro Ser Thr Val Ser Leu Trp His Leu Ala
145                 150                 155                 160
Thr Pro Ser Cys Ser Leu Pro Met Asp Val Ser Cys Trp Ser Leu Ser
                165                 170                 175
Ser Pro Leu Gly Thr Arg Thr Ile Pro Arg Ala Leu Ile Pro Pro
            180                 185                 190
```

<210> 36322
<211> 165
<212> PRT
<213> A.fumigatus

```
<400> 36322
Ser Leu Val Ile Ser Ala Ser Ile Cys Ser Leu Ser Leu Arg Met Thr
1               5                   10                  15
Arg Ala Trp Arg Tyr Ala Arg Gly Ile Phe Val Ser Arg Asp Asn Leu
            20                  25                  30
Lys Ile His Ser Cys Pro Pro Val Arg Ser Cys Phe Arg Leu Gln Pro
        35                  40                  45
Ser Ser Arg Ser Pro Pro Phe Ser Asn Thr Asn Arg Arg Thr Met Ser
    50                  55                  60
Ser Ser Ser Leu Arg Val Pro His Ala Leu Arg Ser Phe Pro Ser Ser
65                  70                  75                  80
Gly Phe Glu Leu Ile Asp His Ser Glu Lys Ile Glu Glu Glu Thr Leu
                85                  90                  95
Pro Thr Tyr His Ala Glu Lys Tyr Tyr Pro Val His Ile Gly Glu Val
            100                 105                 110
Leu Asn Asn Gln Tyr Gln Val Leu Ala Lys Leu Gly Tyr Gly Val Thr
        115                 120                 125
Ser Thr Val Trp Leu Cys Arg Asp Leu Arg Tyr Thr Glu Ala Asn Leu
    130                 135                 140
Leu Leu Arg Asn Leu Thr Asn Tyr Val Ser Lys Lys Lys Ala Val Asn
145                 150                 155                 160
Pro Asn Met Trp Tyr
                165
```

<210> 36323
<211> 127
<212> PRT
<213> A.fumigatus

```
<400> 36323
Leu Cys Val Lys Lys Lys Ser Ser Glu Ser Lys Tyr Val Val Leu Lys
1               5                   10                  15
Val Asn Val Ser Gly Val Glu Arg Asn His Glu Ile Ser Val Tyr Asp
            20                  25                  30
Arg Ile Asn Leu Val Glu Thr Asn His Leu Gly Lys Ser Phe Ile Arg
        35                  40                  45
Lys Leu Leu Gly His Phe His Ile Glu Gly Pro His Gly Arg His Ile
    50                  55                  60
Cys Leu Val His Gln Pro Phe Gly Pro Ser Leu Asp Gln Phe Leu Ser
65                  70                  75                  80
Phe Phe Pro Glu Arg Val Leu Ser Leu Glu Asp Leu Lys Pro Cys Leu
                85                  90                  95
```

```
Arg Gln Ile Leu Gly Ile Leu Asp Phe Leu His Thr Asp Ala His Ile
            100                 105                 110
Ile His Thr Ser Glu Ile Ser Val Pro Lys Asn Ser His Cys Phe
        115                 120                 125

<210> 36324
<211> 119
<212> PRT
<213> A.fumigatus

<400> 36324
Phe Cys Glu Asp Leu Gln Leu Lys Asn Leu Leu Leu Pro Ala Asp Asp
1               5                   10                  15
Pro Gln Ile Phe Ser Ala Ile Glu Glu Ala Glu Ile Glu Glu Pro Ser
            20                  25                  30
Pro Arg Glu Val Leu Asp Asp Ser Arg Thr Ile Tyr Leu Ser Arg Leu
        35                  40                  45
Leu Leu Pro Ser Asn Gly Leu Pro Leu Leu Ser Asp Phe Gly Glu Ala
    50                  55                  60
Arg Phe Gly Asp Glu Glu His Asn Glu Asp Ile Met Pro Asn Val Tyr
65                  70                  75                  80
Arg Ala Pro Glu Val Val Leu Lys Met Asn Trp Asp Tyr Lys Val Asp
                85                  90                  95
Ile Trp Asn Val Ala Met Met Val Arg Lys Gln Thr Cys Leu Thr Leu
            100                 105                 110
Lys Phe Ile Cys Val Leu His
        115

<210> 36325
<211> 69
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (52)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36325
Arg Asn Ala Ser Ile Leu Lys Glu Met Ser Thr Ser Leu Leu Val Met
1               5                   10                  15
Ser Thr Thr Met Phe Met Leu Trp Pro Val Phe Leu Asn Asn Ile Tyr
            20                  25                  30
Gly Ser Ser Gln Gln Leu Phe Leu His Val Asn Tyr Ile Trp Ile Phe
        35                  40                  45
Tyr Val Phe Xaa Val Arg Ala Ala Ala Phe Pro Arg Phe Ser Thr Cys
    50                  55                  60
Ser Lys Ala Leu Tyr
65

<210> 36326
<211> 1005
<212> PRT
<213> A.fumigatus

<220>
```

<221> UNSURE
<222> (30),(57),(753)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36326
Gln Gly Met Gly Ala Leu Lys Val Thr Gly Glu Glu Pro Pro Gln Thr
1 5 10 15
Cys Asp Pro Ser His Leu Leu Gly Lys Thr Pro Thr Gly Xaa Leu Thr
20 25 30
Ala Gly Val Ser Lys Asp Leu Trp Gln Pro Ile Ser Ser Ser Ser Pro
35 40 45
Ile Glu Arg Gln Asp Ser Leu Asn Xaa Ala Gln Asn Pro Gln Lys Ile
50 55 60
His Ala Pro Ser Leu Asn Asp Gln Ser Ala Phe Ala Val Pro Lys Ser
65 70 75 80
Pro Gly Leu Leu Leu Ser Pro Arg Pro Glu Asp Arg Pro Ile Gly Ser
85 90 95
Pro Leu Pro Arg Met Pro Arg Glu Val Pro Asn Ser Leu Ala His Leu
100 105 110
Pro Met Ser Ser Glu Asn Ser Leu Ala Gly Leu Ala Leu Ser Pro Arg
115 120 125
Pro Thr Asn His Pro Asn Pro Ser Ala Thr Gly Ala Ser Lys Pro Asn
130 135 140
Asp Thr Ser Pro Ser His Ile Asp Ala His Arg His Ile Ala Thr Ile
145 150 155 160
Asn His Gly Pro Arg Lys Asp Thr Pro Arg Ser His Trp Ser Pro Ala
165 170 175
Arg Glu Ile Tyr Gln Gly Leu Met Ser Glu Asp Tyr Pro Gly Leu Leu
180 185 190
Leu Pro Pro Asn Ala Leu Pro Leu Ile Arg Val Lys Val Ser Ser Ser
195 200 205
Arg Leu Arg Pro Ser Arg Asn Ser Tyr Leu Ala Pro Lys Pro Ser Glu
210 215 220
Glu Glu Pro Val Phe Thr Leu Gly Val Phe Ser Arg Ser Glu Asn Leu
225 230 235 240
Glu Leu Trp Arg Val Glu Lys Val Val Ala Ala Leu Pro Gln Leu Asp
245 250 255
Gln Gln Ile Arg Gln Ser Ser Ala Leu Trp Met Lys Leu Pro Asp Arg
260 265 270
Ser Ile Phe Ser Gly His Ser Pro Ala Lys Ile Asp Ala Arg Arg Ala
275 280 285
Ala Leu Asn Ser Tyr Phe Glu Ala Leu Leu Asp Thr Pro Val Asp Glu
290 295 300
Arg Ala Ala Leu Ala Ile Cys Gln Phe Leu Thr Met Asp Ala Ile Glu
305 310 315 320
Pro Arg Asp Asp Glu Ser Ser Leu Leu Lys Gly Asn Cys Lys Ala Ala
325 330 335
Ser Glu Val Leu Pro Gly Gln Asp Arg Lys Pro Gln Lys Glu Gly Tyr
340 345 350
Leu Ala Lys Arg Gly Lys Asn Phe Gly Gly Trp Lys Thr Arg Tyr Phe
355 360 365
Ile Leu Tyr Gly Pro Glu Leu Lys Tyr Phe Glu Ser Pro Gly Gly Pro
370 375 380
His Leu Gly Thr Ile Lys Ile Phe Asn Ala Gln Ile Gly Lys Gln Ser
385 390 395 400
Gln Pro Ala Asn Asn Thr Asn Asn Pro Leu Ser Gly Pro Glu Asp Asp

405 410 415
Ser Glu Asn Gln Tyr Arg His Ala Phe Leu Ile Leu Glu Pro Lys Arg
420 425 430
Lys Asp Ser Ser Ala Leu Val Arg His Val Leu Cys Ala Glu Ser Asp
435 440 445
Glu Glu Arg Asp Ala Trp Val Glu Ala Leu Leu Ala Phe Val Asp Gly
450 455 460
Gln Ser Asp Asn Glu Gly Thr Glu Asn Ala Ser Pro Gln Ser Gln Val
465 470 475 480
Ser Thr Gln Ala Arg His Leu Ser Gln Ser Thr Ser Lys Pro Lys Leu
485 490 495
Phe Ala Gly Gly Ser Lys Lys Ser Gly Lys Gly Met Asn Asn Ala Asp
500 505 510
Ala Asp Leu Thr Asp Thr Val Gln Gly Phe Ser Tyr Asp Asp Ala Val
515 520 525
Pro Ala Glu Pro Pro Leu Leu Gly Pro Pro Ser Glu Lys Gln Pro Pro
530 535 540
Arg Ser Pro Met Ser Pro Leu Glu Ala Ala Met Glu Pro Ser Asp Thr
545 550 555 560
Asn Pro Ala Ser Asp His Val Gln Leu Ser Ser Lys Val Ile Ser Gly
565 570 575
Pro Thr Asn Gly Thr Val Ile Gln Asp Ala Gly Ala Trp Gly Asn Lys
580 585 590
Thr Val Thr Thr Thr Lys Glu Lys Lys Arg Ser Ile Trp Gly Phe Arg
595 600 605
Thr Arg Ser Ser Tyr Asp Leu Ala Ser Gln Leu Gln Ala Ser Gln Glu
610 615 620
Pro Ser Ser Ala Gln Ala Val Val Asn Pro Ser Thr Glu Arg Lys Asp
625 630 635 640
Leu Val Arg Pro Val Phe Gly Ile Pro Leu Ala Glu Ala Val Gln His
645 650 655
Cys Ala Pro His Gly Ile Asp Val Asp Leu Pro Ala Val Val Tyr Arg
660 665 670
Cys Ile Glu Tyr Leu Lys Ala Lys Gly Ala Ala Thr Glu Glu Gly Ile
675 680 685
Phe Arg Leu Ser Gly Ser Asn Val Val Val Lys Ala Leu Lys Glu Arg
690 695 700
Phe Asn Thr Glu Gly Asp Val Asp Phe Leu Ala Gly Asp Glu Tyr Tyr
705 710 715 720
Asp Val His Ala Val Ala Ser Leu Phe Lys Gln Tyr Leu Arg Glu Leu
725 730 735
Pro Thr Thr Val Leu Thr Arg Glu Leu His Leu Asp Phe Leu Arg Val
740 745 750
Xaa Arg Ala Cys Arg Cys Phe Pro Ser Phe Leu His Leu Phe Gln Gly
755 760 765
Thr Ile Leu Met Asn Ser Tyr Leu Glu Leu Asp Glu Arg Gln Lys Lys
770 775 780
Ile Leu Ala Phe Asn Ser Leu Val His Arg Leu Pro Arg Pro Asn Leu
785 790 795 800
Ala Leu Leu Arg Ala Leu Val Gln Phe Leu Ile Ile Ile Ile Asn Asn
805 810 815
Ser Asp Val Asn Lys Met Thr Ile Arg Asn Val Gly Ile Val Phe Ala
820 825 830
Pro Thr Leu Asn Ile Pro Ala Pro Val Phe Ser Met Phe Leu Thr Asp
835 840 845
Phe Glu Ser Ile Phe Asp Lys Met Pro Glu Gly Cys Ser Glu Pro Val

```
    850                 855                 860
Lys Leu Lys Val Asp Arg Pro Ala Leu Pro Glu Asp Ile Arg Ser Pro
865                 870                 875                 880
Arg His Gln Met Phe Ser Asp Leu Pro Thr Pro Ala Tyr Ser Gln Thr
                885                 890                 895
Thr Phe Arg Arg Pro Thr Glu Val Val Asp Asp Ser Arg His Asp Thr
            900                 905                 910
Gly Phe Ile Ser Ile Gln Pro Thr Tyr Glu Gln Ser Ser His Asn Leu
        915                 920                 925
Val Glu His Tyr Asn Gln Gln Pro Asp Ser Ala Ala Met Asn Arg Met
    930                 935                 940
Leu Met Pro Ser Val Asp Ser Ser Arg Ser Ala Lys Ala Lys Arg Arg
945                 950                 955                 960
Glu Ser Ser Met Leu Phe Met Glu Tyr Asn His Gln Asp Ser Gly Leu
                965                 970                 975
Pro Ala Met Arg Asn Asp Gln Ser Lys Ser Pro Pro Ile Thr Pro Glu
            980                 985                 990
Leu Ser His Arg Leu Gln Thr Asp Leu Arg Glu Ser Arg
        995                 1000                1005
```

<210> 36327
<211> 171
<212> PRT
<213> A.fumigatus

<400> 36327

```
Arg Pro Phe Phe Leu Ser Ile Phe Ser Ile Gly Ser His Ile Val Tyr
1               5                   10                  15
Ala Ser Asn Leu Arg Arg Phe Pro Ile Val Lys Leu Ser Asp Pro Leu
            20                  25                  30
Phe Ile Leu Ser Cys Val Leu Val Gly Leu Asn His Trp Leu Trp Phe
        35                  40                  45
Arg His Phe Ser Lys Pro Leu Pro Ser Ser Arg Val Gly Ala Asn Trp
    50                  55                  60
Arg Gln Pro Tyr Gln Val Asp Ile Glu Asp Ile Pro Thr Phe Thr Glu
65                  70                  75                  80
Val Ala Ser Tyr Phe Gly Leu Cys Val Trp Leu Val Pro Phe Ala Leu
                85                  90                  95
Phe Val Ser Leu Ser Ala Gly Glu Asn Val Leu Pro Ser Met Gly Ser
            100                 105                 110
Glu Tyr Ala Thr Gly Glu His Val Pro Thr Gly Gly Arg Thr Arg Ile
        115                 120                 125
Ala Leu Ser Ser Glu Gly Lys Met Lys Asn Lys Gly Met Ala Lys Ala
    130                 135                 140
Val Val Asp Gly Val Arg Asp Trp Ile Ser Glu Asn Gly Ala Leu Met
145                 150                 155                 160
Gly Phe Trp Arg Ser Glu Arg Thr Arg Arg Phe
                165                 170
```

<210> 36328
<211> 124
<212> PRT
<213> A.fumigatus

<400> 36328

```
Cys Asp Gly Leu Met Thr Leu Glu Gly Lys Gly Ile Cys Ser Gly Lys
```

```
1               5                   10                  15
His Ala Ile Ala Asp Tyr Leu Ile Glu His Gln Glu Phe Lys Leu Leu
            20                  25                  30
Glu Leu Asn Asn Lys His Tyr Pro Arg Ile Thr Asp Asp Pro Glu Asp
        35                  40                  45
Asp Leu Arg Leu Gln Ala Ser Glu Leu Ser Asn Lys Arg Asn Ser Glu
    50                  55                  60
Phe Thr Phe Asp Ser Val Glu Ser Leu Leu Asp Phe Ala Thr Lys Arg
65                  70                  75                  80
Trp Lys Glu Arg Trp Val Thr Thr Asp Ile Leu Asp Thr Ala Thr Ile
                85                  90                  95
Glu Arg Phe Leu Gln Arg Pro Phe Phe Leu Leu Val Ser Val Asp Ala
            100                 105                 110
Pro Val Ser Leu Arg Trp Lys Arg Phe Thr Asp Arg
        115                 120
```

<210> 36329
<211> 213
<212> PRT
<213> A.fumigatus

<400> 36329

```
Cys Phe Tyr Ser Val Ser Arg Cys Arg Arg Arg Gln Leu Asp Pro Pro
1               5                   10                  15
Pro Leu Glu Arg Phe Val Ile Trp Asn Asp Arg His Leu Tyr Asp Lys
            20                  25                  30
Asp Ile Gly Arg Ala Tyr Leu Thr Asp Arg Ala Gln Val Arg Leu Phe
        35                  40                  45
Asn Ser Cys Ser Ser Leu Glu Glu Leu His Val Ala Leu Glu Ala Leu
    50                  55                  60
Asn Leu Ala Asp Glu Arg Arg Leu Arg Pro Asn Trp Asp Leu Tyr Phe
65                  70                  75                  80
Met Gln Leu Ala Ser Leu Ala Ala Gln Arg Ser Asn Cys Met Lys Arg
                85                  90                  95
Arg Val Gly Cys Val Leu Val Arg Glu Arg Arg Val Ile Ser Thr Gly
            100                 105                 110
Tyr Asn Gly Thr Pro Arg His Leu Thr Asn Cys Asn Glu Gly Gly Cys
        115                 120                 125
Met Lys Pro Pro Glu Ser Leu Gln Leu Ser Leu Ile Leu Ser Cys Cys
    130                 135                 140
Ser Lys Arg Asp Ser His Arg Leu Gly Pro Arg Cys Asn Arg Gly Glu
145                 150                 155                 160
Gly Gly Gly Val Gly Leu Ser Thr Cys Leu Cys Leu His Ala Glu Glu
                165                 170                 175
Asn Ala Leu Leu Glu Ala Gly Arg Glu Arg Ile Arg Glu Gly Ser Ile
            180                 185                 190
Leu Tyr Cys Asp Thr Ser Asp Ser Pro Ala Pro Thr Cys Cys Phe Pro
        195                 200                 205
Asp Val Asp Asp Pro
    210
```

<210> 36330
<211> 68
<212> PRT
<213> A.fumigatus

<400> 36330
Tyr Leu Val Gly Glu Ser Thr His Ser Pro Gly Ser Phe Phe Leu Gly
1 5 10 15
Ile Phe Gly Ile Arg Val Leu Val Leu Gln Tyr Pro Val Ala Cys Ala
20 25 30
Val Phe Leu Ile Ser Val Thr Ile Ser Phe Pro Leu Thr Gly Leu Ile
35 40 45
Asp Val Tyr Ile Tyr Asn Asn Ser Glu Arg Leu His Asp Val Gly Leu
50 55 60
Ala Asp Lys Lys
65

<210> 36331
<211> 161
<212> PRT
<213> A.fumigatus

<400> 36331
Ala Arg Asp Ala Thr Val Glu Lys Glu Glu Val Leu Ala Tyr Arg His
1 5 10 15
Val Phe Ala Phe Met Arg Lys Arg Thr Leu Cys Trp Lys Gln Ala Glu
20 25 30
Ser Val Tyr Ala Lys Ala Gln Tyr Ser Ile Ala Ile Arg Gln Ile Pro
35 40 45
Arg Pro Leu Leu Ala Ala Phe Gln Met Leu Met Thr Arg Arg Cys Pro
50 55 60
Cys Leu Thr Cys Thr Val Lys Ile Ala Gln Val Gly Ile Ser Glu Val
65 70 75 80
Val Tyr Ser Gln Gly Tyr Asn Met Asp Gln Glu Val Cys Leu Asn His
85 90 95
His Ser Leu Val Asn Ala Ala Asn Arg Arg Gln Ser Ala Ala Ile Leu
100 105 110
Lys Ala Ala Gly Val Cys Leu Arg Gln Phe Ser Pro Val Ser Tyr Thr
115 120 125
Ile Ser Thr Gly Leu Asp Lys Glu Gly Leu His Lys Tyr Ser Leu Glu
130 135 140
Thr Ala Ser Ser Ile Ser Lys Ile Leu Arg Pro Phe Leu Arg Ile Tyr
145 150 155 160
Pro

<210> 36332
<211> 67
<212> PRT
<213> A.fumigatus

<400> 36332
Pro Asn Lys Met Gln Tyr Ala Pro Phe Ala Ser Asp Ile Glu Leu Pro
1 5 10 15
Phe Tyr Thr Ala Leu Ala Thr Leu Lys Ile Asp Arg Asp Lys Leu Asp
20 25 30
Asp Ser Ala Arg Lys Val Leu Gly Leu Tyr Glu Val Arg Ser Thr Asp
35 40 45
Ala Pro Lys Asn Ser Cys Arg Met Gln Ile His Gly Asn Ala Leu Thr
50 55 60
Ser Asp Glu

65

<210> 36333
<211> 101
<212> PRT
<213> A.fumigatus

<400> 36333
Tyr Ser Gly Lys Ile Leu Asp Ala Ile Glu Asp Gly Ser Ile Tyr Leu
1 5 10 15
Cys Pro Ser Lys Leu Ser Tyr Phe Met Ile Leu Ser Phe Ala Asp Leu
20 25 30
Lys Lys Tyr Lys Phe His Tyr Trp Phe Ala Phe Pro Ala Leu His Ser
35 40 45
Thr Pro Ser Trp Thr Pro Val Pro Tyr Ser Glu Glu Ile Val Gly Asp
50 55 60
Thr Pro Val Glu Pro Ile Asn Arg Ser Pro Phe Lys Ala Leu Ser Thr
65 70 75 80
Leu Glu Ser Ser Thr Leu Val Glu Ala Val Gln Thr Trp Ser Gly Ser
85 90 95
Val Glu Ala Cys Phe
100

<210> 36334
<211> 109
<212> PRT
<213> A.fumigatus

<400> 36334
Ser Ala Cys Ser Phe Phe Tyr Phe Ser Phe Ala Phe Ser Tyr Ser Cys
1 5 10 15
Leu Ile Leu Lys Asn Ala Arg Pro Leu Glu Glu Asn Phe Phe Phe Ser
20 25 30
Arg Leu Met Arg Glu Lys Ser Arg Leu Lys Ile Lys Asp Leu Phe Val
35 40 45
Asp Lys Ile Glu Gly Phe Ser Thr Thr Phe Asp Pro His Cys Ile Ile
50 55 60
Tyr Tyr Phe Asn Cys Ile Ser Asp Arg Ser Ile Leu Leu Ser Ser Trp
65 70 75 80
Ser Pro Phe Leu Phe Ala Leu Leu Phe Ser Leu Phe Val Leu Val Ile
85 90 95
Leu Phe Leu His Thr Ile Val Trp Ser Pro Thr Pro Ser
100 105

<210> 36335
<211> 70
<212> PRT
<213> A.fumigatus

<400> 36335
Ile Phe Thr Asn Pro Leu Glu Ile Val Lys Ile Arg Leu Gln Val Gln
1 5 10 15
Gly Glu Ile Ala Lys Thr Val Glu Gly Ala Pro Arg Arg Ser Ala Met
20 25 30
Trp Ile Val Lys Asn Met Gly Leu Val Gly Leu Tyr Lys Gly Ala Ser
35 40 45

```
Ala Cys Leu Leu Arg Asp Gly Lys Asp Lys Pro Thr Arg Ser Phe Asp
    50                  55                  60
Phe Cys Glu His Ala Phe
65                  70
```

<210> 36336
<211> 188
<212> PRT
<213> A.fumigatus

<400> 36336

```
Arg Phe Arg Thr Ile Val Pro Leu Tyr Ala Ile Tyr Phe Pro Thr Tyr
1               5                   10                  15
Ala His Leu Lys Ser Asp Val Phe Gly Glu Ser Pro Thr Gln Lys Leu
            20                  25                  30
Gly Ile Val Gln Leu Leu Thr Ala Gly Ala Ile Ala Gly Met Pro Ala
        35                  40                  45
Ala Tyr Leu Thr Thr Pro Cys Asp Val Ile Lys Thr Arg Leu Gln Val
    50                  55                  60
Glu Ala Arg Lys Gly Asp Val Arg Tyr Asn Gly Leu Arg His Cys Ala
65                  70                  75                  80
Ala Thr Ile Trp Arg Asp Glu Gly Phe Arg Ala Phe Phe Lys Gly Gly
                85                  90                  95
Pro Ala Arg Ile Ile Arg Ser Ser Pro Gln Phe Gly Phe Thr Leu Ala
            100                 105                 110
Ala Tyr Glu Leu Leu Gln Lys Trp Leu Pro Met Pro Gly Ser His Pro
        115                 120                 125
Glu Val Ser Pro Thr Gly Gln Val Glu Pro Gly Val Gly Leu Gln Ser
    130                 135                 140
Ala Lys Ala Pro Leu Pro Tyr Leu Arg Ser Arg Asn Ala Leu Lys Leu
145                 150                 155                 160
Leu Leu Asp Leu Asp Glu Asn Ile Gly Arg Val Tyr Ile Pro Gln Ala
                165                 170                 175
Asp Lys Trp Pro Lys Phe Leu Gln Pro Ser Lys Gln
            180                 185
```

<210> 36337
<211> 128
<212> PRT
<213> A.fumigatus

<400> 36337

```
Phe Leu Glu Leu Thr Leu Thr Asp Gln Arg His Gly Glu Cys Phe Val
1               5                   10                  15
Leu Asp Asp Gly Gly Glu Ala Asp Leu Asp Leu Gly Asn Tyr Glu Arg
            20                  25                  30
Tyr Leu Gly Val Thr Leu Gly Arg Asp Asn Asn Ile Thr Thr Gly Lys
        35                  40                  45
Ile Tyr Gln His Val Ile Glu Lys Glu Arg Arg Gly Asp Tyr Leu Gly
    50                  55                  60
Lys Thr Val Gln Ile Val Pro His Leu Thr Asn Glu Ile Gln Asn Trp
65                  70                  75                  80
Val Glu Arg Val Ala Lys Val Pro Val Asp Glu Ser Gly Arg Glu Pro
                85                  90                  95
Asp Val Cys Ile Ile Glu Leu Gly Gly Thr Val Gly Asp Ile Glu Ser
            100                 105                 110
```

Ala Pro Phe Val Ala Ala Ile Ser Gln Phe Val Tyr Trp Thr Ser Gly
115 120 125

<210> 36338
<211> 456
<212> PRT
<213> A.fumigatus

<400> 36338
Gln His Lys Ile Lys Arg Glu His Tyr Gly Leu Leu Phe Arg Val Ala
1 5 10 15
Asp Lys Arg Arg Ala Gly Arg Leu Thr Leu Ser Asp Trp Ala Thr Phe
20 25 30
Glu Asn Leu Leu Thr Lys Pro Asp Ala Glu Tyr Glu Ile Ala Phe Arg
35 40 45
Leu Phe Asp Leu Asp Gly Thr Gly Thr Val Lys Trp Glu Thr Phe Lys
50 55 60
Asn Ile Tyr Asn Met Asn Lys Ser Gly Asp Ser Ile Pro Phe Asp Trp
65 70 75 80
Asn Ser Glu Trp Ala Ser Leu Tyr Ser Gly Arg Ser Lys Ala Arg His
85 90 95
Asp Met Thr Tyr Pro Gln Phe Ala Gln Met Leu Arg Gly Leu Gln Gly
100 105 110
Glu Arg Ile Arg Gln Ala Phe His Ile Phe Asp Lys Asp Gly Asp Gly
115 120 125
Tyr Ile Glu Pro Glu Asp Phe Gln Arg Ile Ile Leu Glu Thr Ser Lys
130 135 140
His Lys Leu Ser Asp Tyr Val Leu Glu Asn Leu Pro Ser Leu Cys Asn
145 150 155 160
Ile Ser Ala Gly Thr Lys Ile Ser Tyr Ala Thr Val Arg Ala Phe Gln
165 170 175
Asn Val Met Arg Glu Met Asp Met Ile Asp Leu Ile Val Arg Glu Ala
180 185 190
Thr Gln Lys Ser Glu Asp Gly Lys Ile Thr Arg Ala Asp Phe Leu Asn
195 200 205
Glu Ala Ala Arg Ile Thr Arg Phe Ser Leu Phe Thr Pro Met Glu Ala
210 215 220
Asp Ile Leu Phe His Phe Ala Gly Leu Asp Ala Pro Ser Gly Arg Leu
225 230 235 240
Ser Gln Lys Asp Phe Ala Lys Val Ile Asp Ala Ser Trp Arg Val Pro
245 250 255
Leu Ala Val Ala Gly Gln Ala Val Ser Thr Ala Thr Thr Thr Ala Gln
260 265 270
Val Ala Ala Glu Lys Thr Arg Ser Val Leu His Ser Val Leu Glu Ser
275 280 285
Val His His Phe Ala Leu Gly Ser Leu Ala Gly Ala Phe Gly Ala Phe
290 295 300
Met Val Tyr Pro Ile Asp Leu Val Lys Thr Arg Met Gln Asn Gln Arg
305 310 315 320
Ser Thr Arg Val Gly Glu Arg Leu Tyr Asn Asn Ser Leu Asp Cys Phe
325 330 335
Arg Lys Val Ile Arg Asn Glu Gly Phe Leu Gly Leu Tyr Ser Gly Val
340 345 350
Leu Pro Gln Leu Ile Gly Val Ala Pro Glu Lys Ala Ile Lys Leu Thr
355 360 365
Val Asn Asp Leu Val Arg Gly His Phe Thr Asn Lys Glu Asn Gly Lys

```
    370                 375                 380
Ile Trp Tyr Pro Tyr Glu Ile Leu Ala Gly Gly Thr Ala Gly Gly Cys
385                 390                 395                 400
Gln Val Val Ser Ala Val Glu Leu Ser Pro His Trp Lys Thr Val Leu
                405                 410                 415
Ile Ser Pro Leu Ile Arg Tyr Ser Gln Ile Pro Ser Arg Leu Ser Arg
            420                 425                 430
Phe Ala Cys Arg Phe Arg Val Arg Leu Pro Arg Pro Ser Arg Glu Pro
        435                 440                 445
Pro Val Ala Arg Pro Cys Gly Leu
    450                 455

<210> 36339
<211> 319
<212> PRT
<213> A.fumigatus

<400> 36339
Ser Asp Asn Ala Gly Ile Leu Ser His Glu Phe His Val Leu Val Gln
1               5                   10                  15
Val Ile Ser Leu Pro Val Lys Pro Leu Ile His Val His Leu Val Ala
            20                  25                  30
Ala Gly Arg Cys Ser Arg Gln Leu Glu Arg Phe Gly Lys Met Ser Ser
        35                  40                  45
Pro Val Ile Leu Leu Pro Gly Asp His Val Pro Ser Asp Lys Leu Pro
    50                  55                  60
Ser Asn Lys Ser Ala Pro Leu Arg Leu Gly Pro Gly Leu Arg Leu Leu
65                  70                  75                  80
Ser Pro Ala Ile Pro Ser Pro Ser Ser Gly His Val Ile Ala Ser Thr
                85                  90                  95
Gln Ala Gly Leu Leu Ser Thr Asp Tyr Lys Lys Asn Ala Val Ser Val
            100                 105                 110
Leu Ser Phe Pro Asn Arg Arg Tyr Ile Pro Thr Pro Asn Asp Leu Val
        115                 120                 125
Ile Ala Gln Val His His Ser Ser Ala Glu Tyr Phe Tyr Cys Met Ile
    130                 135                 140
Thr Pro Gln Ser Pro His Val Leu Leu Gly Gln Leu Ala Phe Glu Gly
145                 150                 155                 160
Ala Thr Lys Lys Thr Arg Pro Met Leu Arg Gln Gly Asp Leu Val Tyr
                165                 170                 175
Ala Arg Val Leu Ser Ile Gly Leu Gly Ala Gly Ala Glu Val Glu Leu
            180                 185                 190
Thr Cys Val Asn Pro Ala Thr Gly Lys Ala Glu Pro Gly Gly Leu Gly
        195                 200                 205
Pro Leu Asn Gly Gly Met Val Phe Asp Val Ser Thr Gly Met Ala Ala
    210                 215                 220
Arg Leu Met Arg Ala Ser Ser Ser Thr Ser Glu Gln Glu Asp Gly Val
225                 230                 235                 240
Asp Gly Leu Val Val Leu Glu Glu Leu Gly Arg Lys Leu Glu Lys Val
                245                 250                 255
Gly Gly Phe Glu Ile Ala Val Gly Arg Asn Gly Lys Val Trp Val Asp
            260                 265                 270
Cys Ser Asn Gly Gly Asp Ala Ala Val Lys Ala Thr Val Ala Ile Gly
        275                 280                 285
Arg Cys Leu Thr Ala Ile Asp Glu His Asp Leu Asn Gln Thr Asp Gln
    290                 295                 300
```

```
Arg Lys Leu Val Thr Arg Ile Leu Arg Glu Met Lys Val Glu Ser
305                 310                 315

<210> 36340
<211> 277
<212> PRT
<213> A.fumigatus

<400> 36340
Glu Ser Arg Tyr Ala Leu His Ile Val Pro Phe Ala Lys Asp His Ile
1               5                   10                  15
Arg Thr Phe Glu Arg Ile Thr Ala Leu Tyr Phe Glu Pro Asp Tyr Tyr
            20                  25                  30
Tyr Leu Gln Asp Met Asn Glu Glu Arg Asp Ala Val Gly Ser Pro Asp
        35                  40                  45
Ser Pro Thr Thr Ser Met Lys Gly Lys Leu Glu Thr Gln Val Gly Glu
    50                  55                  60
Thr Ala Thr Pro Lys Arg Lys Arg Lys Gln Thr Val Asn Asp Thr Asn
65                  70                  75                  80
Thr Gly Met Pro Ser Lys Thr Pro Asn Gln Ser Gln Glu Ser Pro Leu
                85                  90                  95
Asp Arg Ala Gly Ala Arg Pro Val Lys Arg Thr Lys Ile Val Pro Ser
            100                 105                 110
Thr Thr Asn Thr Lys Glu Ala Arg Arg Pro Glu Lys Asn Gly Ser Arg
        115                 120                 125
Glu Ala Ile Pro Ser Pro Glu Thr Pro Val Val Ala Asn Ile Ser Glu
    130                 135                 140
Met Thr Glu Ala Gln Arg Gln Ser Thr Gly Met Gln Pro Leu Ala Asp
145                 150                 155                 160
Val Ala His Thr Asn Glu Thr Ala Ser Lys Lys Pro Lys Lys Ser Lys
                165                 170                 175
Ala Lys Thr Thr Gln Gln Asp Glu Glu Arg Asp Leu Ser Ala Pro Pro
            180                 185                 190
Gln Asn Pro Ala Glu Thr Lys Pro Ile Arg Met Ala Ser Ala Asn Pro
        195                 200                 205
Ser Leu Ala Asp Ser Ser Thr Asp Gln Lys Asp Leu Thr Asp Thr Ser
    210                 215                 220
Ala Val Arg Gly Pro Arg Lys Gly Lys Thr Asp Lys Met Ile Gly Phe
225                 230                 235                 240
Phe Ala Pro Ser Glu Val Ser Ala Leu Glu Thr Phe Lys Leu Gln Phe
                245                 250                 255
Cys Asn Gln His Ala Ile Ser Ser Glu Lys Cys Pro His His Gly Ala
            260                 265                 270
Gly Arg Val Pro Gln
        275

<210> 36341
<211> 253
<212> PRT
<213> A.fumigatus

<400> 36341
Thr Arg Arg Asn Ser Val Asn Tyr Val Ile Thr Leu Asp Ile Asn Thr
1               5                   10                  15
His Ile Cys Ile Leu Leu Leu Gly Leu His Leu Gly Asp Ser Ile His
            20                  25                  30
```

```
Val Val Leu Val Ser Asp Leu Ala His Ala Phe Pro Glu Ser Asn His
        35                  40                  45
Thr Gly Phe His Thr Asp Gly Leu Gln Leu Arg Thr Thr Glu Leu Ile
    50                  55                  60
Ser Thr Ser Ser Gln Phe Gly Pro Val Asp Gly Val Val His Ser His
65                  70                  75                  80
Leu Ala Gly Val Asp Leu Gln Asp Val Cys Pro Cys Leu Leu Ile Gly
                85                  90                  95
Glu Arg Glu Phe Asp Leu Ala Val Gln Ser Thr Gly Thr Glu Gln Ser
            100                 105                 110
Arg Ile Lys Asp Ile Asp Thr Val Cys Arg Ser Gln Asp Leu Asp Thr
        115                 120                 125
Ile Ile Arg Ser Lys Ser Ile Lys Leu Val Gln Lys Leu Gln His Gly
    130                 135                 140
Pro Leu His Leu Thr Val Thr Gly Leu Leu Gly Val Glu Thr Leu Gly
145                 150                 155                 160
Thr His Gly Val Glu Phe Val Asn Glu Asn Asp Arg Arg Gly Leu Leu
                165                 170                 175
Leu Gly Lys Ser Glu Ala Val Pro Asn Gln Leu Gly Ala Val Thr Asn
            180                 185                 190
Glu His Leu His Gln Leu Arg Ser Ser Lys Leu Gln Glu Arg Arg Val
        195                 200                 205
Cys Leu Cys Gly Ala Gly Ser Arg Lys Lys Val Leu Pro Val Pro Gly
    210                 215                 220
Gly Pro Tyr Ile Arg Ala Pro Lys Glu Glu Glu Ile Cys Val Arg Met
225                 230                 235                 240
Leu Ala Asp Asp Asp Gly Arg Thr Gly Gly Lys Asn Gly
                245                 250
```

<210> 36342
<211> 475
<212> PRT
<213> A.fumigatus

<400> 36342

```
Thr Gly Lys Ser Ala Leu Glu Pro Ser Ile Phe Leu Arg Met Phe His
1               5                   10                  15
Leu Leu Pro Ser Leu Arg His Leu Cys Ile Ser Ser Phe Asp Ala Asp
            20                  25                  30
Ala Phe Ala Asp Ser Ala Leu Leu Cys Leu Pro Pro Leu Glu Ser Leu
        35                  40                  45
Arg Leu Glu Arg Leu Pro Gly Ile Thr Asp Thr Gly Leu Ser Gln Tyr
    50                  55                  60
Thr Ser Arg Pro Glu Ser Gly Ser Leu Lys Ser Leu Ala Leu Ile Glu
65                  70                  75                  80
Gln Asn Ile Gln Ser Leu Leu Val Ile Ser Lys Ile Leu Ala Ser Leu
                85                  90                  95
Arg Asn Leu Glu Arg Phe Lys Ile Val Gln Thr Gly His Cys Pro Thr
            100                 105                 110
Leu Asn Ala Asp Gly Ile Val Phe Gln Pro Leu Phe Ala Ser Ser Ser
        115                 120                 125
Leu Lys His Leu His Trp Asp Val Ala Cys Pro Asn Pro Asn Thr Ala
    130                 135                 140
Leu Thr Arg Leu Asp Cys Ala Pro Phe Ala Lys Pro Pro Lys His Val
145                 150                 155                 160
Asp Thr Pro Asn Ser His Leu Ala Gln Ser Ile Leu Cys Ser Gly Phe
```

```
                165                 170                 175
Pro Cys Leu Glu Thr Leu Arg Ala Pro Ser Asp Ile Glu Pro Pro Gly
            180                 185                 190
Ile Leu Gln Ala Val Cys Gln Pro Ile Pro Arg Gly Gln Ala Leu Ile
        195                 200                 205
Asn Ser Asp Arg Tyr Ser Leu Pro Arg Ser Ser His Gly Ser Val Asn
    210                 215                 220
Thr Arg Pro Leu Ala Leu Pro Ala Gly Asn Asn Leu Thr Ser Ala Arg
225                 230                 235                 240
Ile Arg Ala Gln Thr Phe Ile Asp Met Ala Ala Lys Asp Thr Glu Thr
                245                 250                 255
Gly Met Gln Val Leu Ile Thr Asp His Ser Asp Ser Tyr Val Pro Asp
            260                 265                 270
Asn Ala Leu Glu Asp Ala Ser Asp Asp Glu Pro Asp Pro Gly Met Gly
        275                 280                 285
Gln Tyr Gly Ser Leu Ser Ser Gly Arg Ala Lys Glu Glu Pro Asn Gly
    290                 295                 300
Pro Val Thr Val Phe Asn Phe Arg Met Pro Ala Tyr Met Gly Arg Val
305                 310                 315                 320
Gly Ser Arg Thr Thr Glu Lys Asp Val Ser Ile Pro Arg Phe Ile Leu
                325                 330                 335
Arg Pro Asp Leu Pro Gly Gln Asp Ala Asp Gly Gly Leu Ile Gly Trp
            340                 345                 350
Lys His Ile Leu Ala Ser Asn Gln Ser Leu Thr Tyr Ala Ala Gly Val
        355                 360                 365
Gly Val Asn Cys Phe Gly Ser Lys Gly Ser Leu Ile Pro Pro Pro Pro
    370                 375                 380
Pro Glu Glu Ser Pro Pro Ser Pro Ala Ser Thr Thr Val Thr Arg Phe
385                 390                 395                 400
Gly Trp Gly Ser Ile Gly Ser Arg Ser Ala Leu Gly Thr Ser Pro Ile
                405                 410                 415
Thr Pro Thr Thr Pro Ser Thr Pro Met Ser Leu Ser Ser Pro Thr Gly
            420                 425                 430
Leu Pro Trp Asp Lys Asp Thr Cys Thr Gly Ser Trp Asn Tyr Ser His
        435                 440                 445
Lys Arg Gly Arg Asp Trp Trp Phe His Met Glu Arg Asp Arg Pro Gly
    450                 455                 460
Ser Val Glu Ile Val Asp Val Lys Gly Leu Phe
465                 470                 475
```

<210> 36343
<211> 164
<212> PRT
<213> A.fumigatus

<400> 36343

```
Phe Ser Cys Pro Thr Leu Leu Met Pro Phe Arg Arg Ala Ile Ile Pro
1               5                   10                  15
Ala Ser Thr Gln Thr Ala Phe Ser Cys Ala Pro Pro Asn Ser Ser Val
            20                  25                  30
Leu Arg Ala Asn Ser Ala Gln Leu Thr Ala Ser Ser Thr Ala Ile Leu
        35                  40                  45
Arg Glu Trp Ile Cys Arg Met Phe Ala Arg Ala Ser Ser Leu Gly Arg
    50                  55                  60
Gly Asn Ser Ile Leu Arg Ser Ser Arg Pro Glu Arg Ser Arg Ala Gly
65                  70                  75                  80
```

```
Ser Arg Thr Ser Ile Arg Phe Val Ala Ala Arg Thr Leu Ile Arg Ser
                85                  90                  95
Ser Glu Ala Asn Pro Ser Ser Trp Phe Arg Ser Ser Asn Met Val Arg
            100                 105                 110
Cys Thr Ser Arg Ser Pro Asp Phe Ser Glu Ser Lys Arg Leu Val Pro
        115                 120                 125
Thr Ala Ser Ser Ser Ser Met Lys Met Ile Glu Gly Ala Phe Ser Leu
    130                 135                 140
Ala Arg Ala Lys Gln Ser Arg Thr Ser Leu Ala Pro Ser Pro Met Asn
145                 150                 155                 160
Ile Cys Thr Ser
```

<210> 36344
<211> 146
<212> PRT
<213> A.fumigatus

<400> 36344

```
Gly Pro Ala Ser Phe Arg Asn Val Ala Phe Val Ser Ala Ala Gln Ala
1               5                   10                  15
Arg Ala Arg Arg Phe Tyr Arg Tyr Gln Glu Asp His Thr Ser Glu His
            20                  25                  30
Leu Lys Lys Arg Arg Tyr Ala Leu Glu Cys Trp Pro Thr Thr Thr Glu
        35                  40                  45
Glu Pro Gly Glu Arg Thr Val Lys Ile Pro Phe Gly Ala Leu Ile Pro
    50                  55                  60
Ile Phe Val Asn Arg Ser Ala Ser Phe Ile Gly His Thr Met Ala Ser
65                  70                  75                  80
Thr Ile Ser Ser Ile Cys Leu Ser Lys Pro Pro Met Ser Val Tyr Phe
                85                  90                  95
Ser Val Gly Phe Ser Ser Thr Ser Met Ala Phe Thr Arg Leu Ser Tyr
            100                 105                 110
Ser Ala Gly Ser Val Ser Lys Ile Arg Tyr Glu Ser Leu Leu Thr Pro
        115                 120                 125
Ile Arg Ser Pro Gly Phe Ser Phe Ser Trp Ser Thr Arg Pro Met Arg
    130                 135                 140
Gly Arg
145
```

<210> 36345
<211> 156
<212> PRT
<213> A.fumigatus

<400> 36345

```
Leu Ser Asp Ser His Ile Asn Leu Val Thr Met Ser Thr Leu Glu Asp
1               5                   10                  15
Leu Glu Asp Leu Glu Arg Glu Glu Arg Asp Lys Lys Lys Asp Gln Gly
            20                  25                  30
Asp Gly Asp Gly Gln Gln Pro Gly Gly Asp Gly Asp Ala Glu Met Lys
        35                  40                  45
Asp Ala Asp Ala Lys Lys Lys Asp Glu Glu Asp Asp Leu Leu Asp Glu
    50                  55                  60
Glu Ile Leu Asn Ser Ser Thr Ala Asp Ile Val Lys Arg Arg Arg Met
65                  70                  75                  80
```

```
Leu Glu Asn Glu Leu Arg Ile Met Lys Ser Glu Tyr Gln Arg Leu Thr
                85                  90                  95
His Glu Gln Asn Thr Met Arg Glu Lys Val Arg Asp Asn Gln Glu Lys
            100                 105                 110
Ile Glu Asn Asn Arg Tyr Asp Met Leu Val Thr Leu Val Thr Ser Ser
        115                 120                 125
Leu Pro Tyr Cys His Arg Ser Pro Asp Gly Arg Ser Gly Gly Asp Val
    130                 135                 140
Ala Asn Leu Ser Ser Gly Phe Val Trp Lys Pro Val
145                 150                 155
```

<210> 36346
<211> 69
<212> PRT
<213> A.fumigatus

<400> 36346

```
Arg Ser Ile Ser Arg Asp Val Gly Thr Ala Ala Asp Val Val Trp Ser
1               5                   10                  15
Glu Leu Glu His Arg Gln Asp Ser Phe Asn Pro Pro Thr Phe Tyr Leu
            20                  25                  30
Asp Leu Pro Ser Phe Leu Phe Ser Pro Ile Thr His Pro Gln Tyr Ser
        35                  40                  45
Phe Ala Ser Gln Ile Gln Leu Ala Phe Arg Leu Ala His Gln Pro Cys
    50                  55                  60
His His Val Asp Pro
65
```

<210> 36347
<211> 207
<212> PRT
<213> A.fumigatus

<400> 36347

```
Val Ser Gly Trp Pro Glu Arg Trp Arg Cys Cys Lys Ser Ile Ile Gly
1               5                   10                  15
Ile Cys Leu Glu Thr Cys Ile Ile Thr Leu Thr Asp Thr Cys Ile Tyr
            20                  25                  30
Arg Gln Leu Pro Tyr Leu Val Gly Asn Val Val Glu Leu Leu Asp Leu
        35                  40                  45
Asp Val Glu Ala Glu Ala Ala Glu Glu Gly Ala Asn Ile Asp Leu Asp
    50                  55                  60
Ala Thr Arg Val Gly Lys Ser Ala Val Ile Lys Thr Ser Thr Arg Gln
65                  70                  75                  80
Thr Ile Tyr Leu Pro Leu Ile Gly Leu Val Asp His Glu Lys Leu Lys
                85                  90                  95
Pro Gly Asp Leu Ile Gly Val Asn Lys Asp Ser Tyr Leu Ile Leu Asp
            100                 105                 110
Thr Leu Pro Ala Glu Tyr Asp Asn Arg Val Lys Ala Met Glu Val Asp
        115                 120                 125
Glu Lys Pro Thr Glu Lys Tyr Thr Asp Ile Gly Gly Leu Asp Lys Gln
    130                 135                 140
Ile Glu Glu Ile Val Glu Ala Ile Val Trp Pro Met Lys Glu Ala Glu
145                 150                 155                 160
Arg Phe Thr Lys Ile Gly Ile Lys Ala Pro Lys Gly Ile Leu Thr Val
                165                 170                 175
```

```
Leu Ser Pro Gly Ser Ser Val Val Val Gly Gln His Ser Asn Ala Tyr
            180                 185                 190
Leu Leu Phe Phe Arg Cys Ser Asp Val Trp Ser Ser Trp Tyr Arg
        195                 200                 205
```

<210> 36348
<211> 207
<212> PRT
<213> A.fumigatus

<400> 36348

```
Asn Leu Leu Ala Arg Ala Cys Ala Ala Glu Thr Asn Ala Thr Phe Leu
1               5                   10                  15
Lys Leu Ala Gly Pro Gln Leu Val Gln Met Phe Ile Gly Asp Gly Ala
            20                  25                  30
Lys Leu Val Arg Asp Cys Phe Ala Leu Ala Lys Glu Lys Ala Pro Ser
        35                  40                  45
Ile Ile Phe Ile Asp Glu Leu Asp Ala Val Gly Thr Lys Arg Phe Asp
    50                  55                  60
Ser Glu Lys Ser Gly Asp Arg Glu Val Gln Arg Thr Met Leu Glu Leu
65                  70                  75                  80
Leu Asn Gln Leu Asp Gly Phe Ala Ser Asp Asp Arg Ile Lys Val Leu
                85                  90                  95
Ala Ala Thr Asn Arg Ile Asp Val Leu Asp Pro Ala Leu Leu Arg Ser
            100                 105                 110
Gly Arg Leu Asp Arg Lys Ile Glu Phe Pro Leu Pro Asn Glu Glu Ala
        115                 120                 125
Arg Ala Asn Ile Leu Gln Ile His Ser Arg Lys Met Ala Val Asp Asp
    130                 135                 140
Ala Val Asn Trp Ala Glu Leu Ala Arg Ser Thr Asp Glu Phe Gly Gly
145                 150                 155                 160
Ala Gln Leu Lys Ala Val Cys Val Glu Ala Gly Met Ile Ala Leu Arg
                165                 170                 175
Lys Gly Met Ser Lys Val Gly His Glu Asn Tyr Val Asp Ala Ile Ala
            180                 185                 190
Glu Val Gln Ala Lys Lys Lys Asp Thr Asn Met Gly Ile Tyr Val
        195                 200                 205
```

<210> 36349
<211> 120
<212> PRT
<213> A.fumigatus

<400> 36349

```
Asp Ala Ser Leu Ile His Leu Arg Ile Cys His Arg Ala Leu Phe Leu
1               5                   10                  15
Pro Leu Pro Lys Pro Leu Met Ala Leu Lys Ser Val Lys Ala Leu Leu
            20                  25                  30
Tyr Pro Asn Pro Lys His Val Val Gln Phe Met Gln Gln Pro Tyr Ser
        35                  40                  45
Gly Ala Thr Gln Leu Asp Lys Ser Tyr Tyr Thr Glu Gly Ala Asn Arg
    50                  55                  60
Ser Trp Asn Phe Ala Met Val Glu Glu Glu Ile Ala Asp Leu Val Asp
65                  70                  75                  80
Gly Lys Asp Phe Asp Asp Leu Thr Ser Asn Ile Pro Trp Phe Leu Ala
                85                  90                  95
```

```
Lys Thr Leu Tyr Arg Thr Arg Phe Ser Thr Arg Lys Pro Asn Val Pro
            100                 105                 110
Asp Ile Thr Ala Ala Asn Gly Thr
        115                 120
```

<210> 36350
<211> 88
<212> PRT
<213> A.fumigatus

<400> 36350

```
Ala Ala Ser Cys Ala Cys Cys Ser Ser Ser Gly Pro Leu Leu Leu Pro
1               5                   10                  15
Val Ser Pro Ser Ala Arg Ile Arg Ala Thr Asn Ser Lys Ser Ser Thr
            20                  25                  30
Ile Phe Arg Pro Cys Ile Ala Arg Thr Glu Ala Thr Ile Glu Lys Gly
        35                  40                  45
Glu Gly Ser Ile Phe Ser Gly Ala Cys Ala Ala Glu Lys Glu Ile Asp
    50                  55                  60
Tyr Lys Leu Met Arg Thr Gln Lys Pro Cys Val Met Leu Leu Asp Pro
65                  70                  75                  80
Val His Arg Asp His Leu Gly His
                85
```

<210> 36351
<211> 351
<212> PRT
<213> A.fumigatus

<400> 36351

```
Trp Val Met Leu Ser Ser Gly Ser Arg Leu Pro Pro Pro Ser Arg Pro
1               5                   10                  15
Thr Gly Trp Phe Thr Arg Ser Ser Trp Lys Pro Asp Cys Pro Arg Thr
            20                  25                  30
Ser Tyr Ser Ser Ser Pro Ala Met Pro Lys Lys Ser Pro Thr Pro Tyr
        35                  40                  45
Ser Thr Thr Ala Asn Ser Leu Pro Cys Ile Ser Pro Glu Ala Pro Pro
    50                  55                  60
Cys Ser Val Pro Cys Thr Glu Lys Ser Leu Arg Gly Ser Pro Arg Ala
65                  70                  75                  80
Asn Thr Ala Ala Thr Leu Ala Ser Ser Ala Lys Leu Val Ala Arg Thr
                85                  90                  95
Ser Thr Ser Ser Thr Ser Leu Arg Thr Ser Ala Thr Leu Pro Cys Arg
            100                 105                 110
Pro Ser Ala Glu Arg Leu Ser Ser Arg Asp Arg Ser Ala Ala Pro Pro
        115                 120                 125
Pro Ala Arg Thr Ser His Pro Pro Ser Pro Ile Ser Ser Ser Ser Arg
    130                 135                 140
Leu Cys Pro Lys Gln Ser Ser Ser Arg Ser Ala Ser His Pro Thr Ser
145                 150                 155                 160
Pro Thr Ser Ala Ala Pro Ser Ser Thr Lys Pro Pro Ser Thr Ser Ser
                165                 170                 175
Leu Arg Ser Ser Arg Arg Pro Arg Ala Thr Arg Asn Ser Ser Ser Ser
            180                 185                 190
Ser Ala Val Pro Met Thr Pro Pro Arg Ala Gly Thr Phe Asn Pro Pro
        195                 200                 205
```

```
Phe Thr Ala Pro Arg Thr Pro Ile Thr Leu Ser Ser Pro Ala Ser Ser
    210                 215                 220
Leu Ala Pro Ser Trp Leu Cys Thr Pro Thr Thr Thr Pro Gln Arg Pro
225                 230                 235                 240
Thr Ser Pro Arg Ser Ala Arg Arg Leu Thr Arg Pro Val Ser Thr Val
                245                 250                 255
Ser Gln Ala Pro Ser Ser Arg Arg Thr Ala Arg Pro Ser Gly Leu Arg
            260                 265                 270
Arg Met Leu Ser Ala Thr Pro Arg Val Thr Ser Thr Ser Thr Ala Arg
        275                 280                 285
Ala Pro Val Pro Trp Ser Ala Ser Ser Pro Ser Ala Val Pro Val Gln
    290                 295                 300
Ala Ala Pro Thr Ile Arg Pro Ala Val Glu Thr Cys Ser Arg Gly Ser
305                 310                 315                 320
Ser Ala Cys Ala Arg Ser Arg Arg Asn Ser Ser Leu Leu Thr Arg Leu
                325                 330                 335
Ser Thr Leu Ala Met Arg Lys Leu Gly Met Thr Cys Ala Cys His
            340                 345                 350
```

<210> 36352
<211> 148
<212> PRT
<213> A.fumigatus

```
<400> 36352
His Thr Ala Cys Asp Cys Arg Gln Gly Gly Ser Phe Tyr Gln Val Asn
1               5                   10                  15
Asn Leu Leu Asn Gln Glu Thr Asp Asn Ser Gln Ile Lys Ser Ser Gln
            20                  25                  30
Thr Phe Thr Gln Ser Asn Pro Ala Ser Arg Ala Pro Val Ala Thr Tyr
        35                  40                  45
Ser Asn Ala Thr Ala Ser Asp Val Gln Ala Ala Ile Asp Ala Ala Leu
    50                  55                  60
Glu Ala Arg Lys Ser Trp Ala Ala Thr Ser Phe Ala Asp Arg Ala Ser
65                  70                  75                  80
Val Phe Leu Lys Ala Ala Asp Leu Ile Ser Thr Lys Tyr Arg Tyr Asp
                85                  90                  95
Ile Met Ala Leu Thr Met His Gly Gln Gly Lys Asn Ala Trp Gln Ala
            100                 105                 110
Glu Ile Asp Ala Ala Ala Glu Leu Cys Asp Phe Phe Arg Phe Gly Val
        115                 120                 125
Lys Tyr Ala Glu Glu Met Tyr Ala Gln Gln Pro Val His His Ala Pro
    130                 135                 140
Gly Val Trp Lys
145
```

<210> 36353
<211> 75
<212> PRT
<213> A.fumigatus

```
<400> 36353
Ile Arg Phe Leu Pro Gly Pro Ser Val Gln Thr Asn Phe Thr Lys Met
1               5                   10                  15
His Ser Ser Leu Leu Pro Arg Met Arg Ala Gln Gln Phe Ala Lys Cys
            20                  25                  30
```

```
Arg Pro Leu Thr Ser Ser Phe Val Arg Pro Asn Arg Ala Met Gly Thr
        35                  40                  45
Tyr Ala Thr Phe Lys Val Pro Arg Ile Asp Asn Glu Pro Asn Val Ser
    50                  55                  60
Phe Ser Thr Leu Val Pro Ser Arg Asn Gly Phe
65                  70                  75
```

<210> 36354
<211> 439
<212> PRT
<213> A.fumigatus

<400> 36354

```
Pro Cys Thr Asp Arg Ala Arg Thr Pro Gly Arg Arg Arg Leu Met Leu
1               5                   10                  15
Pro Pro Ser Cys Ala Ile Ser Ser Gly Leu Ala Ser Ser Thr Leu Arg
            20                  25                  30
Lys Cys Thr Pro Ser Ser Leu Phe Ile Met Leu Leu Glu Ser Gly Ser
        35                  40                  45
Lys Phe Thr Leu His Leu Arg Ser Arg Met Thr Met Ala Asn Gln Arg
    50                  55                  60
Ser Arg Val Glu Tyr Arg Pro Leu Glu Gly Phe Val Tyr Ala Ile Ser
65                  70                  75                  80
Pro Phe Asn Phe Thr Ala Ile Gly Gly Asn Leu Ala Gly Ala Pro Ala
                85                  90                  95
Leu Met Gly Asn Val Val Val Trp Lys Pro Ser Pro Ala Ala Ile Ala
            100                 105                 110
Ser Asn Trp Leu Val His Gln Ile Leu Leu Glu Ala Gly Leu Pro Lys
        115                 120                 125
Asn Val Ile Gln Phe Val Pro Gly Asp Ala Glu Glu Val Thr Asn Thr
    130                 135                 140
Val Leu Asn His Arg Glu Phe Ala Ala Leu His Phe Thr Gly Ser Thr
145                 150                 155                 160
Ala Val Phe Arg Ser Leu Tyr Gly Lys Ile Ala Gln Gly Val Ala Glu
                165                 170                 175
Gly Lys Tyr Arg Ser Tyr Pro Arg Ile Val Gly Glu Thr Gly Gly Lys
            180                 185                 190
Asn Phe His Leu Val His Lys Ser Ala Asp Ile Arg Asn Ala Ala Val
        195                 200                 205
Gln Thr Val Arg Gly Ala Phe Glu Phe Gln Gly Gln Lys Cys Ser Ala
    210                 215                 220
Thr Ser Arg Ala Tyr Val Ala Ser Ser Ile Ala Asp Gln Phe Leu Glu
225                 230                 235                 240
Gln Val Val Ser Glu Thr Lys Gln Leu Lys Ile Gly Glu Pro Ser Asp
                245                 250                 255
Phe Thr Asn Phe Cys Gly Pro Val Ile His Glu Ala Ser Phe Asn Lys
            260                 265                 270
Leu Ala Gln Val Ile Glu Glu Ala Lys Ser Asp Ser Glu Leu Glu Leu
        275                 280                 285
Leu Val Gly Gly Thr Tyr Asp Ser Ser Lys Gly Trp Tyr Ile Gln Pro
    290                 295                 300
Thr Val Tyr Arg Thr Ser Asn Pro Asp His Pro Leu Leu Ser Arg Glu
305                 310                 315                 320
Leu Phe Gly Pro Ile Leu Val Val His Thr Tyr Asn Asp Ala Thr Glu
                325                 330                 335
Ala Asp Phe Ser Lys Val Cys Glu Lys Ile Asp Gln Thr Gly Glu Tyr
```

```
            340                 345                 350
Gly Leu Thr Gly Ser Val Phe Ala Gln Asp Arg Glu Ala Ile Arg Val
        355                 360                 365
Ala Glu Asp Ala Leu Arg Asn Thr Ala Gly Asn Phe Tyr Ile Asn Cys
    370                 375                 380
Lys Ser Thr Gly Ala Val Val Gly Gln Gln Pro Phe Gly Gly Ala Arg
385                 390                 395                 400
Ala Ser Gly Thr Asn Asp Lys Ala Gly Ser Gly Asn Leu Leu Ser Arg
                405                 410                 415
Phe Val Ser Leu Arg Ser Ile Lys Glu Glu Phe Val Pro Ser Tyr Lys
            420                 425                 430
Val Glu Tyr Pro Ser Asn Ala
        435
```

<210> 36355
<211> 254
<212> PRT
<213> A.fumigatus

<400> 36355

```
Pro Ser Cys Arg Asn Gly Phe Ala Ala Gly Thr Pro Leu Arg Val Arg
1               5                   10                  15
Pro Gln Ser Ser Ser Thr Cys Asn Arg Val Thr Gln Val Asn Asp Ile
            20                  25                  30
Asn Asp Lys Lys Val Gly Ser Ser Asp Thr Pro Ala Glu Lys Ile Thr
        35                  40                  45
Thr Asp Arg Asn Gln Ile Val Ser Asp Leu Arg Glu Leu Ala Asp Leu
    50                  55                  60
Leu Ala Lys Cys Asn Met Arg Leu Ala Tyr Glu Asn Trp Cys Trp Ser
65                  70                  75                  80
Thr His Ala Pro Thr Trp Lys Asp Val Trp Glu Ile Val Lys Ala Val
                85                  90                  95
Asp Arg Pro Asn Ile Gly Leu Cys Leu Asp Thr Phe Gln Thr Ala Gly
            100                 105                 110
Ser Glu Trp Gly Asp Pro Arg Thr Ile Ser Gly Arg Ile Asp Asp Met
        115                 120                 125
Asp Val Asp Glu Leu Asn Arg Arg Phe Ala Ala Ser Met Asp Glu Leu
    130                 135                 140
Ala Arg Ser Ile Pro Pro Glu Lys Ile Tyr Leu Leu Gln Ile Ser Asp
145                 150                 155                 160
Ala Tyr Lys Pro Thr Arg Pro Ile Glu Asp Lys Val Ile Asn Gly Leu
                165                 170                 175
Arg Pro Arg Gly Arg Trp Ser His Asp Phe Arg Pro Met Pro Tyr Asp
            180                 185                 190
Gly Gly Tyr Leu Pro Ile Glu Glu Val Ala Arg Ala Val Leu Lys Thr
        195                 200                 205
Gly Phe Arg Gly Trp Phe Ser Met Glu Ile Phe Asp Gly Gly Asn Gln
    210                 215                 220
Gly Lys Gly Lys Lys Tyr Asp Met Ile Pro Tyr Ala Lys Asn Ala Met
225                 230                 235                 240
Glu Ser Met Gln Arg Leu Leu Lys Asn Cys Ser Asp Asp Arg
                245                 250
```

<210> 36356
<211> 157
<212> PRT

<213> A.fumigatus

<400> 36356

```
Thr Lys Pro Ser Arg Gly Arg Tyr Ser Thr Arg Leu Arg Trp Leu Ala
1               5                  10                  15
Ile Val Ile Leu Asp Arg Lys Cys Lys Val Asn Leu Leu Pro Asp Ser
            20                  25                  30
Arg Ser Met Met Asn Arg Leu Leu Gly Val His Phe Leu Ser Val Leu
        35                  40                  45
Asp Ala Lys Pro Glu Glu Ile Ala Gln Leu Gly Gly Ser Ile Asn Leu
    50                  55                  60
Arg Leu Pro Gly Val Leu Ala Leu Ser Val His Gly Gln Gly His Asn
65                  70                  75                  80
Val Ile Ala Val Leu Gly Arg Asn Lys Ile Gly Ser Leu Glu Glu Asp
                85                  90                  95
Thr Cys Thr Val Cys Glu Arg Cys Ser Gly Pro Arg Leu Ala Ser Leu
            100                 105                 110
Gln Arg Cys Val Asn Ser Arg Leu Asn Ile Gly Gly Gly Gly Val Gly
        115                 120                 125
Val Gly Gly His Trp Gly Thr Arg Gly Arg Val Gly Leu Cys Glu Gly
    130                 135                 140
Leu Arg Ala Leu Asp Leu Gly Ile Val Ser Leu Leu Ile
145                 150                 155
```

<210> 36357
<211> 297
<212> PRT
<213> A.fumigatus

<400> 36357

```
Cys Lys Leu Val Asp Ser Gln Gly Gln Val Cys Arg Gly Phe Ser Ser
1               5                  10                  15
Phe Ala Arg His Thr Val Lys Arg Lys Thr Asn Leu Cys Arg Met Ser
            20                  25                  30
Phe Ser Ser Ala Lys Leu Ser Leu Ser Met Thr Gly Thr Asp Gly Lys
        35                  40                  45
Asp Gly Gly Ala Lys Val Asp Leu Pro Arg Gly His Thr Ser Lys Arg
    50                  55                  60
Phe Gly Pro Asp Ser Ser His Gly Gly Arg Ser Asn Pro Phe Asn Ala
65                  70                  75                  80
Leu Ser Pro Leu Ser Gly Gly Val Ser Ser Pro Ser Thr Asn Ala Ser
                85                  90                  95
Ser Ala Phe Gly Leu Gly Ser Gly Ala Phe Ala Ser Phe Gly Thr Pro
            100                 105                 110
Lys Thr Pro Gly Thr Asn Ala Ser Asp Leu Asn Ser Ser Lys Ala Leu
        115                 120                 125
Gly Glu Lys Arg Glu Thr Ala Ser Glu Gln Asp Ser Ala Ala Asp Val
    130                 135                 140
Lys Ala Lys Ala Ser Ala Ser Ser Leu Thr Gly Pro Lys Glu His Ser
145                 150                 155                 160
Leu Lys Ser Thr Trp Val Ile Trp Tyr Arg Pro Pro Thr Pro Lys Tyr
                165                 170                 175
Ser Asp Tyr Glu Lys Ser Thr Ile Pro Leu Ala Ser Ile Ser Ser Val
            180                 185                 190
Glu Ser Phe Trp Ser Ile Tyr Thr His Leu Lys Arg Pro Ser Leu Leu
        195                 200                 205
```

```
Pro Thr Val Ser Asp Tyr His Ile Phe Lys Lys Gly Ile Arg Pro Val
    210                 215                 220
Trp Glu Asp Asp Ala Asn Lys Lys Gly Gly Lys Trp Ile Val Arg Leu
225                 230                 235                 240
Lys Lys Gly Val Ala Asp Arg Tyr Trp Glu Asp Leu Leu Leu Ala Met
                245                 250                 255
Ile Gly Asp Gln Phe Ala Glu Ala Ser Asp Glu Val Cys Gly Ala Val
            260                 265                 270
Leu Ser Val Arg Ser Gly Glu Asp Val Leu Ser Val Trp Thr Arg Ile
        275                 280                 285
Asp Gly Gly Arg Asn Ile Lys Ile Arg
    290                 295
```

<210> 36358
<211> 106
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (51)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 36358
Ile Ile Cys Tyr Phe Asp Glu Pro Cys Cys Leu Tyr Met Pro Leu Leu
1               5                   10                  15
Gly Thr Ile Ser Glu Phe Leu Ala Pro Leu Ile Ser Pro Asn Arg Arg
            20                  25                  30
Ser Asn Arg Gln Asn Pro Ile Pro Ala Pro Pro Ser Asp Val Thr Ser
        35                  40                  45
Asp Glu Xaa Gln Arg Thr Gln Val Ser Gly Val Ser Asp Ala Pro His
    50                  55                  60
Leu Gly Ser Leu Ala Ser Val Ile Gln Ser Gly Ile Glu Pro Ser Ile
65                  70                  75                  80
Gln Ala Arg Asn Val Ser Trp Asn Tyr Ala Leu Ser Ile Val Leu Val
                85                  90                  95
Ser Ser Pro Ile Pro Ser Arg Val His Phe
            100                 105
```

<210> 36359
<211> 285
<212> PRT
<213> A.fumigatus

```
<400> 36359
Pro Leu Thr Met Asp Asp Pro Pro Pro Pro Pro Pro Pro His Gly Glu
1               5                   10                  15
Asn Pro Asn Thr Thr His Gly Phe Lys Lys Gly Ser Gly Leu Pro Asp
            20                  25                  30
Gly Asn Tyr Asp Ile Phe Ile Ile Pro Pro His Ser Ser Gly Ser Gly
        35                  40                  45
Phe Leu Tyr Leu Pro Ser Leu Gln Thr His Arg Asn Ser Phe Leu Ala
    50                  55                  60
Gly Ala Ala Ser Ala Leu Ala Val Val Tyr Ile Trp Gln Thr Leu Ser
65                  70                  75                  80
Pro Ile Val Lys Ala Trp Tyr Leu Ala Thr Ala Ala Asn Gly Gly Gly
```

```
                85                  90                  95
Met Gly Val Ala Val Leu Leu Ala Ile Val Gly Ile Ala Gly Trp Gly
            100                 105                 110
Phe Gly Ala Tyr Gln Ala His Ile Ala Gly Ser Asn Arg Asp Ser Gly
        115                 120                 125
Gly Ser Ser Gln Ser Arg Gln Ser Gly Pro Gly Ala Arg Gly Gly Pro
    130                 135                 140
Gly Gly Ala Arg Phe Gly Gly His Gly Ala Ala Gly Gly Gly Gly Ser
145                 150                 155                 160
Tyr His Gln Ser Ser Gly Ala Gly Pro Gly Pro Asp Tyr Ser Arg Gly
                165                 170                 175
Pro Asn Phe Gly Gly Pro Ser Pro Gly Pro Gln Gly Thr Tyr Gly Ser
            180                 185                 190
Gly Gly Asn Tyr Gly Ala Gly Pro Gly Pro Gly Gly Pro Tyr Pro Gly
        195                 200                 205
Asn Gln Tyr Gly Ala Gly Ala Ala Pro Pro Pro Pro Asn Ala Gly Thr
    210                 215                 220
Pro Pro His Thr Pro Pro Asn Ala Asp Pro Gly Pro Glu Lys Pro Glu
225                 230                 235                 240
Pro Thr Ser Glu Arg Ser Glu Ser Lys Ser Lys Ser Gly Glu Asp Trp
                245                 250                 255
Glu Arg Ala Arg Glu Glu Thr Arg Arg Lys Glu Glu Leu Arg Arg Lys
            260                 265                 270
Ser Phe His Gln Ala Ala Asp Gly Ser Glu Gln Arg Thr
        275                 280                 285
```

<210> 36360
<211> 93
<212> PRT
<213> A.fumigatus

<400> 36360

```
Asp Val Asn Thr Pro Glu Ser Phe Thr Asp Ser Trp Asn Ser Asn Ala
1               5                   10                  15
Tyr Tyr Pro Pro His Ser His Ser Gly Leu Thr Thr His Leu Ile Arg
            20                  25                  30
Arg Gly Thr Leu Thr Ile Thr Tyr Pro Asp Asp Asn Ser Lys Leu His
        35                  40                  45
Asn Gly Glu Val Lys Lys Glu Thr Phe Gly Val Gly Ala Arg Ile Asp
    50                  55                  60
Val Pro Ala Gly Lys Leu His Glu Val Leu Asp Gly Lys Asp Gly Cys
65                  70                  75                  80
Glu Tyr Val Ile Gly Gly Phe Lys Phe Pro Ile Ser Phe
                85                  90
```

<210> 36361
<211> 92
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (13)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36361

```
Val Val Gln Ala Leu Ser Asp Asn Met Leu Gly Asp Xaa Gly Met Asn
1               5                  10                  15
Thr Asn Asp Tyr Asn Thr Gly Gln Thr Met Phe Phe Leu Cys Phe Leu
            20                  25                  30
Phe Ala Glu Leu Pro Ser Gln Leu Ile Ser Lys Ala Leu Gly Pro Asp
        35                  40                  45
Arg Trp Ile Pro Ile Gln Met Val Cys Trp Ser Leu Ile Ala Ala Phe
    50                  55                  60
Gln Ser Leu Ile Lys Gly Lys Ser Ala Tyr Phe Ala Cys Arg Ala Leu
65                  70                  75                  80
Leu Gly Leu Phe Glu Gly Gly Leu Tyr Val Glu Leu
                85                  90
```

<210> 36362
<211> 78
<212> PRT
<213> A.fumigatus

<400> 36362

```
Val Ser Gly Trp Val Arg His Glu Cys Leu Tyr Pro Ile Asn Asp Ala
1               5                  10                  15
Gln Ile Tyr Arg Glu Asn Asp Lys Pro Tyr Tyr Arg Thr Gly Asn Lys
            20                  25                  30
Val Leu Ile Ala Leu Ala Val Tyr Ser Leu Val Leu Phe Val Val Ala
        35                  40                  45
Arg Phe Tyr Tyr Glu Trp Arg Asn Lys Tyr Val Phe Ser Phe Pro Cys
    50                  55                  60
Phe Lys Arg Trp Leu Gln Lys Leu Ile Cys Val Val Cys Arg
65                  70                  75
```

<210> 36363
<211> 63
<212> PRT
<213> A.fumigatus

<400> 36363

```
Val Thr Asp Pro Thr Thr Pro Lys Ser Ser Arg Ile Arg Tyr Phe His
1               5                  10                  15
Arg Val Ile Ser Ser Pro Asp Trp Thr Asp Leu Thr Leu Asp Thr Gly
            20                  25                  30
Lys Phe Asn Ala Ser Lys Glu Glu Asn Asp Pro Arg Lys Asp Ala Asn
        35                  40                  45
Thr Thr Ser Cys Gln Lys Ser Ser Leu Cys Ser Gly Asn Phe Gly
    50                  55                  60
```

<210> 36364
<211> 310
<212> PRT
<213> A.fumigatus

<400> 36364

```
Ala Leu Ser His Arg Ser His Lys Thr Asp Phe Leu Pro Pro His Ser
1               5                  10                  15
Ile Pro Asp Thr Ile Leu Phe Leu Ser Phe Trp Tyr Lys Ser Lys Glu
            20                  25                  30
Leu Pro Ile Arg Leu Ser Tyr Phe Trp Val Ser Tyr Glu Ala Thr Ala
```

```
        35                  40                  45
Ile Val Gly Ala Phe Leu Ala Phe Gly Phe Leu His Ile Arg Asp Ser
    50                  55                  60
Asp Gly Lys Gly Gly Trp Arg Tyr Leu Phe Ala Phe Glu Gly Leu Ile
65                  70                  75                  80
Thr Gly Ile Ile Gly Ile Ile Ala Ala Phe Trp Met Pro Ala Ser Pro
                85                  90                  95
Thr Gln Thr Lys Gly Gly Phe Arg Gly Lys Asn Gly Trp Phe Asn Glu
            100                 105                 110
His Glu Glu Lys Ile Leu Val Asn Arg Val Leu Arg Asp Asp Pro Ser
        115                 120                 125
Lys Gly Gly Met His Asn Arg Gln Ala Ile Thr Pro Lys Met Leu Trp
    130                 135                 140
Gln Ala Leu Gly Asp Tyr Asp Met Trp Ile Ile Tyr Leu Leu Gly Leu
145                 150                 155                 160
Thr Trp Leu Ile Pro Asn Thr Pro Ala Thr Ser Tyr Ile Thr Leu Gln
                165                 170                 175
Leu Lys Ser Leu Gly Phe Lys Thr Phe Glu Thr Asn Leu Leu Thr Ile
            180                 185                 190
Pro Ala Tyr Ala Ile Phe Ile Ala Asn Leu Leu Phe Trp Thr Trp Ile
        195                 200                 205
Ser Glu Arg Phe Asn Val Arg Phe Leu Leu Gly Val Val Ala Glu Val
    210                 215                 220
Trp Cys Leu Val Leu Leu Ile Ala Leu Glu Val Leu Pro Ala Glu Ala
225                 230                 235                 240
Ser Pro Trp Ala Arg Trp Val Ile Leu Ile Leu Leu Leu Gly Ala Pro
                245                 250                 255
Tyr Ile His Ala Ile Ile Val Ala Met Thr Ser Arg Asn Ala Gly Thr
            260                 265                 270
Val Arg Thr Arg Thr Val Ala Ser Ala Leu Tyr Asn Met Met Val Gln
        275                 280                 285
Thr Ser Asn Ile Ile Ala Asn Asn Val Gly Val Arg Leu Gly Gln Thr
    290                 295                 300
Arg Val Ser Ile Ser Tyr
305                 310
```

<210> 36365
<211> 149
<212> PRT
<213> A.fumigatus

<400> 36365

```
Gln Gly Asp Gln Val Ser Val Trp Ile Val Leu Gln Pro Val Trp Lys
1               5                   10                  15
Leu Val Cys Phe Phe Phe Phe Phe Cys Tyr Leu Phe His Pro Leu
            20                  25                  30
Leu Asn Ser Thr Lys Thr Leu Leu Gly Leu Ala Asn Pro Asn Ser Gly
        35                  40                  45
Thr Gly Asp Asp Phe Cys Gln Ala Gly Cys Leu Ser Asp Tyr Gly Glu
    50                  55                  60
Cys Lys Gly Ile Ser Val Thr Asp Ser Trp Arg Arg Ala Leu Lys Asp
65                  70                  75                  80
Gly Lys Thr Asp Glu Glu Ala Gly Gly Gln Tyr Tyr Trp Asp Ser Thr
                85                  90                  95
Val Asn Leu Phe Trp Thr Trp Asp Thr Pro Ala Ile Ile Asp Arg Lys
            100                 105                 110
```

```
Phe Lys Asp Ile Val Asn Ala Glu Lys Leu Gly Gly Ile Met Ala Trp
        115                 120                 125
Ser Leu Gly Glu Asp Thr Leu Asn Trp Glu His Leu Lys Ala Met Gln
    130                 135                 140
Lys Gly Leu Gly Lys
145
```

<210> 36366
<211> 305
<212> PRT
<213> A.fumigatus

<400> 36366

```
Leu Met Val Asp Ile Asp Trp Glu Tyr Pro Gly Gly Asn Gly Asp Asp
1               5                  10                  15
Tyr Lys Lys Val Pro Asn Ser Gln Lys Thr Ser Glu Ile Glu Thr Tyr
            20                  25                  30
Pro Leu Phe Val Gln Ala Ile Arg Asp Ala Ile Gly Lys Asp Lys Ile
        35                  40                  45
Leu Ser Val Ala Val Pro Gly Lys Arg Gly Asp Met Ile Ala Phe Thr
    50                  55                  60
Lys Glu Gln Gly Pro Lys Ile Trp Ser Ala Val Asp Met Val Asn Val
65                  70                  75                  80
Met Ser Tyr Asp Leu Met Asn Arg Arg Asp Asn Val Thr Asn His His
                85                  90                  95
Ser Gly Val Ala Gly Ser Leu Asp Thr Ile Lys Ala Tyr Lys Glu Ile
            100                 105                 110
Gly Leu Asp Thr Ala Lys Met Asn Leu Gly Phe Ala Tyr Tyr Ala Lys
        115                 120                 125
Trp Phe Met Thr Asp Pro Asn Ser Asp Cys Ala Gln Gln Pro Ile Gly
    130                 135                 140
Cys Ala Val Val Pro Leu Glu Asn Pro Asp Gly Ser Asp Pro Gly Lys
145                 150                 155                 160
Ser Gly Thr Leu Thr Phe Glu Lys Ser Ser Met Ala Ala Pro Pro Asp
                165                 170                 175
Asn Leu Arg Thr Ser Thr Asp Gly Thr Cys Gly Tyr Ser Lys Gly Thr
            180                 185                 190
Lys Cys Pro Ser Gly Ser Cys Cys Ser Gln Tyr Gly Asn Trp Cys Val
        195                 200                 205
Ser Ser Phe Ser Ser Phe Val Ile Phe Phe Thr Pro Tyr Ser Thr Leu
    210                 215                 220
Leu Arg Arg Phe Trp Ala Trp Leu Ile Arg Thr Ala Ala Pro Ala Met
225                 230                 235                 240
Thr Ser Ala Arg Gln Ala Val Ser Gln Thr Met Ala Ser Ala Arg Glu
                245                 250                 255
Phe Pro Leu Leu Ile Pro Gly Val Val Arg Ser Arg Thr Ala Arg Arg
            260                 265                 270
Met Arg Arg Gln Ala Asp Ser Thr Thr Gly Ile Ala Gln Ser Ile Ser
        275                 280                 285
Ser Gly Leu Gly Ile Pro Leu Arg Ser Ser Thr Ala Ser Ser Arg Ile
    290                 295                 300
Ser
305
```

<210> 36367
<211> 255

<212> PRT
<213> A.fumigatus

<400> 36367
Pro Ile Arg Arg Arg Asp Ala Ala Arg Asp Arg Asp Gly Gly Cys His
1 5 10 15
Ser Ile Ser Lys Tyr Leu Asn Asp Ala Glu Thr Ser Thr Pro Pro Arg
20 25 30
Val Ala Gln Ser Ser Leu Arg Gly Thr Gly Pro Gln Gly Glu Gln His
35 40 45
Gly Val Phe Ile Phe Leu Ser Ser Thr Thr Arg Ala Ala Ala Met Arg
50 55 60
Leu Val Tyr Leu Leu Leu Pro Leu Ser Leu Gly Leu Pro Ile Thr Ile
65 70 75 80
Pro Val Asp Gly Thr Glu Val Tyr Gln Leu Gln His Pro Glu His His
85 90 95
Arg Gln Gln Gln Gln Gln Gln Gln Thr Ile Leu Ala Gln Asn Arg Ser
100 105 110
Asp Gln Asp Gln Pro Gln Ile Gln Pro Ser Ser Ser Ser His Gly Ser
115 120 125
Phe Ile Asn Leu Asn Leu Thr Arg His Lys Leu Lys Pro Asn His Tyr
130 135 140
His Gln Lys Asn Thr Thr Asn Gln Ser Thr Asp Lys Ile Leu Gln Ala
145 150 155 160
Tyr Leu His Thr Leu His Thr Ser His Phe Cys Ala His Thr Leu Ser
165 170 175
Gln Tyr Ala Pro Glu Leu Leu Ala Leu Ala Leu Phe Ser Leu Leu Pro
180 185 190
Leu Ala Leu Cys Ile Leu Ala Leu Ser Glu Arg Ile Ala Arg Ser Trp
195 200 205
Thr Val Glu Ala Tyr Pro Glu Arg Gly Arg Ser Arg Arg Arg Phe Leu
210 215 220
Gly Arg Glu Arg Arg Cys Leu Met Gln Ala Arg Arg Glu Arg Glu Lys
225 230 235 240
Arg Ala Ala Leu Asp Thr Val Trp Trp Ile Ala Glu Arg Glu Arg
245 250 255

<210> 36368
<211> 107
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (12)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36368
Ala Tyr Asp Ser Asp Thr Thr Arg Leu Ile Ser Xaa Gly Ser Asp Gln
1 5 10 15
Thr Gln Gly Val Thr His Ala Ile Met Ala Phe Ala Pro Ser Lys Gln
20 25 30
Phe Asn Ser Asp Ser Ser Phe Thr Pro Phe Asp Thr Val Asn Asn Met
35 40 45
Arg Lys Arg Phe Ala Pro Asp Thr Lys Val Met Ile Ala Ile Gly Gly
50 55 60

```
Trp Gly Asp Thr Ala Gly Phe Ser Glu Gly Ala Lys Asp Glu Ala Ser
65                  70                  75                  80
Arg Thr Lys Tyr Ala Lys Asn Val Ala Thr Met Ile Asn Asn Leu Gly
                85                  90                  95
Phe Asp Gly Val Gly Lys Phe Lys Ile Ala Gly
            100                 105
```

<210> 36369
<211> 514
<212> PRT
<213> A.fumigatus

<400> 36369

```
Ile Gly Ser Thr Gly Arg Thr Phe Pro Glu Asn Asn Thr Thr Ser Ser
1                   5                   10                  15
Thr Leu Pro Ser Tyr Pro Pro Glu Arg Arg Asp Leu Tyr Asp Arg Val
            20                  25                  30
Ser Asn His Ala Thr Thr Pro Leu Tyr Arg Arg Ser Ile Pro Ala Pro
        35                  40                  45
Arg Pro Thr Gly Ser Gly Arg Ser Asn Pro Pro Arg Leu Gly Arg Arg
    50                  55                  60
Asp Ser Gly Asn Met Ser Phe Val Met Leu Thr Glu Ser Gln Val Gly
65                  70                  75                  80
Pro Pro His Thr Ser Ser Asn Asn Asn Gly Glu Gly Gln Ser Trp Ala
                85                  90                  95
Asn Lys Arg Pro Ser Gly Val Pro Asn Ser Glu Arg Glu Pro Glu Glu
            100                 105                 110
Gly Ser Phe Ser Asp Gln Val Glu Arg Ser Asn Arg Leu Phe Glu Ile
        115                 120                 125
Ile Ser Ala Arg Ser Asp Ile Asp His Pro Ile Cys Val Glu Cys Thr
    130                 135                 140
Glu Met Leu Val Asp Gly Leu Gln Lys Arg Leu Val Ser Ala Thr Lys
145                 150                 155                 160
Glu Arg Asp Ala Tyr Ile Ser Phe Leu Arg Asp Leu Asn Ser Ser Ala
                165                 170                 175
Pro Thr Ala Glu Glu Ile Glu Ala Ala Glu Gln Ser Leu Lys Glu Thr
            180                 185                 190
Leu Ala Ala Glu Glu Ala Ala Phe Glu Glu Leu Val Ala Leu Glu Lys
        195                 200                 205
Glu Lys Ala Ala Leu Asp Glu Glu Ile Ala Ala Leu Glu Glu Glu Ser
    210                 215                 220
Arg Gln Leu Asp Leu Glu Glu Glu Lys Phe Trp Arg Asp Arg Asn Ala
225                 230                 235                 240
Phe Ala Leu Thr Leu Ser Glu Phe Gln Asn Glu Arg Asp Ala Leu Asn
                245                 250                 255
Met Arg Tyr Asp His Asp Ser Arg Gln Leu Glu Arg Leu Gln Arg Thr
            260                 265                 270
Asn Val Tyr Asn Asp Ala Phe Cys Ile Gly His Asp Gly Tyr Phe Gly
        275                 280                 285
Thr Ile Asn Gly Leu Arg Leu Gly Arg Leu Thr Asn Pro Ser Val Glu
    290                 295                 300
Trp Pro Glu Ile Asn Ala Ala Trp Gly Gln Thr Thr Leu Leu Leu Ala
305                 310                 315                 320
Thr Ile Ala Glu Lys Leu Gly Phe Gln Phe Gln Gly Tyr Arg Leu Lys
                325                 330                 335
Pro Met Gly Ser Met Ser Arg Ile Glu Lys Ile Glu Tyr Pro Arg Thr
```

```
            340                 345                 350
Ser Pro Ala Gln Ser Ala Leu Gly Gly Gly Asn Ala Glu Thr Ser Pro
        355                 360                 365
Ala Ala Lys Ile Thr Thr Leu Asp Leu Phe Ser Ser Gly Asp Leu Pro
    370                 375                 380
Leu Asn Leu Pro Trp Leu His Arg Arg Phe Asp Ala Gly Met Val Ala
385                 390                 395                 400
Phe Leu Glu Cys Leu Arg Gln Leu Gly Glu Phe Val Glu Lys Thr Pro
                405                 410                 415
Ala Pro Val Ser Ser Thr Arg Arg Gly His Gly Asn Ala Pro Val Ala
            420                 425                 430
Gly Leu Lys Leu Pro Tyr Glu Ile Lys Arg Asp Lys Ile Gly Asp Ala
        435                 440                 445
Ser Ile Lys Leu Gly Phe Asn Gln Asn Asp Glu Thr Trp Thr Arg Ala
    450                 455                 460
Cys Lys Tyr Thr Leu Thr Cys Cys Lys Phe Leu Leu Ala His Ala Ser
465                 470                 475                 480
Asn Val Ala Ser Ala Gly Ser Ser Asn Ser Ala Ala Val Ala Ala Ala
                485                 490                 495
Ala Val Ala Ala Gly Glu Gln Ala Arg Leu Ala Thr Ala Ser Pro Thr
            500                 505                 510
Arg Lys
```

<210> 36370
<211> 544
<212> PRT
<213> A.fumigatus

<400> 36370

```
Thr Ser Ile Ile Met Glu Arg Pro Arg Lys Arg Pro Arg Leu Ser Leu
1               5                   10                  15
Gly Val His Gly Glu Asp Pro Asp Asp Ile Asp Leu Gln Glu Ala Arg
            20                  25                  30
Ala Gln Asn Asp Leu Arg Leu Lys Ser Ile Phe Glu Arg Ile Phe Glu
        35                  40                  45
Lys Tyr Gly Lys Asp Phe Thr Asp Ile Gly Asp Glu Ile Asp Leu Gln
    50                  55                  60
Thr Gly Lys Ile Val Val Asn Asn Gly His Leu Gln Arg Met Ser Ser
65                  70                  75                  80
Glu Gly Asp Thr Gly Glu Lys Asp Glu Ala Gly Trp Phe Phe Lys Glu
                85                  90                  95
Asp Leu Pro Thr Ser Thr Val Gln Ile Ser Lys Ala Thr Leu Pro Gly
            100                 105                 110
Ser Val His Asp Leu Glu Val Ala Thr Glu Thr Gly His Asp Asp Thr
        115                 120                 125
Thr Asp Gly Val Gln Leu Gln Arg Thr Leu Thr Ser Pro Gln Pro Leu
    130                 135                 140
Pro Ala Leu Arg Leu Asp Arg Ala Tyr Asp Glu Lys Arg Pro Pro Glu
145                 150                 155                 160
Thr Gly Glu Ala Asp Leu Asp Asp Asp Ser Arg Ser Val Asp Ser Leu
                165                 170                 175
Leu Asp Cys Ala Leu Ile Val Pro Asn Asp Ser Asp Lys Pro Asp Ser
            180                 185                 190
Gln Ala Leu Pro Leu Glu Ser Glu Ala Phe Pro Thr Lys Ala Ile Thr
        195                 200                 205
```

```
Thr Ala Lys Pro Pro Val Gln Ser Gln Gln Thr Arg Gly Val Gln Ala
    210                 215                 220
Asn Glu Pro Val Glu Ser Ile Trp Arg Val Pro Glu Ile Lys Gly Gly
225                 230                 235                 240
Phe Ser Thr Pro Val Phe Tyr Arg Ser Arg Pro Lys Leu Pro Leu Thr
                245                 250                 255
Ala Val Arg Ser Val Ser Pro Pro Lys Ala Gly Ser Leu Trp Ala Leu
            260                 265                 270
Pro Gly Gln Ser Arg Cys Asn Thr Asp Gly Arg Lys Gly Lys Arg Arg
        275                 280                 285
Lys Lys Pro Gly Val Asp Gln Arg Lys Tyr Lys Leu Gln Ser Ser Pro
    290                 295                 300
Val Leu His Asp Trp Ser Phe Ala Glu Thr Pro Asp Gly Asn Glu Ser
305                 310                 315                 320
Asp Asp Pro Leu Gln Glu Asp Tyr Gln Pro Ser Pro Thr Pro Lys Thr
                325                 330                 335
Pro Ile His Ile Arg Ala Lys Ser His Leu Glu Asn Thr Pro Ser Arg
            340                 345                 350
Thr Lys Asp Glu Arg Arg Arg Leu Pro Pro Gln Leu Asn Pro Gly Ser
        355                 360                 365
Gln Pro Thr Ile Asn Ala Leu His Gly Ala Thr Glu Pro Arg Ile Ala
    370                 375                 380
Asn Ser Ala Ala Ser Gln Leu Glu Pro Glu Thr Ile Glu Lys Arg Ala
385                 390                 395                 400
Asp Gln Cys Leu Ser Val Asp Thr His Ile Ser Ala Ala Lys Gln His
                405                 410                 415
Ala Asp Pro Ala Ile Ala Gln Val Ser Thr Pro Thr Arg Ala Lys Arg
            420                 425                 430
Thr Leu Met Thr Pro Asp Glu Ala Lys Leu Ile Ile Arg Met Arg Gln
        435                 440                 445
Ile Glu Gly Lys Lys Trp Lys Glu Val His Glu His Phe Pro Gln Arg
    450                 455                 460
Lys Leu Ile Ser Leu Ile Gln Trp Asn Gln Thr His Trp Thr Glu Arg
465                 470                 475                 480
His Asp Lys Pro Arg Arg Ile Ser Lys Pro Trp Ser Lys Glu Glu Val
                485                 490                 495
Asp Lys Leu Gln Ala Phe Lys Asp Gln Gln Gly Leu Thr Trp Ser His
            500                 505                 510
Ile Arg Ala Ala Val Pro Gly Arg Ser His Ala Glu Ile Glu Phe Ala
        515                 520                 525
Leu Leu Arg Leu Trp Ala Glu Leu Gly Gln Ser Thr Asp Val Gln Tyr
    530                 535                 540
```

<210> 36371
<211> 947
<212> PRT
<213> A.fumigatus

<400> 36371

```
Met Val Arg Lys Leu Glu Ala Gln Ile Leu Lys Val His Gln Arg Leu
1               5                   10                  15
Ser Gln Pro Val Gly Thr Ser Ala Arg Val Arg Leu Glu Asn Glu Leu
            20                  25                  30
Asn Asn Leu Glu Ser Arg Asn Ala Ser Leu Glu Asn Asp Leu Lys Glu
        35                  40                  45
Ile Gln Lys Arg Ile Asp Asp Arg His Glu Gly Leu Glu Ala Gly Thr
```

```
    50                  55                  60
Gln Ala Thr Gly Thr Gly Arg Met Pro Asn Glu Ser Arg Arg Asp Tyr
65                  70                  75                  80
Leu Ile Arg Thr Gly Lys Ile Thr Pro Phe Ser Arg Met Gly Thr Gly
                85                  90                  95
Pro Asn Glu Gly Pro Leu Ala Ser Leu His Asp Ala Leu Ile Asp Ala
            100                 105                 110
Glu Asp Glu Arg Asp Glu Asp Glu Ala Leu Glu Gln Leu Lys Asp Arg
        115                 120                 125
Ser Ala Val Ser His Arg Asn Leu Val Arg Pro Gly Phe Asp Phe Asp
    130                 135                 140
His Glu Ser Thr Asp Thr Ser Ile Ala Gln Thr Arg Pro Ser Lys Arg
145                 150                 155                 160
Arg Lys Leu Glu Gly Asp Ala Arg Arg Lys Lys Ala Ala Ile Lys Gln
                165                 170                 175
Glu Asp Ser Asp Ser Ile Ala Ala Asp Glu Gly Ile Glu Ile Ser Glu
            180                 185                 190
Asp Asn Asp Glu Ser Ala Asp Tyr Val Ala Ser Glu Asp Gln Glu Ser
        195                 200                 205
Leu Leu Gly Asp Glu Glu Glu Phe Phe Pro Asp Gly Lys Pro Glu Arg
    210                 215                 220
Pro Leu Ala His Lys Lys Gly Lys Lys Pro Gly Asp Glu Met Glu Asp
225                 230                 235                 240
Phe Ser Gly Leu Asp Asp Gly Asp Glu Arg Leu Tyr Gln Ser Arg Leu
                245                 250                 255
Gln Ser Trp Val Ser Arg Arg Ser Ala Ala Arg Lys Arg Ala Ser Lys
            260                 265                 270
Ala Leu Gln Ala Thr Glu Gly His Glu Ser Thr Ile Asp Glu Gln Ala
        275                 280                 285
Ser Thr Glu Glu Asp Glu Trp Phe Leu Pro His Pro Thr Val Pro Asp
    290                 295                 300
Val Ser Tyr Asp Asn Gly Tyr Arg Leu Pro Gly Asp Leu Asn Pro Tyr
305                 310                 315                 320
Leu Phe Asp Tyr Gln Lys Thr Gly Val Gln Trp Leu Trp Glu Leu Tyr
                325                 330                 335
Gln Gln Lys Val Gly Gly Ile Ile Gly Asp Glu Met Gly Leu Gly Lys
            340                 345                 350
Thr Ile Gln Ala Ile Ala Phe Leu Ala Gly Leu His Tyr Ser Lys Lys
        355                 360                 365
Leu Asp Arg Pro Val Ile Val Val Cys Pro Ala Thr Val Met Lys Gln
    370                 375                 380
Trp Val Asn Glu Phe His Arg Trp Trp Pro Pro Phe Arg Val Ser Ile
385                 390                 395                 400
Leu His Thr Ser Gly Ser Gly Met Val Asn Ile Arg Ser Glu Ser Ser
                405                 410                 415
Arg Glu Asp Ala Leu Leu Ser Gln Thr Tyr Ser Ser Asn Ser Arg Gly
            420                 425                 430
Ile Thr Ser Asn Gln Lys Ala Ala Arg Lys Val Val Lys Arg Val Val
        435                 440                 445
Glu Glu Gly His Val Leu Val Thr Thr Tyr Ser Gly Leu Gln Thr Tyr
    450                 455                 460
Ser His Phe Leu Ile Pro Val Glu Trp Gly Cys Ala Ile Leu Asp Glu
465                 470                 475                 480
Gly His Lys Ile Arg Asn Pro Asn Thr Ser Ile Thr Ile His Cys Lys
                485                 490                 495
Glu Leu Arg Thr Pro His Arg Ile Ile Leu Ser Gly Thr Pro Met Gln
```

```
                500                 505                 510
Asn Asn Leu Thr Glu Leu Trp Ser Leu Phe Asp Phe Val Phe Pro Met
        515                 520                 525
Arg Leu Gly Thr Leu Val Asn Phe Arg Asn Gln Phe Glu Phe Pro Ile
    530                 535                 540
Arg Gln Gly Gly Tyr Ala Asn Ala Ser Asn Leu Gln Val Gln Thr Ala
545                 550                 555                 560
Ala Lys Cys Ala Glu Thr Leu Lys Asp Ala Ile Ser Pro Tyr Leu Leu
                565                 570                 575
Gln Arg Phe Lys Ile Asp Val Ala Ala Asp Leu Pro Lys Lys Thr Glu
            580                 585                 590
Gln Val Leu Phe Cys Lys Leu Thr Lys Pro Gln Arg Met Ala Tyr Glu
        595                 600                 605
Ser Phe Leu Lys Ser Glu Glu Met Glu Ser Ile Leu Lys Gly Arg Arg
    610                 615                 620
Gln Ile Leu Tyr Gly Val Asp Ile Leu Arg Lys Ile Cys Asn His Pro
625                 630                 635                 640
Asp Leu Gln Asn His Lys Met Gln Ser His Gln Ser Gly Tyr Gly Asn
                645                 650                 655
Ala Asn Lys Ser Gly Lys Met Gln Val Val Lys Ser Leu Leu Glu Leu
            660                 665                 670
Trp Arg Asp Thr Gly His Lys Thr Leu Leu Phe Ala Gln His Arg Ile
        675                 680                 685
Met Leu Asp Ile Leu Glu Lys Phe Val Arg Ser Leu Ser Gly Phe Asn
    690                 695                 700
Tyr Arg Arg Met Asp Gly Thr Thr Pro Ile Gln Asn Arg Gln Thr Ile
705                 710                 715                 720
Val Asp Glu Phe Asn Asn Asp Pro Asn Ile His Val Phe Leu Leu Thr
                725                 730                 735
Thr Lys Val Gly Gly Leu Gly Val Asn Leu Thr Gly Ala Asp Arg Val
            740                 745                 750
Ile Ile Tyr Asp Pro Asp Trp Asn Pro Ser Thr Asp Val Gln Ala Arg
        755                 760                 765
Glu Arg Ala Trp Arg Leu Gly Gln Lys Arg Asp Val Ser Val Tyr Arg
    770                 775                 780
Leu Met Thr Ala Gly Thr Ile Glu Glu Lys Ile Tyr His Arg Gln Ile
785                 790                 795                 800
Phe Lys Gln Phe Leu Thr Asn Lys Ile Leu Arg Asp Pro Lys Gln Arg
                805                 810                 815
Gln Thr Ser Phe Gln Leu Ser Asp Leu Tyr Asp Leu Phe Ala Leu Gly
            820                 825                 830
Asp Glu Lys Pro Gly Ala Thr Glu Thr Ser Lys Leu Phe Gln Asp Ala
        835                 840                 845
Gln Val Thr Phe His Gly Asp Gly Asp Gly Asn Thr Ala Gln Pro Thr
    850                 855                 860
Lys Ala Glu Asp Val Ser Ser Asp Met Gln Ala Glu Lys Asn Asp Ile
865                 870                 875                 880
Ser Lys Val Val Gly Val Ser Ser Val Glu Arg Tyr Gln Gly Glu Ser
                885                 890                 895
Glu Gln Pro Ser Asp Gln Glu Lys Gly Pro Gly Gly Val Asn Ser Glu
            900                 905                 910
Ser Arg Ile Met Glu Gly Ile Phe Ala Arg Ser Gly Val His Ser Ala
        915                 920                 925
Leu Glu His Asp Gln Ile Val Asn Gly Lys Arg Val Val Arg Ala Asp
    930                 935                 940
Pro Lys Ile
```

945

<210> 36372
<211> 114
<212> PRT
<213> A.fumigatus

<400> 36372
His Val Ile Ser Ser Tyr Ser Gly Ala Val Met Asn Cys Cys Asp Asn
1 5 10 15
Ser Gly Ala Arg Asn Leu Tyr Ile Ile Ser Val Lys Gly Val Gly Ala
20 25 30
Arg Leu Asn Arg Leu Pro Ala Ala Gly Val Gly Asp Met Val Met Ala
35 40 45
Thr Val Lys Lys Gly Lys Pro Glu Leu Arg Lys Lys Val Met Pro Ala
50 55 60
Val Val Val Arg Gln Ser Lys Pro Trp Arg Arg Pro Asp Gly Ile Tyr
65 70 75 80
Leu Tyr Phe Glu Asp Asn Ala Gly Val Val Ser Thr Pro Phe Phe Cys
85 90 95
Pro Phe Phe Leu Glu Arg Arg Leu Arg Phe Val Leu Val Ile Ala Gly
100 105 110
Tyr Glu

<210> 36373
<211> 79
<212> PRT
<213> A.fumigatus

<400> 36373
Asn Leu Lys Asn Ile Lys Pro Tyr Val Thr Ser Arg Met Pro Ser Lys
1 5 10 15
Arg Gln Gln Gln Leu Gln Tyr Thr Asn His Lys His Thr Asn Ile Glu
20 25 30
Asp Asp Ser Gln Cys Gln Tyr Asp Pro Ser Pro Thr Ala Ser Val Gly
35 40 45
His Gly Asn Ala Phe Asp Thr Arg Asn Ser His Gln Gln Thr Ile Ser
50 55 60
His Leu Ser Glu Ser Arg Arg Cys Cys Tyr Ser His Leu Gly Gln
65 70 75

<210> 36374
<211> 571
<212> PRT
<213> A.fumigatus

<400> 36374
Cys Val Ser Pro Ser Arg Ala His Pro Arg Ala Gly Glu Pro Ser Gln
1 5 10 15
Leu Ser Gly Ser Pro Tyr Gly Met Glu Asn Gly Pro Pro Thr Ser Ser
20 25 30
Glu Asp Trp Gln Glu Arg Gly Ala Ala Val Ser Val Arg Gln Glu Ile
35 40 45
Asp Ala Asn Gly Lys Pro Val Ala Arg Tyr Ile Lys Lys Gly Val Arg
50 55 60

```
Asp Phe Ser Phe Gly Gln Thr Leu Gly Glu Gly Ser Tyr Ser Thr Val
65                  70                  75                  80
Val Leu Ala Thr Asp Arg Gln Thr Leu Lys Glu Tyr Ala Ile Lys Ile
                85                  90                  95
Leu Asp Lys Arg His Ile Ile Lys Glu Lys Lys Val Lys Tyr Val Asn
            100                 105                 110
Ile Glu Lys Asp Thr Leu Asn Arg Leu Thr Glu His Pro Gly Ile Val
        115                 120                 125
Arg Leu Tyr Tyr Thr Phe Gln Asp Glu Arg Ser Leu Tyr Phe Val Leu
    130                 135                 140
Asp Leu Cys Lys Gly Gly Glu Leu Leu Gly Val Leu Lys Arg Met Thr
145                 150                 155                 160
Thr Phe Asp Glu Glu Cys Thr Arg Phe Tyr Gly Ala Gln Ile Leu Asp
                165                 170                 175
Thr Ile Asp Tyr Met His Lys Arg Gly Val Ile His Arg Asp Leu Lys
            180                 185                 190
Pro Glu Asn Val Leu Leu Asp Ser Gln Met Tyr Ile Lys Ile Thr Asp
        195                 200                 205
Phe Gly Thr Ala Lys Ile Leu Asn Asn Gln Lys Lys Thr Asp Gln Asn
    210                 215                 220
Ser Ser Gly Met Pro Pro Leu Asp Ser Ser Glu Ile Pro Glu Asp Glu
225                 230                 235                 240
Arg Ala Ser Ser Phe Val Gly Thr Ala Glu Tyr Val Ser Pro Glu Leu
                245                 250                 255
Leu Thr Asp Lys Asn Ala Cys Lys Ala Ser Asp Leu Trp Ala Phe Gly
            260                 265                 270
Cys Ile Ile Tyr Gln Leu Leu Ala Gly Arg Pro Pro Phe Lys Ala Ala
        275                 280                 285
Asn Glu Tyr Leu Thr Phe Gln Lys Ile Val Ala Leu Glu Tyr Glu Phe
    290                 295                 300
Pro Val Gly Phe Pro Thr Val Ala Arg Asp Leu Val Glu Arg Leu Leu
305                 310                 315                 320
Val Leu Glu Pro Ala Arg Arg Leu Pro Ile Glu His Ile Lys Asn His
                325                 330                 335
Glu Phe Phe Gln Gly Val Asn Trp Gly Ser Asp Leu Trp Thr Arg Lys
            340                 345                 350
Ala Pro Arg Leu Arg Ala Tyr Val Pro Pro Pro Arg Glu Pro Ile Lys
        355                 360                 365
Leu Asn Gly Gly Gly Asp Asn Asp Ser Phe Pro Pro Val Ile Ser Thr
    370                 375                 380
Ala Pro Ser Asn Ala Pro Asn Ser Asn Ala Arg Val Val Pro Arg Leu
385                 390                 395                 400
Val Thr Glu Leu Pro Pro Pro Ser Gln Leu Asp Ile Glu Trp Ser Pro
                405                 410                 415
Val Leu Thr Lys Thr Asn Glu Arg Ile Leu Lys Leu Gly Asn Trp Met
            420                 425                 430
Val Leu Ser Ser Pro Ala Gly His Ser Pro Ala Ser Lys Asn Gly Ser
        435                 440                 445
Ser Glu Val Glu Ala Pro Lys Lys Phe Ser Arg Phe Phe Gly Gly Ser
    450                 455                 460
Thr Thr Lys Lys Arg Gln Arg Leu Val Met Ile Thr Ser Ser Gly Arg
465                 470                 475                 480
Ile Ile Met Ala Ala Ala Gly Gly Asp Asp Lys Lys Ala Lys Met Glu
                485                 490                 495
Ile Ser Leu Leu Ala Pro Gly Thr Ser Tyr Arg Ser Ala Thr Asp Ser
            500                 505                 510
```

```
Lys Gly Phe Ser Cys Trp Ile Val Asp Thr Val Cys Ser Ser Leu Leu
        515                 520                 525
Pro Phe Lys Ser Ser Ser Ala Lys Phe His Ala Tyr Ser Ala Thr Asn
    530                 535                 540
Ile Ser Ser Leu Lys Ile Gln Ser His His Gln Val Pro Trp Val Arg
545                 550                 555                 560
Pro Pro Cys Leu Ser Lys Asn Gly Trp Ile Arg
                565                 570
```

<210> 36375
<211> 247
<212> PRT
<213> A.fumigatus

<400> 36375

```
Val Leu Val Arg Leu Ala Trp His Ala Ser Gly Thr Tyr Asp Lys Glu
1               5                   10                  15
Thr Gly Thr Gly Gly Ser Asn Gly Ala Thr Met Arg Phe Ala Pro Glu
            20                  25                  30
Ser Asp His Gly Ala Asn Ala Gly Leu Lys Ile Ala Arg Asp Phe Leu
        35                  40                  45
Glu Pro Ile Lys Ala Gln Phe Pro Trp Ile Ser Tyr Ser Asp Leu Trp
    50                  55                  60
Thr Leu Ala Gly Ala Cys Ala Ile Gln Glu Leu Gly Gly Pro Thr Ile
65                  70                  75                  80
Pro Trp Arg Pro Gly Arg Gln Asp Lys Asp Val Ala Ala Cys Thr Pro
                85                  90                  95
Asp Gly Arg Leu Pro Asp Ala Ser Lys Asp Gln Arg His Ile Arg Asp
            100                 105                 110
Ile Phe Tyr Arg Met Gly Phe Asn Asp Gln Glu Ile Val Ala Leu Ile
        115                 120                 125
Gly Ala His Ala Leu Gly Arg Ala His Pro Asp Arg Ser Gly Tyr Asp
    130                 135                 140
Gly Pro Trp Asp Phe Ser Pro Thr Val Phe Thr Asn Glu Phe Phe Arg
145                 150                 155                 160
Leu Leu Val Asp Glu Lys Trp Gln Asn Arg Lys Trp Asn Gly Pro Ala
                165                 170                 175
Gln Phe Thr Asp Lys Thr Thr Lys Thr Leu Met Met Leu Pro Ala Asp
            180                 185                 190
Leu Ala Leu Ile Lys Asp Lys Glu Phe Lys Lys His Val Glu Arg Tyr
        195                 200                 205
Ala Arg Asp Ser Asp Ala Phe Phe Lys Asp Phe Ser Asp Ala Phe Val
    210                 215                 220
Lys Leu Leu Glu Leu Gly Val Pro Phe Thr Ser Lys Ala Glu Asp Arg
225                 230                 235                 240
Tyr Val Phe Lys Thr Ser Glu
                245
```

<210> 36376
<211> 80
<212> PRT
<213> A.fumigatus

<400> 36376

```
Thr Pro Ser His Leu His Thr Gly Thr Pro Asp Thr Ser Thr Val Val
1               5                   10                  15
```

```
Pro Pro His Arg Pro Ser Pro His Ile Gln Asp Pro Pro Asn Gln Leu
            20                  25                  30
Pro Arg Asp Leu Tyr Glu Thr Leu Pro Pro Arg Pro Cys Pro Pro Ser
        35                  40                  45
Pro Pro Ser Pro Ala Gln Val Gly Gly His Asp His Ile Pro Pro Ala
    50                  55                  60
Gly Gln Gly Gln Lys Ala Ser Cys Lys Leu Leu Leu Ser Arg Arg Trp
65                  70                  75                  80
```

<210> 36377
<211> 77
<212> PRT
<213> A.fumigatus

<400> 36377

```
Arg Gln Ile Arg Gly Thr Asp Gln Asn Gly Lys Asn Cys Lys Ile Thr
1               5                   10                  15
Gly Asp Glu Met Trp Gln Ala Tyr Gln Asp Ile Arg Asn Ile Gly Gly
            20                  25                  30
Cys Gly Lys Cys Gly Thr Lys His Phe Gly Asn Gly Cys Met Val Ser
        35                  40                  45
Val Asp Tyr Tyr Tyr Gly Cys Asp Asn Arg Asp Lys Gly Val Gln Val
    50                  55                  60
Met Ala Ala Phe Ala Glu Thr Asn Leu Thr Asp Ser Met
65                  70                  75
```

<210> 36378
<211> 93
<212> PRT
<213> A.fumigatus

<400> 36378

```
Asp Leu Arg Ile Ser Ser Leu Leu Ile His Ser Ser Ala Met Arg Tyr
1               5                   10                  15
Leu Pro Gln Pro Ile Gly Ser Asp Asp Asp Ser Asp Thr Ser Ser Asp
            20                  25                  30
Ile Pro Asp Ile Phe Ser Asp Ser Val Ala Asp Asp Ile Ser Glu Ser
        35                  40                  45
Ala Ser Lys Leu Asp Ser Ser Asp Asp Asp Ser Asp Asp Ser Asn Asp
    50                  55                  60
Asp Leu Ile Leu Asp Asp Glu Glu Gly Gln Glu Leu Ser Ala Leu His
65                  70                  75                  80
Tyr Leu Glu Glu Ala Lys Ser Leu Asn Val Ser Gln Leu
                85                  90
```

<210> 36379
<211> 65
<212> PRT
<213> A.fumigatus

<400> 36379

```
Asn Leu Ser Leu Ser Leu Val Arg Asn Pro Asp Gly Gly Arg Pro Trp
1               5                   10                  15
Leu Phe Ile Tyr Ser Thr Pro Glu Phe Thr Lys Thr Phe Leu Gly Glu
            20                  25                  30
Lys Asp Asp Cys His Ala Val Phe Asp Ala Thr Ser Thr Thr Glu Leu
```

```
        35                  40                  45
Asn Cys Ala Tyr Ile His Lys Ala Ile Ser Ser Ala Pro His Leu Tyr
    50                  55                  60
Pro
65

<210> 36380
<211> 184
<212> PRT
<213> A.fumigatus

<400> 36380
Gly Arg Pro Phe Ser Arg Gly Thr Pro Phe Phe Phe Ser Leu Leu Phe
1               5                  10                  15
Ile Ile Val Leu Leu Gln Arg Thr Gly Ser Cys Gly Ile Thr Val Gly
            20                  25                  30
Pro Ala Val Met Ala Pro Ile Gln Ser Gln Gly Ala Asp Val Glu Val
        35                  40                  45
Cys Pro Gly Asp Pro Ser Leu Arg Asp Asp Gly Val Ser Lys Lys Pro
    50                  55                  60
Ile Thr Ala Glu Glu Ala Met Glu Ile Ala Ile Gly Glu Ser Asn Thr
65                  70                  75                  80
Val Glu Tyr Thr Ile Asp Ser Asp Asn Ser Pro Tyr Leu Glu Val Arg
                85                  90                  95
Ala Asn Val Pro Asn Thr Asp Asp Pro Thr Leu Pro Ile Asn Thr Phe
            100                 105                 110
Arg Met Trp Phe Leu Gly Val Val Phe Thr Leu Val Gly Ala Val Leu
        115                 120                 125
His Gln Leu Ser Met Tyr Ala Val Pro Thr Asp Leu Gly Ile Asp Ala
    130                 135                 140
Gly Arg His Gly Cys Gln Pro Ile Leu Leu Asp Ala Leu Ser Glu Cys
145                 150                 155                 160
Tyr His His Val Pro Cys Gly Ala Ala Gly Gln Leu Pro Cys Arg Val
                165                 170                 175
Leu Phe Arg Lys Gly Thr Ala Asp
            180

<210> 36381
<211> 155
<212> PRT
<213> A.fumigatus

<400> 36381
Ala Ser Ala Ile Ile Gln Ala Gln Arg Val Phe Leu Asn Met Pro Thr
1               5                  10                  15
Pro Val Gly Tyr Gln Ile Leu Leu Ala Leu Ser Met Gln Met Phe Gly
            20                  25                  30
Leu Gly Leu Ala Gly Leu Ser Tyr Arg Tyr Ile Ile Glu Pro Pro Gln
        35                  40                  45
Met Val Cys Arg Ala Leu Met Gln Glu Glu Glu Glu Thr Asp His Leu
    50                  55                  60
Gln Ile Trp Pro Ser Thr Leu Ala Asn Ala Ala Leu Phe Gln Thr Leu
65                  70                  75                  80
His Ser Gly Ala Asn Pro Ile Ala Asp Gly Trp Arg Ile Ser Arg Tyr
                85                  90                  95
Arg Phe Phe Leu Tyr Val Phe Ile Gly Ser Phe Cys Trp Tyr Trp Leu
```

```
            100                 105                 110
Pro Gly Tyr Ile Phe Thr Gly Leu Ser Thr Phe Ala Phe Ile Cys Trp
        115                 120                 125
Ala Ala Pro Ser Thr Ser Ser Ile Pro Pro Asn Glu Ile Gly Asp Phe
    130                 135                 140
Ser Asn Ser Ser Leu Cys Arg Gln Gln Ser Thr
145                 150                 155
```

<210> 36382
<211> 61
<212> PRT
<213> A.fumigatus

<400> 36382

```
Val Asn Asp Ser Ala Val Phe Ser Leu Asn Gln Ser Asn Pro Lys Leu
1               5                   10                  15
Ala Met Val Ile Ala Val Ile Arg Leu Ser Thr Val Leu Ala Ser Asp
            20                  25                  30
Tyr Asp Arg Ala Trp Tyr Leu Ala Pro Pro Gly Pro Ser Ile Thr Tyr
        35                  40                  45
Arg Leu Trp Leu Asp Leu Val Asp Lys Lys Trp Phe Asp
    50                  55                  60
```

<210> 36383
<211> 186
<212> PRT
<213> A.fumigatus

<400> 36383

```
Val Gln Phe Phe Ile Ser Tyr Arg Cys Thr Leu Ser Leu Leu Thr Trp
1               5                   10                  15
Val Leu Met Gln Val Gly Thr Gly Val Asn Gln Phe Phe Ser Met Arg
            20                  25                  30
Tyr Pro Ser Val Thr Ile Thr Ser Leu Val Ala Gln Leu Val Ser Tyr
        35                  40                  45
Pro Val Gly Cys Phe Phe Ala Lys Val Leu Pro Ile Lys Lys Val Arg
    50                  55                  60
Leu Phe Asn Arg Trp Asp Leu Val Ile Asn Pro Asp His His Phe Asn
65                  70                  75                  80
Ile Lys Glu His Ala Val Ile Thr Ile Met Ser Asn Leu Ser Phe Asn
                85                  90                  95
Gln Ser Trp Val Ser Asp Tyr Arg Pro Trp Thr Lys Gly Val Pro Leu
            100                 105                 110
Thr Lys Ser Arg Gln Val Leu Ser Phe Lys His Lys Glu Ser Ser Ser
        115                 120                 125
Ile Cys Gln Pro Gln Leu Val Thr Lys Ser Cys Ser Leu Cys Leu Cys
    130                 135                 140
Arg Cys Ser Ala Leu Ala Trp Leu Asp Tyr His Ile Asp Ile Leu Leu
145                 150                 155                 160
Asn Pro Arg Arg Trp Tyr Ala Glu His Ser Cys Arg Lys Arg Lys Lys
                165                 170                 175
Leu Thr Thr Tyr Arg Ser Gly Leu Arg Arg
            180                 185
```

<210> 36384
<211> 194

<212> PRT
<213> A.fumigatus

<400> 36384
Val Ile Phe Leu Thr Val His Phe Ala Asp Asn Lys Val Leu Asn Asn
1 5 10 15
Leu Phe Gly Met Thr Thr Gly Leu Gly Tyr Leu Pro Thr Thr Phe Asp
20 25 30
Trp Ser Gln Ile Ala Tyr Asn Thr Ser Pro Leu Val Met Pro Phe Trp
35 40 45
Ala Gln Ala Asn Val Phe Ala Gly Trp Phe Cys Val Tyr Ala Val Ile
50 55 60
Ala Pro Ile Leu Tyr Tyr Thr Asn Thr Trp Phe Thr Ala Tyr Leu Pro
65 70 75 80
Leu Thr Gly Ser Asp Ala Tyr Asp Asn Thr Gly Asn Val Tyr Asn Ser
85 90 95
Ser Arg Ile Leu Asp Ala Ser Gly Val Ile Asp Glu Thr Lys Tyr Arg
100 105 110
Glu Tyr Ser Pro Ile Phe Leu Pro Val Thr Phe Ala Leu Ser Tyr Gly
115 120 125
Leu Gly Phe Ala Val Leu Ser Cys Leu Ile Thr His Val Leu Leu Tyr
130 135 140
His Ser Lys Asp Ile Leu Ser Thr Phe Lys Gly Asn Asn Lys Lys Asp
145 150 155 160
Ile His Ala Arg Leu Leu Ser Arg Tyr Pro Asp Val Pro Trp Trp Trp
165 170 175
Phe Ala Val Leu Thr Val Ser Ser Gly Val Ser Ala Ile Ser Pro Gly
180 185 190
Lys Gly

<210> 36385
<211> 106
<212> PRT
<213> A.fumigatus

<400> 36385
Val Gln Ala Phe Gln Gln Ser Pro Leu Ala Lys Ala Asp Pro Arg Gln
1 5 10 15
Val Ile Val Val Ala Val Ala Ile Met Thr Gln Tyr Ile Trp His Thr
20 25 30
Gly Leu Pro Phe Trp Gly Leu Phe Ile Thr Leu Ala Leu Ala Ala Ile
35 40 45
Tyr Val Ile Pro Val Gly Thr Val Tyr Ala Val Ala Asn Leu Asn Ser
50 55 60
Asn Val Leu Thr Val Leu Gly Glu Ile Ile Ser Gly Tyr Thr Leu Lys
65 70 75 80
Gly Lys Pro Leu Val Leu Leu Ile Phe Lys Val Lys Arg Ser Leu His
85 90 95
His Gly Ala Gly Arg Ile Arg Gly Gly Asp
100 105

<210> 36386
<211> 198
<212> PRT
<213> A.fumigatus

<400> 36386
Pro Ser Tyr Arg Ala Tyr Lys Ala Asp Arg His Gly Val Trp His Pro
1 5 10 15
His Ser Ala Thr Ser Gln Ile Asn Thr Thr Ser Leu Ser Phe Leu Thr
20 25 30
Leu Ile Val Phe Leu Lys Ser Ser Ile Ser His Phe Arg Thr Leu Gln
35 40 45
Asp Lys Val Met Ala Val Thr Lys Ser Ser Ser Leu Leu Ile Val Gly
50 55 60
Ala Gly Thr Trp Gly Thr Ser Thr Ala Leu His Leu Ala Arg Arg Gly
65 70 75 80
Tyr Thr Asn Val Thr Val Leu Asp Pro Tyr Pro Val Pro Ser Ala Ile
85 90 95
Ser Ala Gly Asn Asp Val Asn Lys Val Ile Ser Ser Gly Gln Tyr Ser
100 105 110
Asn Asn Lys Asp Glu Ile Glu Val Asn Glu Ile Leu Ala Glu Glu Ala
115 120 125
Phe Asn Gly Trp Lys Asn Asp Pro Leu Phe Lys Pro Tyr Tyr His Asp
130 135 140
Thr Gly Leu Leu Met Ser Ala Cys Ser Gln Glu Gly Leu Asp Arg Leu
145 150 155 160
Gly Val Arg Val Arg Pro Gly Glu Asp Pro Asn Leu Val Glu Leu Thr
165 170 175
Arg Pro Glu Gln Phe Arg Lys Leu Ala Pro Asp Gly Val Leu Gln Gly
180 185 190
Asp Phe Pro Gly Trp Asn
195

<210> 36387
<211> 554
<212> PRT
<213> A.fumigatus

<400> 36387
Ile Ala Leu Cys Cys Thr Val Lys Asp Trp Tyr Lys Asp Asp His Ser
1 5 10 15
Val Asp Val Lys Asn Thr Val Ile His Pro Pro Pro Val Phe His Pro
20 25 30
Pro Pro Val Gln Gly Phe Arg Lys Arg Asp Asp Gly Gly Ser His Ile
35 40 45
Gly Thr Pro Asn Ser His Lys Gln Gly Lys Ala Ala Glu Gly Asp Lys
50 55 60
Ser Gly Ala Ser Ala Lys His Gly Gly Val Thr Leu Ile Lys Gly Pro
65 70 75 80
Ser Gly Asn Asp Gly Gly Asn Ser Ala Glu Ile Glu Phe Asp Ser Lys
85 90 95
Tyr Ala Ser Ala Val Glu Asp His Tyr Lys Asp Asp His Ser Val Asp
100 105 110
Ile Lys Asn His Val Val Ala Pro Pro Ala Val Pro Lys Gly Phe Arg
115 120 125
Lys Arg Gly Ser Asp Pro Val Leu Leu Gly Gly Pro Ser Gly Asp Asp
130 135 140
Glu Gly Asn Asp Ala Asp Phe Val Phe Asp Asp Asp Tyr Ser Ser Thr
145 150 155 160
Val Asp Asp His Tyr Val Asp Asp His Ser Val Lys Ala Glu Asn Trp

```
                165                 170                 175
Ile Val His Val Pro Pro Pro Pro Ser Pro Pro Arg Pro Glu Pro Ser
            180                 185                 190
His Pro Gln Lys Pro Ser Phe Val Pro Pro Tyr Ala Gln Gly Pro Pro
        195                 200                 205
Pro Gln Ala Thr Ala Pro Pro Phe Ala Gly Asn Pro Glu Pro Pro Gln
    210                 215                 220
Gly Val Asp Pro Ala Ala Ser Glu Pro Cys Thr Thr Ser Thr Phe Ile
225                 230                 235                 240
Glu Thr Val Ile Lys Thr Phe Ala Asp Asp Pro Val Ala Thr Lys Pro
                245                 250                 255
Ala Ala Pro Tyr Ser Pro Pro Glu His Ser Gln Ala His Val Pro Gln
            260                 265                 270
Thr Tyr Ala Pro Ser Glu Pro Ser His Gly Phe Glu Pro Thr His Pro
        275                 280                 285
Ala Glu Ala Val Pro Thr Gly Gly Phe Pro Pro His Glu Val Glu Pro
    290                 295                 300
Pro Lys Asp His Glu Lys Pro Gly Pro Gln Lys Pro Glu Pro Thr His
305                 310                 315                 320
Pro Ser Phe Thr Thr Ser Lys Val Glu Gly His Pro Gln Pro Thr Gly
                325                 330                 335
Ala Ser Pro Thr His Glu Val Glu Pro Pro Lys Glu Tyr Glu Lys Pro
            340                 345                 350
Gly Pro Gln Lys Pro Glu Pro Ala His Pro Ser Phe Thr Thr Ser Lys
        355                 360                 365
Val Glu Gly His Pro Gln Pro Thr Val Pro Ser Tyr Pro Pro Gln Glu
    370                 375                 380
Asn Leu Gln Glu Pro Pro Glu Asp Ser Ala Pro Thr Asp Pro Gly Pro
385                 390                 395                 400
Gly Gln Ser Glu Gly Asp Ala Phe Pro Cys Pro Ser Gly Lys Pro Gly
                405                 410                 415
Gly His Gln Pro Glu His Ala Ala His Glu Tyr Gln Pro His Gln Thr
            420                 425                 430
Gln Gly Val Asp Pro Gln Glu Ala Pro Lys His Ala Pro Thr Ala Val
        435                 440                 445
Glu Pro Leu Thr Ser Ile Thr Ser Thr Ile Thr Val Ser Tyr Thr Ser
    450                 455                 460
Ser Phe Ala Val Val Pro Val Tyr Met Asp Ser Ser His Lys Thr Ser
465                 470                 475                 480
Cys Thr Ser Gly Ala His Gln Arg Pro Thr Asp Val Asp Ala His Asn
                485                 490                 495
Ser His His Ala Pro Ser Ser Ala His Ser Gln Ala Val Lys Pro Thr
            500                 505                 510
His His Ala Ala Pro Ser Pro Thr His Ser Gln Thr Leu Phe Thr Gly
        515                 520                 525
Ala Ala Gly Arg Ile Thr Pro Ala Ala Gly Val Val Ser Ala Met Cys
    530                 535                 540
Gly Leu Met Ala Val Leu Ala Phe Val Leu
545                 550
```

<210> 36388
<211> 153
<212> PRT
<213> A.fumigatus

<400> 36388

```
Asn Lys Leu Arg Ile Asp Met Ser Ser Asp Asp Ala His Thr Gly Gly
1               5                  10                  15
Asn Leu Ala Glu Met Ala Glu His Gly Thr Thr Met Pro Asn Asp Ala
            20                  25                  30
Gly Leu Gln Asn Thr Leu Pro Ser Val Pro Arg Pro Asp Gln Arg Ser
        35                  40                  45
Glu Ser His Gln Phe Asp Asn Gln Gly Leu Ala Glu Pro Ser Leu Ala
    50                  55                  60
Phe Ala Ala Asp Asn Ala Thr Asp Leu Pro Arg Ser Thr Lys Glu Met
65                  70                  75                  80
Gly Ala Ser Gly Glu Val Val Thr Gly Thr Gly Asp Ala Phe Pro Val
                85                  90                  95
Ser Gly Glu Ser Lys Arg Ile Asn Pro Gly Ala Met Asp Pro Gly Ala
            100                 105                 110
Arg Gly Asn Ala Arg Thr Ile Lys His Ala Asn Leu Asn Arg Ser Ile
        115                 120                 125
Phe Asp Arg Leu Ala Arg Glu Asp Gly Asn Ala His Glu Phe Ile Arg
    130                 135                 140
Glu His Glu Phe Arg Asn Arg Asp Glu
145                 150
```

<210> 36389
<211> 153
<212> PRT
<213> A.fumigatus

<400> 36389

```
Pro Pro Ser Arg Pro Pro Ser Pro Ser Ala Thr Pro Pro Pro Ser Arg
1               5                  10                  15
Ser Phe Pro Phe Thr Trp Thr Arg Ala Thr Arg Leu Pro Ala Arg Arg
            20                  25                  30
Glu Pro Thr Ser Asp Pro Pro Thr Leu Thr Pro Thr Thr Val Thr Thr
        35                  40                  45
Arg Leu Pro Arg His Thr Ala Arg Pro Ser Asn Pro Arg Thr Thr Leu
    50                  55                  60
Leu Arg Arg Arg Arg Ile Ala Arg Leu Cys Ser Leu Ala Pro Pro Ala
65                  70                  75                  80
Ala Ser His Pro Leu Leu Ala Leu Cys Gln Pro Cys Val Val Ser Trp
                85                  90                  95
Leu Phe Leu Pro Ser Cys Cys Lys Leu Ser Phe Val Pro Leu Ile Ala
            100                 105                 110
Val Ala Phe Val Phe Leu Ile Asn Ile Leu Phe Ser Arg Phe Ser Tyr
        115                 120                 125
Leu Met Ser Phe Ile Ser Leu Gly Leu Asp Phe Ala Leu Thr Leu Ala
    130                 135                 140
Leu Leu Ser Val Phe Val Ser Leu Gln
145                 150
```

<210> 36390
<211> 185
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (18)

<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36390

```
Thr Ser Thr Gly Thr His Leu Val Thr Ala Gly Gln Asp Ala Arg Ile
1               5                  10                  15
Arg Xaa Trp Asp Ala Ser Thr Gly Ala Asn Thr Leu Val His Phe Gly
            20                  25                  30
Pro Arg Val Arg Asn Gly Val Ser Ser His Leu Ala Glu Arg Ala Pro
        35                  40                  45
Leu Ile Val Pro Arg Gly Leu Met Ala Pro Gly Gln Glu Thr Phe Leu
    50                  55                  60
Trp Ala Asn Phe Asn Glu His Asp Asp Arg Gly Glu Ile Phe Met Phe
65                  70                  75                  80
Glu Leu Arg Glu Gly Thr Phe Ile Lys Arg Leu Lys Val Pro Gly Leu
                85                  90                  95
Met Ala Gly Arg Gln Gln Ile Arg Gly Arg Ser Asn Ala Leu Ser Ala
            100                 105                 110
Ala Arg Ile Asn Ser Leu Ala Trp Arg Gly Asn Gly Gly Ser Gly Glu
        115                 120                 125
Gly Leu Glu Met Phe Ser Ala His Gly Asp Gly Thr Ile Arg Ala Trp
    130                 135                 140
Val Ser Arg Gln Pro Glu Gly Glu Pro Asp Glu Ala Glu Glu Ala Glu
145                 150                 155                 160
Gln Ala Asp Arg Lys Arg Lys Arg Asp Ile Leu Asp Glu Ile Tyr Arg
                165                 170                 175
Gly Phe Val Ala Pro Ser Thr Pro Ala
            180                 185
```

<210> 36391
<211> 66
<212> PRT
<213> A.fumigatus

<400> 36391

```
Lys Gln His Glu Leu His Gln Val Lys Pro Thr Cys Ala His His Pro
1               5                  10                  15
Phe Ala Ile Phe Ala Asn Ser Asn Thr Leu Thr Ser Phe Phe Glu Leu
            20                  25                  30
Glu Ile Leu Gln Gln Leu Tyr Ala Ile Gly Ile Leu Gly Val Ile Phe
        35                  40                  45
Gln Thr Ala Leu Ser Pro Pro Cys Lys Pro Phe Gly Lys Trp Ser Ser
    50                  55                  60
Gly Val
65
```

<210> 36392
<211> 538
<212> PRT
<213> A.fumigatus

<400> 36392

```
Leu Trp Cys Cys Lys Gly Thr Tyr Lys Pro Gln Ile His Thr His Tyr
1               5                  10                  15
Leu Pro Gln Leu Ser Leu Ser Trp Ala Arg His Thr Asp Ala Leu Asn
            20                  25                  30
Thr Thr Phe Leu Leu Leu Ser Ser Asp Tyr Ser Lys Ser Ile His Leu
```

```
        35                  40                  45
Gln Ser Asp Arg Ser Leu Glu Phe His Thr Pro Ser Gly Cys His Tyr
    50                  55                  60
Gly Thr Arg Leu Pro Arg Tyr Gly His Asp Val Val Tyr Asp Arg Gln
65                  70                  75                  80
Ser Thr Glu Ala Leu Val Pro Ala Val Gly Val Asn Gln Asp Gly Met
                85                  90                  95
Gly Glu Val Phe Arg Leu Asn Leu Glu Met Gly Arg Tyr Met Arg Ser
            100                 105                 110
Phe Glu Val Asp Val Gly Gly Asp Asp Phe Thr Ser Thr Gly Gly Gly
        115                 120                 125
Thr Leu Gln Gly Gly Ile His Thr Gly Ala Val Asn Thr Gly Ala Ile
    130                 135                 140
Ala Glu Glu Ser His Asn Leu Leu Ala Phe Gly Thr Ser Met Gly Thr
145                 150                 155                 160
Val Glu Leu Trp Asp Pro Arg Ala Lys Gly Arg Ala Gly Val Leu Leu
                165                 170                 175
Pro Pro Asn Gln Thr Gly Pro Asp Asp Gly Arg Ser Glu Ile Thr Ala
            180                 185                 190
Leu Glu Phe His Arg Ser Gly Leu Thr Phe Ala Thr Gly Ser Ser Asn
        195                 200                 205
Gly Leu Ile His Leu Tyr Asp Leu Arg Ser Pro Val Pro Leu Leu Lys
    210                 215                 220
Lys Asp Gln Gly Tyr Gly Phe Pro Val His Thr Leu Lys Phe Leu Gln
225                 230                 235                 240
Pro Ser Thr Phe Ala Arg Glu Gln Thr Met Glu Pro Lys Ile Leu Ser
                245                 250                 255
Ser Asp Lys Lys Ile Ile Lys Ile Trp Asp Pro Arg Asp Gly Lys Pro
            260                 265                 270
Trp Thr Ser Val Glu Pro Ala Val Asp Ile Asn Ser Val Ala Trp Cys
        275                 280                 285
Lys Asp Ser Gly Met Leu Leu Thr Ala Asn Glu Gly Arg Gln Gln His
    290                 295                 300
Ala Phe Phe Ile Pro Gln Leu Gly Pro Ala Pro Arg Trp Cys Ser Phe
305                 310                 315                 320
Leu Asp Asn Leu Val Glu Glu Met Ala Glu Asp Pro Asn Asp Pro Asn
                325                 330                 335
Ala Phe Ser Thr Gly Gln Thr Gly Ala Val Tyr Asp Asn Tyr Lys Phe
            340                 345                 350
Leu Thr Val Pro Gln Leu Lys Thr Leu Asn Leu Asp His Leu Ile Gly
        355                 360                 365
Arg Thr Asn Leu Leu Arg Pro Tyr Met His Gly Tyr Phe Val Ala Gln
    370                 375                 380
Arg Leu Tyr Glu Glu Ala Arg Leu Ile Thr Asn Pro Tyr Ile Trp Glu
385                 390                 395                 400
Glu Glu Arg Ala Lys Arg Val Lys Glu Lys Ile Asp Lys Glu Arg Glu
                405                 410                 415
Ser Arg Ile Arg Gly Lys Lys Lys Ala Ala Val Lys Val Asn Lys Lys
            420                 425                 430
Leu Ala Glu Lys Leu Met Ala Ile Glu Glu Lys Asn Glu Arg Arg Gln
        435                 440                 445
Ala Gln Arg Val Leu Lys Gln Gly Gly Asp Glu Asn Met Val Glu Ala
    450                 455                 460
Pro Arg Thr Glu Lys Pro Ala Thr Gly Leu Phe Gly Asp Ser Arg Phe
465                 470                 475                 480
Ala Lys Met Phe Glu Asp Glu Glu Phe Ala Val Asp Glu Thr Ser Arg
```

```
                485                 490                 495
Glu Phe Gln Leu Leu Asn Pro Ser Thr Ile Pro Glu Pro Val Glu Arg
            500                 505                 510
Lys Glu Arg Gly Leu Thr Ala Val Glu Gln Glu Glu Val Asp Glu Val
        515                 520                 525
Pro Gly Ser Ser Ser Glu Glu Asp Asp Asp
    530                 535
```

<210> 36393
<211> 127
<212> PRT
<213> A.fumigatus

<400> 36393

```
Ser Ser Ala Ser Asp Ala Glu Arg Arg Val Arg Ser Arg Ser Pro His
1               5                   10                  15
Ser Gly Lys Ile Ser Thr Ser Ser Tyr Lys Arg Thr Asn Arg Pro Pro
            20                  25                  30
Pro Gln Met Arg Val Ser Ser Ser Thr Thr Ser His Ser Thr Arg Asp
        35                  40                  45
Arg Ser Phe Ala Ser Arg Ala Gln Asn Met Arg Thr Lys Thr Lys Arg
    50                  55                  60
Ala Arg Arg Gly Gly Val Val Gly Glu Arg Glu Phe Thr Phe Met Pro
65                  70                  75                  80
Gln Asp Lys Ser Lys Gln Lys Lys Ala Pro Ala His Thr Pro Ala Ser
                85                  90                  95
Ser Asp Tyr Lys Ser Lys Glu Arg Arg Ser Ala Ser Gly Asn Thr Phe
            100                 105                 110
Arg Lys Ser Glu Phe Thr Arg Gln Gly Pro Glu Gly Met Gln Tyr
        115                 120                 125
```

<210> 36394
<211> 267
<212> PRT
<213> A.fumigatus

<400> 36394

```
Cys Arg Gln Thr Arg Gln Gly Pro Phe Ile Tyr Pro Asp Ser Ser Val
1               5                   10                  15
Arg Cys His Arg Asp Pro Thr Glu Phe Gly Ser Gly Arg Leu Ala Gln
            20                  25                  30
Ser Ser Val Ser Cys Ile Arg Ile Val Ile Val Thr Cys Pro Leu Ser
        35                  40                  45
Tyr Arg Leu Ser Pro Pro Lys Leu Phe Phe Phe Tyr Gln Arg Ala Ile
    50                  55                  60
Ser Leu Glu Ser Gly Asn Asn Phe Arg Cys Gly Gly Arg Gly Asn Pro
65                  70                  75                  80
Ser Val Pro Ser Ile Val Gly Ala Val Thr Glu Gln Asn Met Lys Leu
                85                  90                  95
Ser Asn Gln Ser Glu Val Pro Val Tyr Thr Ile Ser Gly Ser Asn Thr
            100                 105                 110
Ala Arg Pro Leu Pro Glu Trp Leu Ala Arg Arg Arg Lys Arg Ser Leu
        115                 120                 125
Lys Asn Asp Pro Glu Tyr Ala Asn Arg Ile Glu Leu Leu Gln Asp Phe
    130                 135                 140
Glu Phe Glu Glu Ala Ser Gln Cys Ile Arg Val Ser Glu Asp Gly Glu
```

```
145                 150                 155                 160
Trp Val Met Ser Thr Gly Arg Phe Tyr Leu Val Lys Phe Met Leu Phe
                165                 170                 175
Ser Leu Ser Leu Ala Thr Asp Tyr Gly Val Val Lys Glu His Thr Ser
            180                 185                 190
Leu Lys Phe Ile Leu Thr Thr Phe Pro Asn Cys Leu Tyr Leu Gly Arg
        195                 200                 205
Gly Ile Gln Met Arg Ser Ile Arg Arg Ser Ser Phe Cys Pro Leu Ile
    210                 215                 220
Thr Gln Ser Arg Ser Ile Cys Asn Pro Ile Val Arg Trp Ser Ser Ile
225                 230                 235                 240
His Pro Gln Ala Ala Ile Thr Gly Arg Gly Phe Pro Asp Met Val Thr
                245                 250                 255
Met Trp Phe Thr Thr Gly Ser Arg Leu Arg Leu
            260                 265
```

<210> 36395
<211> 65
<212> PRT
<213> A.fumigatus

<400> 36395

```
Ile Tyr Phe Leu Asn Phe Asp Ile Lys Ala Gln Arg Asp Phe Glu Lys
1               5                   10                  15
Ser Thr Leu Asp Gln Ile Ala Ser Trp Glu Ala Ser Leu Asp Ile Phe
            20                  25                  30
Arg Trp Phe Ser Val Gly Gly Glu Gly Leu Pro Leu Glu Ser Val Asn
        35                  40                  45
Gln Asp Asp Trp Leu Arg Glu Ile Trp Glu Glu Asp Glu Trp Tyr Arg
    50                  55                  60
Cys
65
```

<210> 36396
<211> 99
<212> PRT
<213> A.fumigatus

<400> 36396

```
Leu Ser Leu Val Thr Cys Ser Thr Met Thr Pro Phe His Arg Leu Ser
1               5                   10                  15
Arg Cys Phe Arg Gln Ala Pro Ser Pro Pro Arg Ala Pro Val Ser Ser
            20                  25                  30
Asn Phe Pro Ile Leu Asn Ser Val Met Lys Ile Glu Glu Glu Gln Met
        35                  40                  45
Pro Ala Phe Glu Arg Gly Leu Phe Tyr Pro Val Lys Leu Gly Asp Val
    50                  55                  60
Phe Cys Ser Arg Tyr Gln Val Leu Ser Lys Leu Gly Phe Gly Ala Asn
65                  70                  75                  80
Ser Thr Val Trp Phe Gly Arg Asp Leu Gln Tyr Ser Met Ala Leu Leu
                85                  90                  95
Pro Gln Gln
```

<210> 36397
<211> 133

<212> PRT
<213> A.fumigatus

<400> 36397
Tyr Gly Phe Ala Asn Leu Gln Gly Ser His His Cys Tyr Ile Ala Leu
1 5 10 15
Lys Ile Tyr Ile Arg Ser Ser Glu Gly Asn Trp Glu Val Gln Val Leu
20 25 30
Lys His Leu Ser Ser Val Lys Thr His His Pro Gly Ser Ser Leu Val
35 40 45
Arg Lys Met Ile Glu Glu Phe Lys Ile Thr Gly Pro Gly Gly Ser His
50 55 60
Gln Cys Ile Val Tyr Glu Pro Leu Leu Met Ser Leu Leu Tyr Phe Gln
65 70 75 80
Ala Thr Leu Asn Pro Gln Ser Leu Pro Glu Asp Leu Leu Lys Gly Ala
85 90 95
Leu Gln Gln Leu Leu Leu Ala Leu Asp Tyr Leu Tyr Ser Glu Ala His
100 105 110
Val Ile Tyr Thr Gly Leu Cys Leu Ser Lys Pro His Thr Val Cys Pro
115 120 125
Glu Leu Ile Ser Cys
130

<210> 36398
<211> 107
<212> PRT
<213> A.fumigatus

<400> 36398
Asp Ile Gln Ala Lys Asn Ile Leu Ile Ser Ser Lys Asp Asp Ser Ile
1 5 10 15
Phe Arg Glu Trp Asp Thr Ser Glu Ala Ala Glu Pro Gly Pro Arg Lys
20 25 30
Leu Asp Ser Ser His Val Ile Tyr Gln Ser Arg Pro Phe His Arg Lys
35 40 45
Lys Gly Trp Arg Gly Phe Gly Met Pro Leu Leu Ser Asp Phe Gly Glu
50 55 60
Ala Arg Leu Gly Asp Val His Asn Gly Leu Ile Gln Pro Asp Ile Tyr
65 70 75 80
Arg Ala Pro Glu Val Ile Leu Gly Met Ser Trp Thr Ser Lys Val Asp
85 90 95
Ile Trp Asn Val Gly Ala Phe Val Cys Glu Gly
100 105

<210> 36399
<211> 70
<212> PRT
<213> A.fumigatus

<400> 36399
Glu Pro Leu Val Ser Leu Pro Ala Phe Ala Met Pro Ser Ile Val Arg
1 5 10 15
Glu Arg Arg Arg Ser Ser Gln Trp Phe Lys Glu Cys Arg Thr Gln Lys
20 25 30
Ser Phe Ala Gly Val Pro Lys Leu Glu Val Leu Ile Arg Glu Phe Leu
35 40 45

```
Ala Val Asp Arg Leu Ser Thr Gly Thr Tyr Lys Ser Asn Thr Val Ser
    50                  55                  60
Thr Phe Ala Val Thr Asn
65                  70
```

<210> 36400
<211> 116
<212> PRT
<213> A.fumigatus

<400> 36400

```
Lys Ser Leu Glu Thr Phe Phe Gly Val Gly Pro Gln Val Ser Ala Arg
1               5                   10                  15
Leu Leu Ala Arg Phe His Ile His Pro Thr Cys Lys Val Gly Glu Leu
            20                  25                  30
Ala Asn Lys Gln Val Leu Asp Leu Thr Ala Ala Leu Ser Asp Met Lys
        35                  40                  45
Ile Glu Asn Asp Leu Arg Arg Gln Ile Leu Asp Asp Ile Lys Arg Leu
    50                  55                  60
Lys Glu Ser Gly Ser Tyr Arg Gly Arg Arg His Ala Leu Gly Leu Pro
65                  70                  75                  80
Val Arg Gly Gln Arg Thr Arg Thr Gln Val Gly Tyr Pro Phe Thr Phe
                85                  90                  95
Ala Gly Leu Ile Arg Thr Arg Ser Cys Tyr Glu Leu Glu Thr Arg Lys
            100                 105                 110
Gly Gly Ala Tyr
        115
```

<210> 36401
<211> 66
<212> PRT
<213> A.fumigatus

<400> 36401

```
Pro Gly Thr Gly Leu Gln Leu Leu Val Ala Thr Phe Gly Gly Phe Val
1               5                   10                  15
Phe Asp Leu Ser Thr Phe Asp Asp Leu Asp Cys Leu Arg Arg Phe Val
            20                  25                  30
Ala Arg Thr Leu Gly Asn Ile Phe Asp Leu Phe Asp Asp Leu Val Ala
        35                  40                  45
Leu Lys Asn Leu Thr Lys Asn Asn Met Ala Thr Ile Lys Pro Thr Ser
    50                  55                  60
Ser Thr
65
```

<210> 36402
<211> 160
<212> PRT
<213> A.fumigatus

<400> 36402

```
Leu Val Gly Thr Gly Gly Lys Ser Ile Tyr Gly Glu Lys Phe Ala Asp
1               5                   10                  15
Glu Asn Phe Lys Leu Arg His Thr Arg Lys Gly Leu Leu Ser Thr Ala
            20                  25                  30
Leu Leu Glu Pro Leu Thr Arg Thr Ser Pro Phe Ser Asn Tyr Thr Arg
```

```
        35                  40                  45
His Gly Lys Arg Trp Gln Gly Tyr Gln Arg Leu Ser Val Leu His Tyr
    50                  55                  60
His Arg Ser Tyr Ser Val Ser Leu Pro Ser Val Ile Cys Leu Pro Val
65                  70                  75                  80
Tyr Thr Asn Arg Gln Leu Ile Pro His Val Leu Leu Val Gly Leu Met
                85                  90                  95
Val Ala Met Leu Phe Leu Val Arg Phe Leu Arg Ala Thr Arg Ser Ser
            100                 105                 110
Asn Arg Ser Lys Met Phe Pro Arg Val Leu Ala Thr Asn Leu Arg Arg
        115                 120                 125
Gln Ser Arg Ser Ser Lys Val Glu Arg Ser Lys Thr Asn Pro Pro Lys
    130                 135                 140
Val Ala Thr Arg Ser Cys Arg Pro Val Pro Gly Gln Ser Leu Leu Leu
145                 150                 155                 160
```

<210> 36403
<211> 61
<212> PRT
<213> A.fumigatus

<400> 36403

```
Arg Ser Glu Gln Asp Pro Ala Asp Gly Leu Tyr Asp Gly Glu Pro Ser
1               5                   10                  15
Glu Ile Ser Thr Leu Ser Glu Ser Ser Ala Tyr Ser Leu Arg Asn Val
            20                  25                  30
Ala Phe Leu Ser Ile Phe Ile Ala Met Val Phe Ile Ala Val Lys Ile
        35                  40                  45
Ser Lys Lys Ala Lys Gln Phe Asn Glu Lys Ser Glu Val
    50                  55                  60
```

<210> 36404
<211> 102
<212> PRT
<213> A.fumigatus

<400> 36404

```
Ala Trp Gln Thr Leu Ala Arg Ile Pro Thr Ala Leu Ser Ser Ser Leu
1               5                   10                  15
Pro Pro Phe Leu Leu Arg Glu Phe Thr Phe Cys Asp Leu Leu Ala Gly
            20                  25                  30
Leu Tyr Glu Pro Pro Thr Asn Thr Ser Cys Thr Ala Ser Trp Leu Asp
        35                  40                  45
Gly Arg His Val Val Phe Gly Glu Val Leu Glu Gly Tyr Glu Val Val
    50                  55                  60
Glu Gln Ile Glu Asn Val Pro Lys Gly Pro Gly Asp Lys Pro Ala Glu
65                  70                  75                  80
Thr Val Lys Ile Val Lys Ser Gly Glu Ile Lys Asp Glu Ser Thr Lys
                85                  90                  95
Gly Ser His Glu Glu Leu
            100
```

<210> 36405
<211> 64
<212> PRT
<213> A.fumigatus

<400> 36405
Pro Gly Val Ser Thr Gly Asn Asp Trp Thr Ile Phe Met Glu His Ser
1 5 10 15
Asn Ile Pro Val Leu Pro Ser Thr Gln Lys Asp Val Phe Arg Ile Arg
20 25 30
Thr Thr Ser Gly Arg Ser Gly Leu Val Gln Leu Trp Ala Asn Ala Thr
35 40 45
Asn Ile Met Trp Thr Gly Gly Arg Tyr Tyr Arg Val Ala Leu Cys Gly
50 55 60

<210> 36406
<211> 209
<212> PRT
<213> A.fumigatus

<400> 36406
Val Cys Cys Val Ser Val Ser Val Met Pro Thr Asn Leu Phe Ser Phe
1 5 10 15
Met Thr Ala Ser Asn Gly Ile Ala Leu Leu Val Val Gly His Val Ile
20 25 30
Ala Gly Leu Cys Val Ser Ile Thr Ser Ala Met Val Pro Val Tyr Gln
35 40 45
Ala Glu Val Ala Pro Lys Glu Ile Arg Gly Arg Val Ile Ser Leu Gln
50 55 60
Gln Trp Ala Ile Thr Cys Gly Ile Leu Ile Gln Tyr Phe Ile Val Ser
65 70 75 80
Asp Gln Leu Phe Leu Ser Lys Trp Arg Arg Phe Leu Thr Ile Asp Ser
85 90 95
Asn Met Val Pro Ala Thr Ser Thr Glu Val Pro Ile Thr Arg Leu Lys
100 105 110
Val Leu Leu Pro Ser Ala Phe Pro Gly Val Ser Arg Trp Cys Leu Ala
115 120 125
Leu Ser Ser Ser Ser Ala Cys Phe Ser Thr Pro Ser Arg Pro Val Gly
130 135 140
Leu Gln Ala Lys Thr Ala Gly Thr Lys Arg Trp Arg Tyr Leu Pro Thr
145 150 155 160
Phe Thr Glu Met Glu Thr Ala Thr Ile Pro Arg Phe Trp Leu Asn Ile
165 170 175
Lys Lys Leu Arg Arg Pro Trp Leu Trp Ser Val Ser Arg Arg Leu Leu
180 185 190
Ala Ile Arg Asn Trp Ser Ser Leu Ala Phe Ser Ser Val Cys Ser Leu
195 200 205
Val

<210> 36407
<211> 151
<212> PRT
<213> A.fumigatus

<400> 36407
His Tyr Asn Ser Phe Leu Val Ile Leu Pro Ser Val Ser Gln Arg Val
1 5 10 15
Val Asn Asn Ser Asn Leu Val Leu Val Asp Ala Ser Val Met Gln Pro
20 25 30

```
Arg Pro Asp Ser Val Ile Leu Thr Met Gln Ser Ala Leu Lys Leu Pro
        35                  40                  45
Ile Gly Leu Pro Val Arg Ile Asp Pro Ile Thr Leu Asp Leu Phe Asn
    50                  55                  60
Arg Gly Glu Ser Gly Asn Ser Thr Phe Ala Lys Leu Tyr Leu Asn Gly
65                  70                  75                  80
Thr Thr Ile Ser Gly Asn Thr Thr Leu Gly Val Thr Ser Gln Phe Thr
                85                  90                  95
Pro Leu Asn Val Asp Gln Trp Thr Lys Tyr Val Arg Gly Val Val Phe
            100                 105                 110
Glu Glu His Ala Pro Leu Ser Leu Lys Gly Thr Thr Met Ser Tyr Leu
        115                 120                 125
Gly Lys Leu Lys Ser Arg Val Thr Met Asp Lys Thr Ile Lys Gln Asn
    130                 135                 140
Ser Lys Arg Thr Ser Tyr Gln
145                 150

<210> 36408
<211> 179
<212> PRT
<213> A.fumigatus

<400> 36408
Gly Thr Thr Val Leu Gly Leu Lys Ser Gly Asp Leu Val Ile Gly Asn
1               5                   10                  15
Ala Thr Ile Asp Asn Leu Val Leu Arg Pro Gly Asn His Ser Asn Pro
            20                  25                  30
Val Arg Gly Arg Leu Asp Leu Lys Thr Val Leu Lys Asn Leu Gly Pro
        35                  40                  45
Val Leu Gln Ser Gln Lys Asp Ser Ile Arg Asn Gly Tyr Leu Ser Leu
    50                  55                  60
Asp Ser Val Thr Lys Thr Val Val Tyr Glu Gly Val Glu Val Pro Tyr
65                  70                  75                  80
Tyr Thr Asn Val Met Lys Asp Leu Thr Leu Thr Ala Lys Ile Pro Ile
                85                  90                  95
Gly Gly Leu Leu Val Asn Thr Leu Arg Gly Ile Phe Asn Lys Asn Gly
            100                 105                 110
Thr Asn Ile Leu Asp Gln Leu Asn Ile Thr Asp Ser Ser Ser Ser Glu
        115                 120                 125
Ser Thr Ser Ser Val Leu Ser Glu Leu Gln His Leu Asn Leu Ser Ser
    130                 135                 140
Leu Gly Gly Ser Leu Ser Ser Lys Leu Thr Ser Arg Ser Leu Ala Glu
145                 150                 155                 160
Phe Leu Asp Arg Pro Asp Asp Lys Leu Leu Leu Val Asp Val Leu Lys
                165                 170                 175
Ala Phe Leu


<210> 36409
<211> 318
<212> PRT
<213> A.fumigatus

<400> 36409
Gln Tyr Gly Ser Ser Asn Val Asp Gly Gly Pro Asp Asn Pro Thr Gln
1               5                   10                  15
```

```
Ser Thr Ala Ala Phe Arg Ile Pro Trp Gly Ile Gln Met Val Pro Gly
            20                  25                  30
Phe Ile Leu Phe Val Gly Leu Phe Phe Tyr Pro Lys Ser Pro Arg Trp
        35                  40                  45
Leu Ala Ser Lys Asp Arg Trp Asp Glu Ala Met Glu Val Leu Ala Asn
    50                  55                  60
Leu His Gly Asn Gly Asp Arg Asn His Pro Lys Val Leu Ala Gln Tyr
65                  70                  75                  80
Gln Glu Ile Glu Glu Ala Leu Ala Leu Glu Arg Glu Gln Ala Ser Thr
                85                  90                  95
Ser Tyr Gln Glu Leu Val Lys Pro Arg Ile Leu Lys Arg Val Phe Leu
            100                 105                 110
Gly Met Ser Leu Gln Met Trp Ser Gln Leu Cys Gly Glu Leu Ile Val
        115                 120                 125
Pro Phe Ser Met Arg Gln Arg Leu Met Ala Ala Ala Ile Gly Met Asn
    130                 135                 140
Val Met Met Tyr Tyr Ile Val Tyr Ile Met Gln Ser Thr Gly Thr Gly
145                 150                 155                 160
Ser Pro Leu Leu Thr Ala Ser Ile Gln Tyr Ile Leu Asn Thr Ala Leu
                165                 170                 175
Thr Leu Pro Ala Ile Ile Tyr Leu Asp Arg Phe Gly Arg Arg Pro Ala
            180                 185                 190
Ile Leu Ile Gly Phe Ala Leu Gln Ala Thr Phe Leu Tyr Ile Glu Gly
        195                 200                 205
Gly Leu Gln Ala Gly Phe Gly Lys Pro Asn Pro His Asp Asp Pro Lys
    210                 215                 220
Leu Asp Ala Ile Ser Trp Val Val Ser Asp His Pro Asn Val Gly Lys
225                 230                 235                 240
Ala Ile Ile Ala Leu Ser Tyr Leu Phe Val Cys Ser Phe Ala Thr Thr
                245                 250                 255
Ile Gly Pro Thr Ser Trp Thr Tyr Pro Ala Glu Ile Tyr Pro Ala Lys
            260                 265                 270
Val Arg Ala Lys Ala Val Ser Leu Ala Thr Ala Ser Asn Trp Ile Trp
        275                 280                 285
Asn Cys Leu Leu Ala Leu Phe Val Pro Pro Leu Leu Trp Ser Ile Asn
    290                 295                 300
Trp Lys Met Tyr Met Ile Val Arg Thr Cys Met Glu Asn Leu
305                 310                 315
```

<210> 36410
<211> 155
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (155)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 36410
Thr Ile Asp Leu Leu His Ile Asn Pro Ser His Pro Arg Gln Ser Thr
1               5                   10                  15
Thr Pro Thr Ala Ala Tyr Arg Asn Ile Glu Pro Asn Thr Met Leu Ile
            20                  25                  30
Ile Gly Leu Thr Gly Ser Ile Ala Thr Gly Lys Ser Thr Val Ser Ala
        35                  40                  45
```

```
Leu Leu Ala Ser Pro Pro Tyr Ser Leu Pro Ile Ile Asp Ala Asp Leu
    50                  55                  60
Leu Ala Arg Gln Val Val Glu Pro Gly Thr Pro Ala Tyr Lys Ala Ile
65                  70                  75                  80
Val Asn Tyr Phe Gly Pro Ser Thr Pro Asp Leu Leu Leu Pro Pro Ser
                85                  90                  95
Asp Gly Asp Ala Thr Ser Ser Gln Pro Pro Leu Asn Arg Pro Ala Leu
            100                 105                 110
Gly Arg Arg Val Phe Gly Thr Ser Glu Glu Arg Lys Arg Asp Arg Met
        115                 120                 125
Ile Leu Asn Lys Ile Val His Pro Ala Val Arg Trp Glu Ile Tyr Lys
    130                 135                 140
Ala Leu Ile Tyr Tyr Tyr Val Arg Gly His Xaa
145                 150                 155

<210> 36411
<211> 180
<212> PRT
<213> A.fumigatus

<400> 36411
Arg Leu Val Leu Met Ala Gly Ala Arg Tyr Ile Ile Asp Asn Tyr Glu
1               5                   10                  15
His Leu Pro Asp Val Met Leu Val Ile His Ser Gln Arg Phe Gln Trp
            20                  25                  30
His Asn Asp Asp Pro Tyr Tyr Asp Gly Val Pro Val Leu Arg Arg Phe
        35                  40                  45
Gln Val Ser Tyr Leu Gln Lys Gln Gly Tyr Val Asn Leu Arg Cys Ala
    50                  55                  60
Trp Thr Leu Gly Cys Pro Ala Glu Ile His Pro His Thr Asp Thr His
65                  70                  75                  80
Arg Asp Asp Val His Ala Gly Glu Tyr Phe Lys Asn Gly Phe Met Glu
                85                  90                  95
Leu Phe Pro Gly Val Asp Val Pro Asp Glu Val Gly Val Ser Cys Cys
            100                 105                 110
Ala Gln Phe Gly Val Thr Asn Trp Lys Val Arg Glu Arg Pro Lys Ser
        115                 120                 125
Asp Tyr Val Arg Phe Arg Lys Trp Leu Ser Glu Thr Pro Leu Lys Asp
    130                 135                 140
Asp Leu Ser Gly Arg Ile Met Glu Tyr Ser Trp His Ser Met Phe Pro
145                 150                 155                 160
Thr Pro Leu Pro Leu Arg His Ser Val Phe Ile Lys Gln Cys Gly Ala
                165                 170                 175
Asn Ser His Gln
            180

<210> 36412
<211> 98
<212> PRT
<213> A.fumigatus

<400> 36412
Ala Ser Val Ala Lys Gly Ala Asp Glu Ser Lys Ser Thr Thr Cys Phe
1               5                   10                  15
Ile Ser Thr Val Ser Arg Ser Thr Thr Cys Pro Lys Asn Gln Phe Leu
            20                  25                  30
```

```
Pro Ile Ser Thr Ser Tyr Leu Leu Leu Leu Thr Ser Leu Thr Ile Leu
        35                  40                  45
Gly Met Thr Leu Asn Ser Asn Arg Lys Tyr Tyr Lys Thr Pro Ser Thr
    50                  55                  60
Ile Val Ala Ser Leu Leu Lys Ile Tyr Lys Ala Ala Asp Tyr Ile Leu
65                  70                  75                  80
Leu Asn Lys Tyr Lys Phe Asn His Thr Asn Ala Arg Tyr Cys Ile Asn
                85                  90                  95
Gly Leu
```

<210> 36413
<211> 101
<212> PRT
<213> A.fumigatus

<400> 36413

```
Ala Pro Asp Ala Leu Ala Glu Glu Thr Thr Gly Gln Ser Tyr Val Asn
1               5                   10                  15
Gly Asp Ala Leu Thr Asn Ser Ala Tyr Ala Met Val Ile Phe Asn His
            20                  25                  30
Arg Val Phe Leu Ala Gly Glu Tyr Val Thr Ala Glu Lys Ser Lys Pro
        35                  40                  45
Glu Ile Glu Ser Arg Leu Pro Pro Arg Ile Arg Pro Trp Thr Cys Gln
    50                  55                  60
Leu Ser Arg Gln Asp Val Glu Gly Leu Pro Ser Gly Pro Val Thr Asp
65                  70                  75                  80
Phe Leu Glu Asn Pro Asp Asn Gly Asn Asn Ser Ser Arg Glu Val Gly
                85                  90                  95
Ile Phe Ser Ser Trp
            100
```

<210> 36414
<211> 77
<212> PRT
<213> A.fumigatus

<400> 36414

```
Glu Gln Asn Ala Thr Ile Gln Leu Gln Ala Ala Thr Ser Gly Trp Trp
1               5                   10                  15
Ile Leu Gly Pro Ser Thr Ile Asn Tyr Leu Ser Arg Asp Glu Thr Leu
            20                  25                  30
Ile Arg Glu Leu His Gly Leu Ile Tyr Thr Ile Tyr His Glu Glu Lys
        35                  40                  45
Met Pro Thr Ser Leu Leu Glu Leu Leu Pro Leu Ser Gly Phe Ser Arg
    50                  55                  60
Lys Ser Val Thr Gly Pro Asp Gly Asn Pro Ser Thr Ser
65                  70                  75
```

<210> 36415
<211> 184
<212> PRT
<213> A.fumigatus

<400> 36415

```
Gln Ala Asp Arg Ala Pro Ser Ser Thr Leu Ser Pro Thr Leu Thr Gly
```

```
1               5                   10                  15
Leu Ser Leu Pro Met Val Glu Pro Met Arg Met Thr Ser Thr Met Ser
            20                  25                  30
Arg Ala Leu Pro Arg Asp Gln Trp Pro Thr Glu Pro Gly Lys Thr Val
        35                  40                  45
Lys Leu Gln Glu Phe Thr Asp Pro Ser Pro Phe Ser Ile Pro Ala Lys
    50                  55                  60
Thr Ala Met Ser Arg Ile Ile Tyr Ser Thr Thr Asn Ala Asn Gly Thr
65                  70                  75                  80
Leu Val Pro Ala Ser Ala Tyr Ile Leu Trp Pro Phe Gln Pro Lys Ala
                85                  90                  95
Leu Arg Arg Lys Thr Gln Asn Asn Ser Gly Leu Ser Ser Ala Pro Val
            100                 105                 110
Val Leu Trp Lys His Gly Thr Ser Gly Phe Tyr Ala Asn Gly Ala Pro
        115                 120                 125
Ser Thr His Arg Gly Leu Phe Tyr Ala Asp Ile Val Pro Phe Ala Leu
    130                 135                 140
Ala Glu Ala Gly Tyr Ala Val Val Ala Pro Thr Met Pro Ala Ser Ala
145                 150                 155                 160
Trp Thr Ser Pro Gly Thr Glu Val Thr Phe Arg Thr Ser Thr Leu Phe
                165                 170                 175
Ala Lys Leu Val Leu Thr Met Leu
            180
```

<210> 36416
<211> 90
<212> PRT
<213> A.fumigatus

<400> 36416

```
Ala Lys Ile Ser Ile Ala Ser Lys Cys Val Ala Ser Ser Ser Gly Thr
1               5                   10                  15
Ser Ile Pro Gly Glu Ser Arg Val Ile Leu Phe Ser Ala Leu Val Ser
            20                  25                  30
Ala Glu Gly Glu Ser Ser Thr Asp Cys Thr Arg Leu Arg Tyr Ser Ala
        35                  40                  45
Gly Ala Leu Phe Arg Lys Leu Met Met Ile Arg Arg Ser Ile Cys Gly
    50                  55                  60
Asp Ser Ile Glu Val Thr Leu Ile Met Tyr Leu Ala Thr His Gly Glu
65                  70                  75                  80
Thr Leu His Asn Pro Pro Pro Asp Phe Gly
                85                  90
```

<210> 36417
<211> 175
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (94)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36417

```
Ser His Asp Pro Ser Glu Ile Phe Gln Val Tyr Phe Ala Cys Lys Pro
1               5                   10                  15
```

```
Ile Ser Asp Arg Leu Ser Asn Ala Cys Lys Gly Asp Ile Val Glu Glu
            20                  25                  30
Lys His Gly Phe Ala Glu Ile Leu Ser Gly Ala Gly Trp Gln Met Asp
        35                  40                  45
Asp Ile Leu Glu Ala Leu Glu Ser Ala Asp Asp Phe Tyr Cys Glu Arg
    50                  55                  60
Leu Gly Val Val Lys Met Asp Cys Trp Ser Arg Gly Arg Val Leu Gly
65                  70                  75                  80
Asp Ala Ala Phe Cys Pro Ser Ala Thr Thr Gly Met Gly Xaa Thr Arg
                85                  90                  95
Ile Leu Val Gly Val Tyr Ile Leu Val Gly Glu Ile Gly Lys Gln Cys
            100                 105                 110
Lys Arg Ser Phe Gly Gly Asp Ile Asp Gly Ser Thr Thr Lys Asp Ala
        115                 120                 125
Leu Ser Arg Ala Phe Lys Ala Tyr Gly Ile Phe Arg Pro Phe Leu Asp
    130                 135                 140
Gln Val Gln Arg Gly Leu Leu Asp Gly Tyr Ser Phe Ser Asp Arg Leu
145                 150                 155                 160
Pro Ser Thr Ser Leu Val Leu Leu Phe Ser Ile Leu Pro Ser Leu
                165                 170                 175
```

<210> 36418
<211> 278
<212> PRT
<213> A.fumigatus

<400> 36418

```
Leu Trp Thr Pro Ser Ser Ser Lys Leu Leu Ser Val Pro Leu Lys Met
1               5                   10                  15
Asn Ser Gln Arg Ile Ala Tyr Phe Gly Ala Thr Gly Gly Cys Thr Asn
            20                  25                  30
Ala Cys Leu Ala Leu Ser Leu Arg Gln Gly Leu Lys Ala Val Ala Leu
        35                  40                  45
Ala Arg Thr Pro Lys Lys Leu His Asp Met Leu Leu Ser Gln Gly Ile
    50                  55                  60
Ser Glu Glu Thr Ile Ser Ala Asn Leu Ile Ile Ile Gln Gly Asp Ile
65                  70                  75                  80
Thr Asp Val Ala Ala Val Lys Lys Thr Leu Met Ser Gly Asp Glu Arg
                85                  90                  95
Lys Leu Val Asp Lys Ile Val Ser Gly Val Gly Ala Arg Pro Ser Phe
            100                 105                 110
Gln Leu Ser Val Thr Thr Pro Val Lys Met Asp Asn Pro His Ile Cys
        115                 120                 125
Glu Gln Ala Ile Thr Thr Ile Ile Lys Ala Leu Gly Glu Ile Tyr Ala
    130                 135                 140
Glu Tyr Pro Asp Glu Arg Leu Cys Lys Pro Val Ile Thr Val Ile Ser
145                 150                 155                 160
Thr Thr Gly Val Asp Gly Pro Asp Asp Val Pro Phe Gly Phe Lys Ser
                165                 170                 175
Leu Tyr Ser Val Leu Leu Ala Val Pro His Glu Asp Lys Lys Lys Leu
            180                 185                 190
Glu Glu Leu Val Lys Ser Asp Glu Leu Lys Asp Ala Ser Ser Arg Val
        195                 200                 205
Phe Gly Gly Ala Val Ile Val Arg Pro Ser Leu Leu Val Gly Asp His
    210                 215                 220
Gln Ile Ala Ser Ile Gly Ala Lys Lys Leu Arg Val Gly Thr Glu Glu
```

```
225                 230                 235                 240
Asn Pro Pro Ile Gly Tyr Thr Val His Arg Ala Arg Val Gly Gln Trp
                245                 250                 255
Ile Phe Glu Glu Val Val Thr Lys Ser Lys Val Asp Trp Val Gly Lys
            260                 265                 270
Ile Val Thr Leu Thr Tyr
        275
```

<210> 36419
<211> 160
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (137)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36419

```
His Met Leu Val Thr Met Arg Leu Ser Arg Ser Ile Ala Val Phe Thr
1               5                   10                  15
Leu Val Thr Tyr Ala Thr Gly Leu Pro Ser Leu Gln Val Ile Pro Arg
            20                  25                  30
Gly Glu Pro Gln Leu Pro Leu Leu Asp Pro Ser Met Thr Ile Lys Glu
        35                  40                  45
Ala Ala Arg Lys Cys Gly Asp Lys Ala Gln Leu Ser Cys Cys Asn Arg
    50                  55                  60
Val Val Lys Ala Gly Asp Tyr Thr Ser Val Tyr Gln Gly Ile Gly Ala
65                  70                  75                  80
Gly Leu Leu Ser Asn Leu Ala Gly Gly Gly Ser Gly Ile Ser Ser Ile
                85                  90                  95
Leu Ala Phe Asp Gln Cys Ser Arg Leu Asp Ala Gln Gly Glu His Pro
            100                 105                 110
Asn Arg Ile Ser Ser Ala Arg Glu Met Thr Asn Ser Arg Ser Pro Cys
        115                 120                 125
Gly Pro Phe Thr Tyr Pro Gly Ser Xaa Glu Pro Ala Leu Gln Ala Lys
    130                 135                 140
Arg Gly Leu Leu Ser Glu Glu Pro Arg Arg Cys Gly Met Tyr Leu Thr
145                 150                 155                 160
```

<210> 36420
<211> 122
<212> PRT
<213> A.fumigatus

<400> 36420

```
Thr Thr Thr Leu Pro Leu Asp Cys Val Tyr Pro Tyr Gly Leu Pro Arg
1               5                   10                  15
Ser Asn Leu Arg Lys Ser Lys Met Pro His Leu Asn Pro Pro Ser Asn
            20                  25                  30
Glu Gly Lys Glu Pro Ser Thr Gly Thr Arg Pro Thr Gly Ser Ala Gly
        35                  40                  45
Tyr Ala Ser Leu Asp Ala Leu Ser Thr Arg Glu Gly Asn Ala Ser Gly
    50                  55                  60
Arg Val Phe Gly Thr Gly Thr Gly Gly Thr Val Thr Ser Pro Glu Tyr
65                  70                  75                  80
```

```
Ser Thr Ala Leu Asn Ser Asp Val Met Gln Asn Ala Glu Ser Asp Arg
                  85                  90                  95
Ala Met Ser Lys Glu Glu Ala Asp Arg Met His Glu Gln Arg Met Glu
             100                 105                 110
Glu Glu Tyr Ala Lys Arg Glu Gly Gly Ala
         115                 120
```

<210> 36421
<211> 73
<212> PRT
<213> A.fumigatus

<400> 36421

```
Asp Thr Pro Thr Ala Ala Tyr Arg Ser Asp Val Val Ala Thr Ala Val
1               5                  10                  15
Thr His Ser Ile His Leu Arg Leu His Lys Gln Ile Ala Gly Cys His
            20                  25                  30
Lys Ala Ile Trp Val Tyr Ile Thr Arg Leu Val Gln Ser Ser Glu Pro
        35                  40                  45
Leu Pro Phe Leu Leu Ile Val Ser Ile His Thr Asp Tyr Leu Glu Ala
    50                  55                  60
Ile Ser Ala Asn Gln Arg Cys Leu Thr
65                  70
```

<210> 36422
<211> 223
<212> PRT
<213> A.fumigatus

<400> 36422

```
Ile Leu Phe Thr Phe Pro Ser Asn Phe Phe His Leu Ser Leu Leu Ser
1               5                  10                  15
Phe Gln Arg Ala Leu Ser Cys Asn Pro Leu Lys Thr Tyr Pro Ser His
            20                  25                  30
Thr Ile Leu Thr Phe Ser Thr Thr Leu Leu Leu Ala Leu Thr Met Gln
        35                  40                  45
Tyr Lys Thr Leu Pro Leu Leu Ile Met Ala Ala Thr Ala Leu Ala Ala
    50                  55                  60
Pro Glu Ala Arg Pro Glu Ala Ala Ala Glu Ala Ala Pro Glu Ala Val
65                  70                  75                  80
Pro Glu Ala Ala Pro Ala Ala Ser Pro Glu Asp Val Gly Lys Arg Gln
                85                  90                  95
Tyr Glu Tyr Tyr Ser Ser Leu Met Asn Glu Leu Asn Ser Leu Ser Val
            100                 105                 110
Tyr Pro Gln Lys Ala Ser Lys Leu Asn Asp Thr Asn Arg Ser Cys Gly
        115                 120                 125
Tyr Arg Ala Asp Thr Ser Asn Trp Asp Lys Phe Leu Thr Asn Ile Asp
    130                 135                 140
Tyr Asn Gln Tyr Leu Thr Asn Thr Glu Tyr Lys Gln Tyr Leu Thr Asn
145                 150                 155                 160
Thr Asp Phe Gly Gly Ile Pro Thr Asn Thr Ala Ala Asp Asn Val Pro
                165                 170                 175
Thr Asn Thr Lys Leu Gly Gly Val Pro Thr Asp Leu Glu Gly Leu Pro
            180                 185                 190
Ser Phe Ser Met Pro Thr Ala Ala Phe Thr Tyr Asp Gly Met Pro Pro
        195                 200                 205
```

```
Pro Ser Ile Ser Ser Arg Arg Pro Gly Leu Glu Arg Thr Ala Leu
    210                 215                 220
```

<210> 36423
<211> 73
<212> PRT
<213> A.fumigatus

<400> 36423

```
Lys Lys Lys Leu Asp Thr Lys Arg Leu Gly Arg Met Ser Ser Leu Arg
1               5                   10                  15
Cys Glu Leu Glu Ile Cys Tyr Ser Gly Met Ile Ser Arg Lys Pro Met
            20                  25                  30
Gly Leu Ile Leu Thr Gly Thr Asp Arg Lys Ser Cys Gln Ser Gln Ser
        35                  40                  45
Trp Thr Val Arg Ala Tyr Asn Thr Glu Lys Tyr Thr Thr His Cys Pro
    50                  55                  60
Arg Arg Val Trp Ser Asp Lys Phe Pro
65                  70
```

<210> 36424
<211> 87
<212> PRT
<213> A.fumigatus

<400> 36424

```
Ser Cys Pro Asn Asn Ile Phe Pro Val His Ile Ala Met Thr Thr Phe
1               5                   10                  15
Tyr Pro Gly Val Leu Tyr Leu Ala Phe Phe Phe Asn Asp Leu Cys Gly
            20                  25                  30
Ile Ile Arg Pro His Ala Leu Phe Ser Pro Tyr Met Asn Val Met Ser
        35                  40                  45
Ile Phe Ser Leu Gly Arg Arg Arg Gln His Met Lys Met Gly Val Pro
    50                  55                  60
Trp Phe Asn Tyr Ser Arg His Asn Thr Lys Leu Ser Arg Gly Trp Arg
65                  70                  75                  80
Glu Trp Ala Leu Ile Val Lys
                85
```

<210> 36425
<211> 134
<212> PRT
<213> A.fumigatus

<400> 36425

```
Ser Gln Thr Pro Val Glu Leu Thr Gln Thr Val Asn Met Thr Lys Leu
1               5                   10                  15
Ser Leu Leu Pro Leu Leu Thr Leu Ala Ser Ala Val Leu Ala Lys Gln
            20                  25                  30
Asp Ala Phe Gln Ala Lys Cys Ala Ser Phe Gly Arg Lys Ile Lys Leu
        35                  40                  45
Pro Asn Val His Val Asn Phe Val Glu Tyr Val Pro Gly Gly Thr Asn
    50                  55                  60
Leu Thr Leu Pro Asp Asn Asp Val Thr Cys Gly Ala Ser Ser Gln Val
65                  70                  75                  80
Val Ser Ala Asp Met Cys Arg Val Ala Met Ala Val Asp Thr Ser Lys
```

```
                85                  90                  95
Ser Ser Gln Ile Thr Leu Glu Ala Trp Phe Pro Arg Glu Tyr Thr Gly
            100                 105                 110
Arg Phe Leu Ser Thr Gly Asn Gly Gly Leu Ser Gly Cys Met Ala Ser
        115                 120                 125
Ser Lys Pro Leu Gln Lys
    130
```

<210> 36426
<211> 394
<212> PRT
<213> A.fumigatus

<400> 36426

```
Ser Ser Val Met Ala Asn Ile Ile Ile Gly Ile Gln Tyr Tyr Asp Leu
1               5                  10                  15
Ala Tyr Thr Ala Gly Leu Gly Phe Ala Thr Val Gly Ala Asn Asn Gly
            20                  25                  30
His Asn Gly Thr Ser Gly Lys Pro Phe Tyr Gln His Pro Glu Val Ile
        35                  40                  45
Glu Asp Phe Ala Tyr Arg Ser Ile His Thr Gly Val Val Val Gly Lys
    50                  55                  60
Gln Leu Thr Lys Met Phe Tyr Lys Glu Gly Phe Asp Lys Ser Tyr Tyr
65                  70                  75                  80
Leu Gly Cys Ser Thr Gly Gly Arg Gln Gly Phe Lys Ser Ile Gln Lys
                85                  90                  95
Tyr Pro Asn Asp Phe Asp Gly Val Val Ala Gly Ala Pro Ala Phe Asn
            100                 105                 110
Phe Val Asn Leu Ile Ser Trp Ser Ile His Phe Tyr Ser Ile Thr Gly
        115                 120                 125
Ser Asn Thr Ser Asp Thr Tyr Leu Ser Pro Glu Ser Trp Lys Val Val
    130                 135                 140
His Asp Glu Ile Val Arg Gln Cys Asp Glu Ile Asp Gly Ala Lys Asp
145                 150                 155                 160
Gly Ile Ile Glu Asp Thr Asp Leu Cys Gln Pro Val Ile Glu Thr Ile
                165                 170                 175
Ile Cys Lys Pro Gly Ala Ser Asp Lys Thr Asn Cys Ile Thr Gly Ala
            180                 185                 190
Gln Ala Lys Thr Val Arg Asn Val Leu Ser Pro Phe Tyr Gly Val Asn
        195                 200                 205
Gly Thr Leu Leu Tyr Pro Arg Met Gln Pro Gly Ser Glu Leu Phe Ala
    210                 215                 220
Ser Ser Val Val Tyr Asn Gly Gln Pro Phe Arg Tyr Ser Thr Asp Trp
225                 230                 235                 240
Tyr Arg Tyr Val Val Tyr Asn Asn Pro Asp Trp Asp Ala Thr Lys Trp
                245                 250                 255
Thr Val Glu Asp Ala Ala Val Ala Leu Ala Gln Asn Pro Tyr Asn Ile
            260                 265                 270
Gln Thr Trp Asp Ala Asp Ile Ser Ser Phe Gln Lys Ala Gly Gly Lys
        275                 280                 285
Val Leu Thr Tyr His Gly Met Gln Asp Gln Leu Ile Ser Ser Asp Asn
    290                 295                 300
Ser Lys Leu Tyr Tyr Ala Arg Val Ala Glu Glu Met Gly Leu Gly Pro
305                 310                 315                 320
Glu Glu Leu Asp Asp Phe Tyr Arg Phe Phe Pro Val Ser Gly Met Ala
                325                 330                 335
```

```
His Cys Thr Gly Gly Asp Gly Ala Tyr Gly Ile Gly Asn Gly Leu Arg
            340                 345                 350
Thr Tyr Asn Gly Ala Glu Pro Glu Asn Asn Val Leu Met Ala Met Val
        355                 360                 365
Gln Trp Val Glu Lys Gly Ile Ala Pro Glu Phe Ile Arg Val Pro Ser
    370                 375                 380
Leu Thr Pro Pro Ala Gly Arg Ser Ala Ser
385                 390
```

<210> 36427
<211> 477
<212> PRT
<213> A.fumigatus

<400> 36427

```
Gln Leu Thr Ile Arg Ile Gln Leu Asp Asp Arg Pro Leu Asp Leu Phe
1               5                   10                  15
Pro Ile His Val Val Val Leu Pro His Gly Asn Arg Arg Glu Arg Gln
            20                  25                  30
Asn His Asn Arg Arg Arg Arg Asp Thr Leu Ile Leu Leu Thr Leu Arg
        35                  40                  45
Pro Cys Met Val Asp Cys Ile Pro Gly Arg Thr Ala Gly Arg Val His
    50                  55                  60
His Leu Arg Arg Arg Ala Pro Gln Val Asp Ser Arg Arg Ile Ala Phe
65                  70                  75                  80
Gln Val Val Arg Glu Pro Ser Glu Gln Arg Leu Trp Glu Gly Val Gly
                85                  90                  95
Val Asp Gly Pro Gly Asn Arg Val Ala Asp Arg Pro Ala Glu Thr Ala
            100                 105                 110
Gly Gln Ala Asp His Gly Asp His His Gly His Ala Val Ala Val Arg
        115                 120                 125
Gly Arg His Asp Gly His Leu Val Pro Asp His Glu Arg Ala Ala Ala
    130                 135                 140
Lys Gly Asp Glu Asp Leu Ala His His Glu Ile Pro Asp Leu Ala Leu
145                 150                 155                 160
Gly Ala Ala Glu Val Asp His Glu Ala Gly Ala Glu Glu His Gln Arg
                165                 170                 175
Gly Ala Glu Ile Gln Ala Gly Phe Leu Glu Val Phe Gly Leu Ala Asp
            180                 185                 190
Pro Asp Ala Glu Glu Asp Gly Pro Glu Gly Arg Ala Asp Ala Val Asp
        195                 200                 205
Leu Cys His Val Ala Gly Val Gly Gly Val Gln Val Val Asp Asp Leu
    210                 215                 220
Glu Val Val Val Val Val Leu Val Pro Gly Val Ile Val Glu Glu Asn
225                 230                 235                 240
Asp Arg Ser Gln Asn Ala Gly Pro Glu His Arg Pro Val Leu Glu Glu
                245                 250                 255
Leu Pro Leu Asp Glu Ser Gly Arg Gly Glu Glu Ser Leu Pro Tyr Arg
            260                 265                 270
Glu Asp Gly Glu Glu Gln His Ala Asp Asp Asp His Ala Asp Lys Gly
        275                 280                 285
Gly Arg Gly Val Ala Ala Glu Ala Val Arg Leu Glu Ala Glu Gly Gln
    290                 295                 300
Glu Lys Gln Asp Lys Gly Ser His Glu Glu Lys Gly Ala Asp Glu Val
305                 310                 315                 320
Glu Leu Ala Lys Val Met Pro Glu Gly Leu Glu Arg Arg Pro Ala Ala
```

```
                325                 330                 335
Gly Val Pro Asp Lys His Ala Arg Leu Leu Gly Leu Ala Leu Val Glu
            340                 345                 350
Leu Glu Asp Gln Arg Glu Arg His Lys Gly Glu Glu Asp Asp Asp Gly
        355                 360                 365
Glu Thr Ala Val Gly Pro Pro Pro Arg Gly Met Gly Ile Glu Arg Leu
    370                 375                 380
Arg Ser Glu Arg Ala Asn Lys Gly Cys Thr Asp Gly Arg Gly Ala Asn
385                 390                 395                 400
Glu Cys Val Gly Lys Cys Pro Ile Ala Gln Pro Gly Arg Val Arg Asp
                405                 410                 415
Lys Asp Asn Gln Asp Glu Val Asp Gly Arg Val Ala Asn Pro Val Gln
            420                 425                 430
Arg Val Ser Gly Cys Glu Ala Ile Gly Ala Ile Ala Arg Gly Asp His
        435                 440                 445
Asp Asn Pro Asp Asp Gln Asp Pro Asp Glu Asn Gln Lys Ala Leu Gly
    450                 455                 460
Ser Ala Pro Glu Ile Glu Gly Phe Gly Asp Arg Gln Leu
465                 470                 475
```

<210> 36428
<211> 491
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (40)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36428

```
Gln Arg Leu Leu Met Asp Thr Val Asn Arg Ile Trp Val Cys Phe Phe
1               5                   10                  15
Ile Ser Lys Pro Ala Val Phe His Gln Gln Gln Tyr Asp Leu Leu Arg
            20                  25                  30
Leu Cys Gly Leu Leu Ile Gly Xaa Pro Asp Leu Pro Gly Val Tyr Ser
        35                  40                  45
Leu Asp Tyr His Arg Gly Ser Ala Thr Ala Ala Tyr Arg Gln Asn Pro
    50                  55                  60
Gln Ser Leu Gly Pro Ser Arg Gly Leu Ser Gly Phe Arg Arg Gly Leu
65                  70                  75                  80
Asp Arg Arg Asp Tyr Arg Asp Arg Leu Leu Gln Trp Pro Gln Trp Leu
                85                  90                  95
Arg Ser Arg Ile His Ala Val Leu Asp Trp Leu His Gly Arg Gln Leu
            100                 105                 110
His Pro Gly Cys Leu Cys Arg Gly Arg Val Arg Ala Ala Gln Ser Gly
        115                 120                 125
Ile Cys Leu Arg Ile His Trp His Pro Asp His Leu Tyr Ser Leu Cys
    130                 135                 140
Trp Pro Ala Arg Cys Ala Gly Val Leu Cys Pro Phe His Val Ala Val
145                 150                 155                 160
Gly Leu Arg Leu Phe Arg His Arg His Leu Leu His Leu Cys Ala Ser
                165                 170                 175
Arg Ala Gly Leu Gln Val Leu Pro Ala Gln Gly Arg Glu Asp Gly Arg
            180                 185                 190
Val Cys Pro Gly Pro Gln Arg Pro Asp Ala Ser Pro Val Leu Pro Ala
```

```
        195                 200                 205
Leu Leu Ser Arg Val Arg Pro Arg Arg Arg Leu Ser Pro His Gly Cys
    210                 215                 220
Leu Cys Pro Val Ser Leu Ala Leu Gln Pro Arg Asp Val Arg Leu Gln
225                 230                 235                 240
Arg Leu Leu Leu Gly His Leu Tyr Gln His Gly Arg His Arg Arg Ala
                245                 250                 255
Ala Leu Pro Arg Leu Arg Asp Met Gly Glu Ile Leu Arg Pro Asp Arg
            260                 265                 270
Phe His Gln Val Ala Ala Leu Gln Glu Pro Asp Gly Ala Arg Gly Leu
        275                 280                 285
His Phe Gly Cys Gly His Phe Leu Gln Leu Leu His Leu Gly Pro Val
    290                 295                 300
Leu Leu Leu Leu Pro Pro Gly Arg Leu Gln Pro Glu His Arg Gln His
305                 310                 315                 320
Arg Leu His Asp Thr Asp Leu Gln Arg Arg Leu Asp Pro Leu Gly Arg
                325                 330                 335
Pro Leu Arg His Leu Asp Pro Pro Asp Gln Thr Leu Pro Glu Asn Leu
            340                 345                 350
Pro Val Phe Arg Arg Pro Ala Asp Ala Pro Arg Arg Arg Pro His Asp
        355                 360                 365
Pro Leu Pro Arg Arg Arg Glu Gln Asp Arg Val Ser Arg Asp Val Pro
    370                 375                 380
Asp Leu His Arg Leu Trp Arg Arg His Ala Arg Asp Arg Gly Arg Asp
385                 390                 395                 400
Gly Arg His Gly Gly Arg Gly Pro Arg Arg Arg Ala His Asp Asp Arg
                405                 410                 415
His Asp Gln Pro Gly Arg Gln Phe Arg Arg Gly Asp Arg Leu Arg Gly
            420                 425                 430
Cys Arg Gly His Leu Arg Gln His Leu Pro Thr Gly Ala Ala Pro Arg
        435                 440                 445
Ala Pro Gly Arg Pro Glu Arg Arg Phe Cys Asp Tyr Leu Pro Gly Gly
    450                 455                 460
Leu Asp Gly Ala Gly Asp Val Pro Ala Arg Gln Cys Gly Pro Glu Cys
465                 470                 475                 480
Asn Gln Pro Cys Met Asp Gly Glu Ser Glu Val
                485                 490
```

<210> 36429
<211> 517
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (32)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36429

```
Thr Gly Ser Gly Cys Val Ser Ser Phe Leu Asn Leu Gln Phe Ser Ile
1               5                   10                  15
Ser Asn Asn Met Ile Tyr Tyr Ala Tyr Ala Gly Phe Ser Ser Ala Xaa
            20                  25                  30
Gln Ile Ser Gln Ala Tyr Ile Leu Ser Thr Ile Ile Gly Gly Val Leu
        35                  40                  45
Gln Leu Pro Ile Ala Lys Thr Leu Asn Leu Trp Gly Arg Ala Glu Gly
```

```
    50                  55                  60
Phe Leu Val Phe Val Gly Val Leu Ile Val Gly Ile Ile Val Ile Ala
65                  70                  75                  80
Ser Cys Asn Gly Pro Asn Gly Phe Ala Ala Gly Tyr Thr Leu Tyr Trp
                85                  90                  95
Ile Gly Tyr Thr Ala Val Asn Phe Ile Leu Val Val Phe Val Ala Asp
            100                 105                 110
Ala Ser Gly Leu Arg Asn Arg Ala Phe Ala Tyr Ala Phe Ile Gly Thr
        115                 120                 125
Pro Thr Ile Cys Thr Ala Phe Val Gly Pro Leu Ala Ala Gln Ala Phe
    130                 135                 140
Tyr Ala His Ser Thr Trp Arg Trp Ala Tyr Gly Cys Phe Ala Ile Val
145                 150                 155                 160
Ile Phe Phe Thr Phe Val Pro Leu Ala Leu Val Phe Lys Phe Tyr Gln
                165                 170                 175
Arg Lys Ala Glu Lys Thr Gly Val Phe Val Arg Asp Pro Ser Gly Arg
            180                 185                 190
Thr Pro Leu Gln Ser Phe Arg His Tyr Phe Arg Glu Phe Asp Leu Val
        195                 200                 205
Gly Ala Phe Leu Leu Met Ala Ala Phe Val Leu Phe Leu Leu Pro Phe
    210                 215                 220
Ser Leu Glu Thr Tyr Gly Phe Ser Gly Tyr Ser Ser Ala Thr Phe Ile
225                 230                 235                 240
Ser Met Val Val Ile Gly Val Leu Leu Phe Pro Val Phe Ala Ile Trp
                245                 250                 255
Glu Arg Phe Phe Ala Pro Thr Ala Phe Ile Lys Trp Gln Leu Phe Lys
            260                 265                 270
Asn Arg Thr Val Leu Gly Ala Cys Ile Leu Ala Ala Val Ile Phe Phe
        275                 280                 285
Asn Tyr Tyr Thr Trp Asp Gln Tyr Tyr Tyr Tyr Tyr Leu Gln Val Val
    290                 295                 300
Tyr Asn Leu Asn Thr Ala Asn Thr Gly Tyr Met Thr Gln Ile Tyr Ser
305                 310                 315                 320
Val Gly Ser Thr Leu Trp Ala Val Leu Phe Gly Ile Trp Ile Arg Gln
                325                 330                 335
Thr Lys His Phe Gln Lys Thr Cys Leu Tyr Phe Gly Ala Pro Leu Met
            340                 345                 350
Leu Leu Gly Ala Gly Leu Met Ile His Phe Arg Gly Ala Glu Ser Lys
        355                 360                 365
Ile Gly Tyr Leu Val Met Cys Gln Ile Phe Ile Ala Phe Gly Gly Gly
    370                 375                 380
Thr Leu Val Ile Gly Asp Glu Met Ala Val Met Ala Ala Ala Asp Arg
385                 390                 395                 400
Asp Gly Val Pro Met Met Ile Ala Met Ile Ser Leu Ala Gly Ser Phe
                405                 410                 415
Gly Gly Ala Ile Gly Tyr Ala Val Ala Gly Ala Ile Tyr Ala Asn Thr
            420                 425                 430
Phe Pro Gln Ala Leu Leu Arg Gly Leu Pro Asp Asp Leu Lys Gly Asp
        435                 440                 445
Ser Ala Thr Ile Tyr Leu Gly Gly Ser Thr Ala Gln Val Met Tyr Pro
    450                 455                 460
Pro Gly Ser Ala Ala Arg Asn Ala Ile Asn His Ala Trp Thr Glu Ser
465                 470                 475                 480
Gln Lys Tyr Glu Cys Ile Thr Ala Thr Ala Val Val Val Leu Ala Phe
                485                 490                 495
Pro Ala Ile Ala Met Trp Lys Asn Tyr Asn Val Asp Arg Lys Gln Val
```

```
            500                 505                 510
Lys Gly Thr Val Ile
        515
```

<210> 36430
<211> 71
<212> PRT
<213> A.fumigatus

<400> 36430

```
Thr Met Ala Ala Thr Thr Glu Lys Asp Leu Thr Ala Arg Thr Thr Ala
1               5                  10                  15
Asn Ile Glu Ala Ala Ser Asp Thr Val Ser Leu Glu Glu Lys Ser Glu
            20                  25                  30
Arg Glu Ile Leu Glu Arg Pro Asn Glu Ile Thr Gln Asp Ala Gln Ile
        35                  40                  45
Gly Val Gln Lys Ala Glu Ala Thr Ala Leu Val Trp Ser Lys Thr Ala
    50                  55                  60
Leu Tyr Ala Thr Tyr Ala Trp
65                  70
```

<210> 36431
<211> 228
<212> PRT
<213> A.fumigatus

<400> 36431

```
Ser Pro Leu Ala Met Ala Pro Met Ala Ser Gln Pro Asp Thr Arg Cys
1               5                  10                  15
Thr Gly Leu Ala Thr Arg Pro Ser Thr Ser Ser Trp Leu Ser Leu Ser
            20                  25                  30
Arg Thr Arg Pro Gly Cys Ala Ile Gly His Leu Pro Thr His Ser Leu
        35                  40                  45
Ala Pro Arg Pro Ser Val Gln Pro Leu Leu Ala Arg Ser Leu Arg Arg
    50                  55                  60
Arg Ser Met Pro Ile Pro Arg Gly Gly Gly Pro Thr Ala Val Ser Pro
65                  70                  75                  80
Ser Ser Ser Ser Ser Pro Leu Cys Leu Ser Arg Trp Ser Ser Ser Ser
                85                  90                  95
Thr Ser Ala Arg Pro Arg Arg Arg Ala Cys Leu Ser Gly Thr Pro Ala
            100                 105                 110
Ala Gly Arg Leu Ser Ser Pro Ser Gly Ile Thr Phe Ala Ser Ser Thr
        115                 120                 125
Ser Ser Ala Pro Phe Ser Ser Trp Leu Pro Leu Ser Cys Phe Ser Cys
    130                 135                 140
Pro Ser Ala Ser Arg Arg Thr Ala Ser Ala Ala Thr Pro Arg Pro Pro
145                 150                 155                 160
Leu Ser Ala Trp Ser Ser Ser Ala Cys Cys Ser Ser Pro Ser Ser Arg
                165                 170                 175
Tyr Gly Arg Asp Ser Ser Pro Arg Pro Leu Ser Ser Ser Gly Ser Ser
            180                 185                 190
Ser Arg Thr Gly Arg Cys Ser Gly Pro Ala Phe Trp Leu Arg Ser Phe
        195                 200                 205
Ser Ser Thr Ile Thr Pro Gly Thr Ser Thr Thr Thr Thr Thr Ser Arg
    210                 215                 220
Ser Ser Thr Thr
```

225

<210> 36432
<211> 97
<212> PRT
<213> A.fumigatus

<400> 36432
Pro Lys Gln Asn Ser Lys Leu Gly Leu Trp Asp Phe Ser Leu Gly Ile
1 5 10 15
Ser Cys Phe Leu Ser Phe Ser Gly Tyr Leu Val His Ala Gln Leu Ser
20 25 30
Met Tyr Ala Arg Ala Leu Leu Tyr Asp His Gly Ser Asp Met Tyr Thr
35 40 45
Gly Thr Asn Arg Asp His Asn Ala Ile Thr Asp Pro Pro Met Ser Leu
50 55 60
Phe Ser His Leu Pro Gln Ser His Gly Ser Pro Ser His Ala Pro Ser
65 70 75 80
Ala Ala Thr Ser Asp Ser Leu Ser Leu His Ile Asp Ser Leu Phe Gln
85 90 95
Phe

<210> 36433
<211> 475
<212> PRT
<213> A.fumigatus

<400> 36433
Pro Thr His Gly Pro Arg Phe Arg Ser Ser Leu Ala Val Ile Met Ser
1 5 10 15
Arg Ile Leu Val Leu Arg Lys Lys Pro Gln Leu Ile Gly Ile Leu Glu
20 25 30
Glu Glu Val Leu Arg Pro Ala Lys Lys Leu Leu Glu Gly Ala Arg Glu
35 40 45
Gly Lys Lys Thr Ser Pro Gly Ile Pro Asp Met Pro Ser Arg Ala Thr
50 55 60
Ser Val Ala Ser Asp Tyr Asp Gly Gln Arg Glu Tyr Val Asp Arg Glu
65 70 75 80
Ser Met Pro Pro Pro Pro Thr Pro Ser Thr Val Ser Pro Ala Thr Gly
85 90 95
Thr Arg Arg Gly Arg Ser Arg Met Ser Thr Arg Ala Ser Thr Ala Asp
100 105 110
Ile Glu Glu Asn Asn Val Pro Ser Thr Pro Ser Ile Val Thr Lys Lys
115 120 125
Lys Val Pro Lys Ser Glu Asn Lys His Ala Arg Ala Phe Asp Arg Glu
130 135 140
Leu His Asp Asp Gly Pro Val Thr Pro Val Ala Arg Asp Met Val Thr
145 150 155 160
Pro Arg Lys Ser Thr Thr Arg Lys Leu Arg Asn Ser Glu Ile Ala Pro
165 170 175
Ser Ile Glu Pro Glu Pro His Thr Val Tyr Val Lys Ser Glu Pro Lys
180 185 190
Glu Asp Ser Val Phe Thr Asp Asp Asn Pro Phe Gln Ser Gly Ser Ser
195 200 205
Pro Ala Ser Arg Ser Ile Ser Arg Asp Val Lys Arg Lys Thr Ser Ser

```
    210                 215                 220
Arg Leu Ser Thr Ala Ser Pro Ala Phe Ser His Gly Leu Arg Pro Arg
225                 230                 235                 240
Lys Ser Glu Thr Pro Tyr Asp Leu Asp Gly Asp Ile Ser Arg Thr Pro
                245                 250                 255
Thr Arg Ser Pro Val Gly Ser Pro Val Phe Pro Arg Glu Glu Val Glu
            260                 265                 270
Met Asp Gly Lys Glu Asp Glu Ser Glu Leu Ser Ala Gly Glu Glu Phe
        275                 280                 285
Thr Pro Glu Glu Gln Leu Ala Leu Glu Lys Gln Gln Ala Glu Leu Met
    290                 295                 300
Tyr Pro Thr Ala Pro Arg Ile Arg Arg Arg Ala Ala Lys Gln Ser Thr
305                 310                 315                 320
Ala Asn Lys Ala Ala Pro Trp Ile Leu Ile Phe Ser Leu Leu Cys Gly
                325                 330                 335
Phe Gly Gly Trp Trp Arg Lys Glu Lys Ile Glu Ile Gly Tyr Cys Gly
            340                 345                 350
Ile Gly Lys Pro Thr Trp Ser Leu Ala Glu Thr Arg Val Pro Glu Trp
        355                 360                 365
Ala Arg Val Leu Glu Pro Gln Cys Glu Pro Cys Pro Pro His Ala Phe
    370                 375                 380
Cys Tyr Pro Asn Phe Glu Ala Ser Cys Glu Asn Asp Phe Ile Leu Lys
385                 390                 395                 400
Pro His Pro Leu Ser Leu Gly Gly Leu Ile Pro Leu Pro Pro Thr Cys
                405                 410                 415
Glu Pro Asp Ser Glu Lys Ala Arg Arg Val Lys Ala Val Thr Asp Lys
            420                 425                 430
Ala Ile Glu Glu Leu Arg Asp Arg Arg Ala Lys Phe Glu Cys Gly Glu
        435                 440                 445
Arg Leu Glu Asp Gly Glu Asp Ser Asp Val Ser Gly Asn Glu Arg Ser
    450                 455                 460
Gly Ser Glu Thr Gly Asp Cys Thr Glu Thr Ala
465                 470                 475
```

<210> 36434
<211> 215
<212> PRT
<213> A.fumigatus

<400> 36434

```
Gln Arg Pro Gln Arg Asn His Arg Pro Ser Asp Val Leu Val Leu Ser
1               5                   10                  15
Ser Thr Ser Ile Ala Arg Leu Pro Leu Thr Cys Ala Phe Arg Arg His
            20                  25                  30
Ile Arg Leu Ser Leu Leu Ala Tyr Arg Leu Pro Leu Ser Ile Leu Ile
        35                  40                  45
Ile Met Val Leu Gly Leu Val Tyr Thr Arg Ala Lys Ile Leu Ala Arg
    50                  55                  60
Arg Ser Asp Leu Ala Arg Val Pro Glu Leu Val Ala Thr Thr Leu Asp
65                  70                  75                  80
Arg Leu Ala Thr Gln Ala Ala Leu His Ala Arg Gly Glu Ala Arg Glu
                85                  90                  95
Pro Tyr Ile Pro Ile Gly Gln Leu Arg Asp Asp Val Leu Arg Ser Glu
            100                 105                 110
Leu His Gly Lys Arg Arg Glu Glu Leu Trp Arg Arg Val Arg Asn Val
        115                 120                 125
```

```
Val Glu Gly Asn Ala Asn Ile Arg Ala Ala Val Arg Glu Gly Arg Gly
    130                 135                 140
Gly Asp Val Ala Arg Val Trp Glu Trp Ile Gly Gly Ile Gly Gly Val
145                 150                 155                 160
His Gly Asn Ala Leu Glu Ser Ser Ala Ile Arg Arg Glu Ser Asn Arg
                165                 170                 175
Gln Leu Ser Tyr Ser Ser Pro Ser Ser Glu Gly Asn Arg Pro Pro Gly
            180                 185                 190
Asp Gln Gln Gln Leu Thr Pro Arg Ser Pro Gly Glu Leu Arg Arg Trp
        195                 200                 205
Asp Glu Gly Arg Pro Val Tyr
    210                 215
```

<210> 36435
<211> 98
<212> PRT
<213> A.fumigatus

<400> 36435

```
Val Gly Gln Leu Ala Val Thr Leu Ser Ser Asp Ser Ala Ala Leu Glu
1               5                   10                  15
Ser Ile Ala Val Asn Thr Ala Asp Thr Pro Asn Pro Phe Pro Asn Pro
            20                  25                  30
Arg Asn Ile Ser Thr Pro Ala Leu Ala Asp Arg Ser Ala Asn Val Gly
        35                  40                  45
Ile Ala Leu Asn Tyr Ile Ala Asn Thr Pro Pro Glu Leu Phe Thr Ser
    50                  55                  60
Leu Ala Met Lys Leu Arg Thr Glu Asp Val Val Thr Gln Leu Thr Asn
65                  70                  75                  80
Gly Asp Ile Arg Phe Pro Arg Leu Thr Ala Ser Met Lys Arg Cys Leu
                85                  90                  95
Cys Arg
```

<210> 36436
<211> 81
<212> PRT
<213> A.fumigatus

<400> 36436

```
Glu Pro Ser Gln Ser Ile Gly Gly Leu Arg Leu Val Ser Cys Ser Leu
1               5                   10                  15
Pro Met Lys Cys Leu Thr Gln Ala Met Thr Asp Ser Cys Arg Pro Arg
            20                  25                  30
Ile Val Ser Pro Val Arg Glu Pro Ala Lys Tyr Gly Ser Leu Glu Lys
        35                  40                  45
Pro Ser Gln Leu Arg Pro Pro Arg Ala Val Arg Pro Arg Gly Pro Thr
    50                  55                  60
Thr Gly Pro Arg Ala Thr Leu Thr Pro Leu Arg Leu Asn Ser Ala Pro
65                  70                  75                  80
Met
```

<210> 36437
<211> 83
<212> PRT

<213> A.fumigatus

<400> 36437
Ile Ala Ala Ile Ser Arg Ser Cys Ile Pro Trp Leu Leu Val Leu Lys
1 5 10 15
Ile Ala Ser Ile Asp Ser Ser Thr Leu Val Ser Ser Glu Gly Lys Met
20 25 30
Lys Leu Thr Val Pro Leu Leu Ala Ala Ala Leu Gln Leu Ala Gly Ile
35 40 45
Ala Ala Gly Gln Glu Asp Ala Ala Ile Ala Ala Asn Leu Glu Lys Phe
50 55 60
Trp Ser Tyr Gly Arg Ser Glu Pro Val Tyr Pro Ser Arg Lys Cys Asp
65 70 75 80
Arg Glu Ser

<210> 36438
<211> 495
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (28),(34)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36438
Leu Thr Val Arg Cys Ser Thr Ala Glu Thr Gln Gly Leu Gly Asp Trp
1 5 10 15
Asn Glu Ala Tyr Ala Lys Ala Lys Ala Leu Val Xaa Arg Met Thr Asp
20 25 30
Glu Xaa Lys Asn Asn Leu Thr Tyr Gly Tyr Lys Ser Thr Thr Asn Gly
35 40 45
Cys Ser Gly Asn Ser Gly Gly Ala Pro Gly Val Gly Phe Pro Glu Leu
50 55 60
Cys Leu Gln Asp Ala Gly Asn Gly Val Arg Gly Thr Asp Met Val Asn
65 70 75 80
Gly Tyr Ala Ser Gly Val His Val Gly Ala Ala Trp Asn Arg Asp Leu
85 90 95
Ala Tyr Glu Arg Ala His Tyr Met Gly Ala Glu Phe Arg Arg Lys Gly
100 105 110
Val Asn Val Ala Leu Gly Pro Val Val Gly Pro Leu Gly Arg Thr Ala
115 120 125
Arg Gly Gly Arg Asn Trp Glu Gly Phe Ser Asn Asp Pro Tyr Leu Ala
130 135 140
Gly Ser Leu Thr Gly Glu Thr Ile Arg Gly Leu Gln Glu Ser Val Ile
145 150 155 160
Ala Cys Val Lys His Phe Ile Gly Asn Glu Gln Glu Thr Asn Arg Asn
165 170 175
Pro Pro Met Leu Trp Glu Gly Ser Tyr Asn Gln Ser Val Ser Ser Asn
180 185 190
Leu Asp Asp Lys Thr Met His Glu Leu Tyr Leu Trp Pro Phe Gln Asp
195 200 205
Ala Ile Lys Ala Gly Ala Gly Ser Val Met Cys Ser Tyr Asn Arg Ile
210 215 220
Asn Asn Ser Tyr Gly Cys Gln Asn Ser Lys Ala Leu Asn Gly Leu Leu

```
225                 230                 235                 240
Lys Gly Glu Leu Gly Phe Gln Gly Phe Val Val Thr Asp Trp Asp Ala
                245                 250                 255
Gln His Ser Gly Val Ala Ala Ala Asp Ala Gly Leu Asp Met Ala Met
            260                 265                 270
Pro Asp Ser Val Tyr Trp Glu Asn Gly Thr Leu Ala Leu Ala Val Lys
        275                 280                 285
Asn Gly Ser Leu Ala Gln Ser Arg Leu Asp Asp Met Ala Thr Arg Ile
    290                 295                 300
Leu Ala Ser Trp Tyr Lys Tyr Ala Glu Ile Glu His Pro Gly His Gly
305                 310                 315                 320
Ile Pro Val Asp Leu Arg Lys Pro His Glu Leu Thr Asp Ala Arg Asp
                325                 330                 335
Pro Lys Ser Arg Ser Thr Ile Phe Gln Ser Ala Val Glu Gly His Val
            340                 345                 350
Leu Val Lys Asn Thr Gly Asn Ala Leu Pro Leu His Lys Pro Lys Phe
        355                 360                 365
Leu Ser Leu Phe Gly Tyr Asp Gly Ile Ala Ala Thr Gly Asn Thr Met
    370                 375                 380
Asp Asn Val Thr Phe Gly Arg Trp Val Phe Gly Leu Ser Asn Thr Leu
385                 390                 395                 400
Asn Tyr Pro Asn Gly Ser Ala Ile Asp Thr Lys Ile Gln Arg Asp Met
                405                 410                 415
Phe Leu Ser Ser Tyr Asp Pro Ala Ala Glu Gly Pro Gly Val Ala Leu
            420                 425                 430
Asn Gly Thr Leu Ile Thr Gly Gly Gly Ser Gly Ala Thr Thr Pro Ser
        435                 440                 445
Tyr Ile Asp Ala Pro Phe Asp Ala Phe Gln Arg Gln Ala Arg Glu Asp
    450                 455                 460
Gly Thr Phe Leu Ala Trp Asp Phe Ala Ser Gln Lys Pro Ile Val Asn
465                 470                 475                 480
Pro Ala Ser Glu Ala Cys Ile Val Phe Val Asn Glu Leu Ala Ser
                485                 490                 495
```

<210> 36439
<211> 183
<212> PRT
<213> A.fumigatus

<400> 36439

```
Pro Glu Arg Leu Ser Val Val Tyr Arg Ser Gln Ser Leu Pro Val Ser
1               5                   10                  15
Ser Thr Ser Ser Ala Met Ser Lys Arg Pro Thr Val Thr Leu Arg Cys
            20                  25                  30
Phe Gly Arg Ala Pro Thr Thr Asn Pro Ser Arg Arg Thr Trp Thr Thr
        35                  40                  45
Arg Pro Cys Met Ser Phe Thr Cys Gly Pro Ser Arg Thr Gln Ser Arg
    50                  55                  60
Pro Val Arg Asp Pro Ser Cys Ala Ala Thr Thr Gly Ser Thr Thr Ala
65                  70                  75                  80
Thr Gly Ala Arg Thr Ala Arg His Ser Met Ala Cys Ser Arg Val Ser
                85                  90                  95
Ser Ala Ser Arg Ala Leu Ser Ser Arg Thr Gly Met Leu Ser Thr Gln
            100                 105                 110
Gly Ser Pro Leu Pro Thr Arg Val Trp Thr Trp Gln Cys Pro Thr Pro
        115                 120                 125
```

```
Ser Ile Gly Arg Met Glu Pro Ser Leu Trp Pro Ser Lys Met Ala Arg
    130                 135                 140
Trp Leu Lys Val Val Trp Thr Ile Trp Pro Pro Gly Ser Leu His Leu
145                 150                 155                 160
Gly Ile Ser Met Gln Arg Ser Ser Ile Gln Val Met Gly Phe Leu Ser
                165                 170                 175
Ile Ser Gly Ser Leu Met Ser
            180
```

<210> 36440
<211> 577
<212> PRT
<213> A.fumigatus

<400> 36440

```
Lys Arg His Arg Ser Ser Ala Ser His Ala Trp Arg Ala Ser Pro Gly
1               5                   10                  15
Arg Ser Thr Gln His Leu Gln Ser Val Phe Ala Ala Pro Ser Val Asn
            20                  25                  30
Glu Gly Met Ser Ser Ala Ala Met Gln Thr Val Pro Gln Tyr Thr Pro
        35                  40                  45
Ala Arg Ser Thr Ala Thr Tyr Val Ser Leu Pro His Pro Ile Pro Ala
    50                  55                  60
Ser Thr Ser Gln Tyr Asp Tyr Ala Gln Gln Leu Phe Asn Asp Leu Pro
65                  70                  75                  80
Arg Ser Thr Gln Pro Ser Trp Arg Ser Arg Asp Pro His Thr Ala Val
                85                  90                  95
Val Ser Thr Ala Leu Ser Ser Gln Gln Pro Ser Ser Pro Pro Thr Thr
            100                 105                 110
Thr Tyr Ser Ser Ala Met Ser Asp Pro His Glu Gln Ala Pro Pro Leu
        115                 120                 125
Ser Thr His Ala Ser Pro Ser Leu Asn Pro Thr Leu Pro Thr Pro Gly
    130                 135                 140
Gln Asn Ser Asn Arg Ala Pro Val Tyr Pro Asp Leu Gln Gly Ala Pro
145                 150                 155                 160
Pro Ile Pro Pro Pro Arg Thr Ser Ser Thr His Arg Thr Gln His Gly
                165                 170                 175
Ser Ser Thr Thr Ser Ser Ser Gly Glu Arg Val Ser Ser Ser Arg Arg
            180                 185                 190
Asn Lys Ser Lys Pro Asp Asp Arg Ser Thr Gly His Arg Glu Arg Arg
        195                 200                 205
Gly Asp Glu Pro Arg Ser His Cys Ser Ala Ala His Ser Ser Glu Glu
    210                 215                 220
Pro Thr Arg Glu Pro Ser Gly Lys Gly Ser Arg Arg Val Gln Thr Gly
225                 230                 235                 240
Ser Ser Ser Ala Val Asp Ser Arg Ser Glu Glu Val Met Glu Thr Ile
                245                 250                 255
Pro Ser Leu Gly Thr Leu Val Lys Glu Ser Ser Thr Val Ile Asn Gln
            260                 265                 270
Val Val Val Ser Asp Pro Ser Val Asp Ile Met Arg Glu Gln Ala Arg
        275                 280                 285
Gln Ala Glu Ala Ser Ile Ser Pro Ser Ser Asp Ser Ala Pro Pro Ser
    290                 295                 300
Gly Leu Ala Leu Val Gly Ser Glu Gly Val Asp Asp Gly Gly Arg Gly
305                 310                 315                 320
Gly Leu Arg Ser Arg His Asp Phe Asn Glu Asn Thr Ile Lys Arg Lys
```

```
                325                 330                 335
Glu Thr Thr Phe Gly Gln Tyr Ile Leu Gly Gln Thr Leu Gly Glu Gly
            340                 345                 350
Glu Phe Gly Lys Val Lys Leu Gly Trp Lys Lys Asp Gly Ser Val Gln
        355                 360                 365
Val Ala Ile Lys Leu Ile Arg Arg Glu Ser Leu Gly Ser Asn Pro Asn
    370                 375                 380
Arg Leu Pro Lys Ile Tyr Arg Glu Ile Ser Ile Leu Arg Asp Leu His
385                 390                 395                 400
His Pro Asn Ile Val Arg Leu His Glu Met Val Glu Thr Asp Arg His
                405                 410                 415
Ile Gly Ile Ile Met Glu Tyr Ala Ser Gly Gly Glu Leu Phe Asp His
            420                 425                 430
Ile Leu Asn Asn Arg Tyr Leu Lys Asp Asn Ser Ala Arg Arg Leu Phe
        435                 440                 445
Ala Gln Leu Val Ser Gly Val Gly Tyr Leu His Lys Lys Gly Ile Val
    450                 455                 460
His Arg Asp Leu Lys Leu Glu Asn Leu Leu Leu Asp Arg Asn Arg Asn
465                 470                 475                 480
Ile Ile Ile Thr Asp Phe Gly Phe Ala Asn Thr Phe Asp Pro Ser Asp
                485                 490                 495
Glu Leu Gly Glu Glu Ile Glu Tyr Asn Leu Thr Asn Lys Glu Phe Val
            500                 505                 510
Lys Arg Met Arg Leu Asp Lys Pro Asn Ala Lys Gly Met Arg Arg Gly
        515                 520                 525
Asp Leu Met Gln Thr Ser Cys Gly Ser Pro Cys Tyr Ala Ala Pro Glu
    530                 535                 540
Leu Val Val Ser Asp Ser Leu Tyr Thr Gly Arg Lys Val Asp Val Trp
545                 550                 555                 560
Ser Cys Gly Val Ile Leu Val Ser Trp His Arg Leu Ser Leu Ser Ser
                565                 570                 575
Gly
```

<210> 36441
<211> 316
<212> PRT
<213> A.fumigatus

<400> 36441

```
Arg Val Phe Ala Cys Cys Val Ser His His Glu Gln Tyr Asn Gln Ser
1               5                   10                  15
Cys Gly His Cys Arg His Asp Ser Ser Ser Trp Ser Val Phe Pro His
            20                  25                  30
Ala Leu Leu Glu Pro Asp Ala Asn Leu Ser Ser Cys Phe Ala Glu Ser
        35                  40                  45
His Arg Glu Ala Pro Ala Leu Ala Arg Ser Ala Ser Val Arg Glu Pro
    50                  55                  60
Pro Lys Ala Tyr Gln Ser Ser Ile Pro Thr Val Gly Gly Leu Val His
65                  70                  75                  80
Gln Ser Gly Asp Ile Ser Gln Glu Pro Ser Val Asp Arg Ser Lys Thr
                85                  90                  95
Ser Arg Asp Thr Lys Arg Arg Thr Val Gln Val Glu Tyr Val Ala Pro
            100                 105                 110
Gln Ser Gln Thr Ala Arg Gly Glu Ser Pro Ser Ala Pro Glu Ser Pro
        115                 120                 125
```

```
Asn Ala Lys Pro Ser Glu Val Leu Pro Ala Ala Arg Pro Gly Ser Arg
    130                 135                 140
Asp Ala Ala Ala Asn Thr Gln Val Gly Ala Leu Pro Ser Gly Val His
145                 150                 155                 160
Met Glu Gln Arg Ser Ile Arg Ala Gly Glu Pro Lys Ala Pro Ala Gly
                165                 170                 175
Ser Val Pro Pro Thr Pro Gly His Leu Pro Arg Ser Thr Ser Asp Ser
            180                 185                 190
Thr Ala Leu Thr Gly Thr His Thr Thr Met Pro Pro Thr Gln Ala Thr
        195                 200                 205
Arg Pro Thr Thr Gly Ala Ser Met Ala Ser Phe Asn Thr Gly Arg Leu
    210                 215                 220
Pro Ser Arg Gly Ser Tyr Gly Gln Pro Val Ala Pro Thr Val Ala Ala
225                 230                 235                 240
Thr Asn Ala Gln Gly Arg Leu Ala Gln Pro Lys Ser Lys Gln Tyr Val
                245                 250                 255
Ile Ser Ala Pro Ile Pro Gln Asn Ser Ser Gln His Ala Ala Met Ser
            260                 265                 270
Ile Gly Arg Pro Ser Thr Gln Ala Leu Pro Ala Lys Phe Asn Thr Thr
        275                 280                 285
Pro Arg Gln Glu Pro Leu Lys Gly His Lys Arg Ser Ser Leu His His
    290                 295                 300
Gly Ala Gly Arg Thr Ala Met Val Ile Asn Ile Thr
305                 310                 315

<210> 36442
<211> 223
<212> PRT
<213> A.fumigatus

<400> 36442
Tyr Ala Met Leu Ala Gly Tyr Leu Pro Phe Asp Asp Asp Pro Ala Asn
1               5                   10                  15
Pro Asp Gly Asp Asn Ile Asn Leu Leu Tyr Lys Tyr Ile Val Ser Thr
            20                  25                  30
Pro Leu Thr Phe Pro Glu Tyr Val Thr Pro His Ala Arg Asp Leu Leu
        35                  40                  45
Arg Arg Ile Leu Val Pro Asp Pro Arg Lys Arg Ala Asp Leu Phe Glu
    50                  55                  60
Val Ala Arg His Ser Trp Leu Ser Glu Phe Ser His Val Val Ser His
65                  70                  75                  80
Ile Thr Ser Ser Thr Thr Lys Val Ala Asp Ile Ala Asp Thr Thr Val
                85                  90                  95
Pro Pro Gly Gln Cys Ser His Thr Arg Ser Trp Ser Leu Thr Leu Thr
            100                 105                 110
Tyr Arg Arg Val Leu Gln Lys Ala Ile Gly Lys Pro Gln Arg Trp Leu
        115                 120                 125
Ala Val Pro Pro Ser Glu Ser Leu Arg Lys His Thr Arg Ala Arg Tyr
    130                 135                 140
Leu Arg Leu Glu Gly Leu Cys Ile Asn Pro Glu Thr Ser Pro Lys Ser
145                 150                 155                 160
Arg Gln Ser Ile Gly Gln Arg Leu Leu Gly Thr Gln Asn Gly Glu Arg
                165                 170                 175
Tyr Arg Ser Asn Met Ser Pro Pro Asn Leu Arg Gln Gln Glu Glu Lys
            180                 185                 190
Ala Leu Pro Arg Gln Asn Pro Arg Thr Gln Ser His Pro Lys Ser Phe
```

```
        195                 200                 205
Gln Pro Gln Gly Pro Ala Val Glu Met Arg Arg Gln Thr His Lys
    210                 215                 220

<210> 36443
<211> 117
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (70)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36443
Ile Ser Leu Tyr Pro Leu Gly Phe Val Cys Asn Gln Asn Glu Glu Glu
1               5                   10                  15
Trp Ala Ile Ser Ala Leu Gln Asp Tyr Leu Phe Glu Phe Ser Ser Ser
            20                  25                  30
Ser Gln Ile Phe Pro Thr Gln Leu Gly Asn Ser Thr Gly Arg Arg Tyr
        35                  40                  45
Phe Ala Ser Arg Arg Asn Gly Asp Arg Glu Asp Arg Gln Thr Arg Ala
    50                  55                  60
Gly Lys Asp Gly Val Xaa Pro Pro Arg Arg Asp Arg Thr His Pro Leu
65                  70                  75                  80
Asn Tyr Gln Ala Ala Pro Val Met Gly Leu Lys Ala Glu Gly Tyr Gln
                85                  90                  95
Ala His Thr Leu Asn Thr Gly Glu Arg Ile Asp Glu Met Glu Leu Ser
            100                 105                 110
Leu Arg Arg Gly Pro
        115

<210> 36444
<211> 396
<212> PRT
<213> A.fumigatus

<400> 36444
Ser Met Ser Cys Arg Ile Gly Asn Ile Ile Lys Arg Val Arg Asp Arg
1               5                   10                  15
Leu Ala Asn Gln His Pro Trp Trp Arg Gln Asp Ser Gln Thr Ser Asp
            20                  25                  30
Asp Glu Ser Asn Tyr Phe Thr Ser Ala Ala Pro Arg Ala Thr Ser Pro
        35                  40                  45
Arg Ala Ala Arg Ser Arg Lys Ser Arg Arg His Ile Thr Asp Arg Ser
    50                  55                  60
Gly Tyr Ile Pro Thr Pro Pro Ser Ser Pro Lys Tyr Ser Leu Thr Ile
65                  70                  75                  80
Lys Asn Pro Ser Ser Leu Met Glu Val Leu Ser Gln Leu Trp Thr Thr
                85                  90                  95
Ser Gly Pro Thr Ser Pro Trp Lys Ala Thr Asn Ala Thr Phe Ile Tyr
            100                 105                 110
Ser Leu Leu Leu Pro Thr Leu Asn Thr Phe Ile Arg Ser Leu Leu Ser
        115                 120                 125
Ala Ile Val Gly Leu Pro Glu Glu Asp Ile Ala Ser Ser Met Thr Ala
    130                 135                 140
```

```
Asp Ile Leu Thr Ser Thr Ser Pro Phe Ala Thr Leu Val Leu Ser Phe
145                 150                 155                 160
Ile Ala Ser Ser Leu Ser Ala Met Leu Leu Ser Pro Ile Asp Thr Ala
                165                 170                 175
Arg Thr Phe Leu Ile Leu Thr Pro Ala Thr His Gly Pro Arg Ser Leu
            180                 185                 190
Leu Arg Ala Ile Arg Gln Leu Pro Thr Pro Asn Cys Met Ile Pro Ser
        195                 200                 205
His Leu Ile Pro Ile Thr Ile Leu His Ser Ser Leu Pro Asn Phe Ile
    210                 215                 220
Thr Thr Thr Thr Pro Leu Phe Phe Lys Thr Tyr Leu Ser Ile Asp Pro
225                 230                 235                 240
Val Leu Asn Pro Ser Met Trp Asn Leu Leu Ala Phe Leu Gly Ser Gly
                245                 250                 255
Leu Glu Leu Ala Val Arg Phe Pro Leu Glu Thr Val Leu Arg Arg Ala
            260                 265                 270
Gln Ile Ala Thr Tyr Thr Ser Pro Ser Ile Arg Gln Lys Tyr Ala Ala
        275                 280                 285
Thr Ser Arg Ser Asn Thr Ser Ala Ala Thr Glu Glu Thr Ser Val Val
    290                 295                 300
Glu Thr Ile Val Pro Val Pro Gln Thr Tyr Arg Gly Ile Val Gly Thr
305                 310                 315                 320
Met Trp Gly Ile Val Tyr Glu Glu Gly Val Ser Ala Pro Ser Ser Asp
                325                 330                 335
Ala Glu Arg Val Leu Gly Lys Pro Ile Ser Ser Arg Lys Arg Gln Gly
            340                 345                 350
Gln Gly Ile Gly Gly Leu Tyr Arg Gly Trp Arg Ile Gly Met Trp Gly
        355                 360                 365
Ile Ala Gly Ile Trp Gly Ala Gly Leu Leu Gly Ser Ile Gly Gly Gly
    370                 375                 380
Gly Asp Glu Glu Val Met Val Ser Gly Gly Arg Phe
385                 390                 395
```

<210> 36445
<211> 106
<212> PRT
<213> A.fumigatus

<400> 36445

```
Arg Phe Gln Lys His Asn Val Ser His Pro Pro Ala Pro Ser Ser Ala
1               5                   10                  15
Gln Val Phe Gly Ser Ser Ala Arg Asp Leu Leu Pro Asp Leu Asp Tyr
            20                  25                  30
Ser Glu Tyr Leu Glu Ser Ser Pro Ser Leu Ser Glu Trp Ile Arg Asp
        35                  40                  45
Ala Met Asp Ala Ala Ile Trp Arg Tyr Thr Ser Val Leu Thr Ala Gln
    50                  55                  60
Pro Phe Asp Val Ala Lys Thr Ile Leu Gln Ala Tyr Val Val Pro Asn
65                  70                  75                  80
Ser Gln Asp Gly Gln Arg Pro Ala Asp Glu Arg Arg Arg Ser Gly Arg
                85                  90                  95
Met Gly Ser Phe Asp Glu Ser Asp Glu Val
            100                 105
```

<210> 36446
<211> 112

<212> PRT
<213> A.fumigatus

<400> 36446
Val Thr Leu Ser Arg Gly Pro Cys Arg Pro Val Val Lys Thr Glu Gly
1 5 10 15
Leu Ala Ala Leu Ser Ala Gly Lys Ala Thr Arg Glu Glu Arg Ile Ala
20 25 30
His Ala Lys Glu Gly Lys Asp Arg Ser Glu Tyr Lys Ser Val Thr Ala
35 40 45
Arg Arg Lys Glu Arg Lys Glu Ala Gln Gly Lys Ser Thr Thr Asn Lys
50 55 60
Glu Lys Ala Arg Arg Lys Asn Leu Phe Met Thr Leu Gly Lys Ala Lys
65 70 75 80
Ser Lys Asn Lys Arg Ser Leu Val Glu Thr Arg Asn Ile Leu Arg Ala
85 90 95
His Gln Gln Arg Gln Lys Arg Gly Gly Arg Arg Gly Asn Thr Gly Ser
100 105 110

<210> 36447
<211> 292
<212> PRT
<213> A.fumigatus

<400> 36447
Ile Ala Gly Thr Leu His Ser Thr Ala Leu His Gly Val Leu Gln Ile
1 5 10 15
His His His Pro Ile Pro Ser Lys Met Ser Leu Ala Gln Asn Ser Asn
20 25 30
Leu Asp Ser Lys Arg Arg Arg Phe Gln Pro Pro Ile Thr Thr Phe Phe
35 40 45
Ser Pro Ala Val Ser Asp Ser Asn Gly Thr Asp Ala Ala Cys Ser Pro
50 55 60
His Leu Ser His Asn His Tyr Ala Ala Ala Thr His Ser Pro Thr Pro
65 70 75 80
Ile Val Pro Ala Lys Ile Gln Ser Ser Leu Leu Ser Val Gly Met Arg
85 90 95
Val Arg Lys Ser Val Ala Glu Gly Tyr Lys Thr Lys Gly Val Lys Met
100 105 110
Phe Asp Thr Pro Thr Ser Thr Ile Ser Leu Ser Ala Lys His Glu His
115 120 125
Ser Thr Gly Arg Gly Phe Pro Thr Val Arg Gly Glu Leu Ala Pro Phe
130 135 140
Cys Gly Leu Ser Lys Ser Cys Asp Tyr Thr Val Glu Pro His Ser Asn
145 150 155 160
Thr Val Tyr Glu Leu Ser Glu Thr Arg Gly Tyr Asn Val Asp Ile Val
165 170 175
Thr Asp Asp Gly Asp Ala Phe Ser Leu Pro Pro Ser Ser Gln Glu Ser
180 185 190
Val Tyr Ser Ala Asn Asn Gly Gln Lys Arg Ser Tyr Asp Pro Tyr Ala
195 200 205
Asp Glu Asp Ala Ser Asp Phe Glu His Ser Val Phe Val Thr Thr Asp
210 215 220
Thr Val Pro Gly Arg Thr Ile Leu Cys Pro Ser Leu Gly Arg Gln Arg
225 230 235 240
Arg Arg Phe Val Ala Leu Gln Ser Gln Ala Ile Gln Gln Gly Thr Met

```
                245                 250                 255
Gln Val Asp Asp Phe Glu Glu Pro Val Phe Leu Arg Arg Arg Glu Glu
            260                 265                 270
Val Asp Ala Asp Tyr Met Pro Ala Arg Met Gly Asp Cys Glu Val Lys
        275                 280                 285
Met Gly Gly Ala
    290
```

<210> 36448
<211> 260
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (227),(228)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36448

```
Pro Pro His Cys Val Thr Phe His Ala Arg Ala Glu Glu Leu Asp Gly
1               5                   10                  15
Asp Gly Ala Asp Ala Thr Thr Ser Glu Phe Arg Ala Lys Leu Lys Ser
            20                  25                  30
Leu Lys Asp Ile Val Asn Pro Ala Leu Arg Arg Lys Gln Glu Asn Ala
        35                  40                  45
Asn Arg Pro Ala Arg Val Gln Leu Leu Gln Asp Ser Leu Lys Asn Ser
    50                  55                  60
Lys Thr Ile Leu Asp Ile Leu Gln Lys Gln Ile Glu Gln Asp Glu Glu
65                  70                  75                  80
Leu Tyr Ser Ser Ser Leu Ser Ser Ala Thr Ser Thr Glu Ser Lys Glu
                85                  90                  95
Ser Ser Thr Ser Thr Thr Ser Thr Ala Ser Ser Ser Glu Ser Ser Ser
            100                 105                 110
Thr Thr Ala Asp Pro Leu Asp Asp Phe Glu Lys Asp Pro Tyr Thr Thr
        115                 120                 125
Pro Ala Ser Glu Thr Thr Ser Thr Thr Ser Thr Thr Thr Thr Pro Lys
    130                 135                 140
Pro Thr Gly Pro Lys Tyr Ser Ile Phe His Pro Ser Asp Leu Ser Ser
145                 150                 155                 160
Leu Thr Lys Val Tyr Glu Ser Thr Asn Thr Trp Leu Glu Thr Gln Leu
                165                 170                 175
Ala Leu Gln Glu Lys Leu Thr Glu Ser Asp Asp Pro Ala Leu Thr Val
            180                 185                 190
Ala Glu Ile Asp Thr Arg Leu Lys Glu Leu Glu Arg Thr Met Lys Arg
        195                 200                 205
Ile Tyr Glu Lys Met Gly Ala Ala Ala Ala Lys Ser Gly Lys Ser Ser
    210                 215                 220
Gly Glu Xaa Xaa Glu Glu Asn Gly Lys Gly Asn Ser Gln Lys Pro Lys
225                 230                 235                 240
Lys Asp Lys Gly Lys Lys Glu Lys Ala Glu Lys Ala Lys Ala Pro Pro
                245                 250                 255
Lys Asp Glu Leu
            260
```

<210> 36449
<211> 115

<212> PRT
<213> A.fumigatus

<400> 36449
Pro Thr Asn Glu Gln Ser Ala Leu Thr Ala Phe Ser Asn Asn Ile Gly
1 5 10 15
Gln Ile Ala Tyr Leu Gln Ser Glu Lys His Gln Val Lys His Ile Tyr
20 25 30
Phe Gly Gly Ser Phe Ile Arg Gly His His Gln Thr Met Asn Thr Leu
35 40 45
Ser Tyr Ala Ile Arg Phe Trp Ser Lys Gly Glu Lys Gln Ala Tyr Phe
50 55 60
Leu Arg His Glu Gly Tyr Leu Gly Ala Val Gly Ala Phe Leu Arg Arg
65 70 75 80
Gln Pro Glu Asn Trp Gly Arg Arg Asn Ser Ile His Asp Ala Ser Ser
85 90 95
Ala Ile Gln Ala Ala Lys Glu Ala Ile Pro Lys Lys Asp Glu Gly Leu
100 105 110
Ser Ser Thr
115

<210> 36450
<211> 63
<212> PRT
<213> A.fumigatus

<400> 36450
Arg Gly Arg Leu Arg Thr Gln Leu Phe Pro Asn Ala Leu Asp Asp Lys
1 5 10 15
Ile Ser Glu Phe Leu Asp Asp Lys Gly Asn Arg Leu Ile Glu Glu Val
20 25 30
Tyr Gln Gly Val Ser Arg Tyr Phe Ser Ala Thr Tyr Phe Asp Val His
35 40 45
Asn Thr Thr Thr Trp Ile His Gln Tyr Thr Ser Gly Tyr Lys His
50 55 60

<210> 36451
<211> 128
<212> PRT
<213> A.fumigatus

<400> 36451
Leu Cys Gln Ile Leu Gly Val Ser Thr Arg Leu Cys Arg Leu Gln Gln
1 5 10 15
Gln Thr Ser Ser Ser Leu Ala Arg Ala Arg Lys Ala Thr Tyr Pro Ala
20 25 30
Lys Ala Thr Asn Thr Ala Lys Val Thr Phe Lys Leu Val Ser Tyr Arg
35 40 45
Ser Gly Ala Ile His Ala Phe Pro Leu Asp Glu Cys Lys Tyr Gly Lys
50 55 60
Asp Leu Phe Asp Lys Ala Arg Ala Phe Phe Phe Arg Leu Leu Asp Arg
65 70 75 80
Asn Val Asp Val Lys Ile Leu Ser Cys Gln Ile Ser Ser Glu Arg Ala
85 90 95
Gln His Phe Leu Phe Gly Ser Glu Gly Glu Phe Glu Leu Leu Ile Gln
100 105 110

```
His Ala Lys Asp Ser Lys Arg Gln Lys Met Glu Gln Leu Pro Leu Lys
        115                 120                 125

<210> 36452
<211> 407
<212> PRT
<213> A.fumigatus

<400> 36452
Asn Pro Ile Ala Arg Arg Trp Lys Lys Leu Met Gly Met Ala Thr Asp
1               5                   10                  15
Pro Asp Asn Tyr Thr Asp Thr Glu Thr Phe Leu Asp His Leu Gln Arg
            20                  25                  30
Asn Pro Arg Val Gly Pro Tyr Asp Phe Trp Pro Leu Val Ala Asp Ser
        35                  40                  45
Thr Val Ile Val Gln His Val Cys Ser Val Ala Ile Phe Val Cys Cys
    50                  55                  60
Phe Val Gly Ile Val Gln Glu Arg Leu Ser Pro Val Ser Val Val Cys
65                  70                  75                  80
Trp Gly Ser Val Gly Thr Ala Met Gly Trp Ile Leu Trp Asp Ser Trp
                85                  90                  95
Val Trp Arg Glu His His Ala Glu Gln Ala Pro Asn Ala Gly Arg Ile
            100                 105                 110
Ala Asp Gly Asp Asp Gly Ser Ser Ser Ser Ser Ala Val Ser Ser Val
        115                 120                 125
Asn Pro Ser Ser Gly Ala Thr Ser Arg Pro Val Gly Pro Lys Asp Gly
    130                 135                 140
Gln Asn Glu Val His Gly Leu Gly Leu Thr Ile Ser Ser Gly Glu Pro
145                 150                 155                 160
Asp Gly Leu Leu Arg Arg Arg Ser Thr Gly Phe Ser Gly Glu Ala Tyr
                165                 170                 175
Gly Pro Cys Glu Pro Gly Ser Pro Ser His Gln Ala Ser Gly Gly Leu
            180                 185                 190
Ser Asn Met His Leu His His Gly Ser Gln Glu Thr Asp Glu Thr Ser
        195                 200                 205
Leu Leu Ser Ser Arg Asn Arg Gln Arg Leu Ser Thr Val Lys Ser Ala
    210                 215                 220
Phe Leu Ile Tyr Phe Ser Leu Leu Gly Leu Ser Pro Ile Leu Lys Ser
225                 230                 235                 240
Leu Thr Lys Ser Thr Ala Ser Asp Ser Ile Trp Ala Met Ser Cys Trp
                245                 250                 255
Leu Leu Ile Met Asn Ile Phe Ser Phe Asp Tyr Gly Ser Gly Glu Gly
            260                 265                 270
Ala Gly Ala Thr Lys Phe Pro Ala Ser Leu Ser Thr Asn Ala Ala Val
        275                 280                 285
Met Ala Ser Thr Val Leu Ala Ser Arg Leu Pro Ser Thr Thr His Val
    290                 295                 300
Phe Ser Leu Met Leu Phe Ser Ile Glu Val Phe Gly Leu Phe Pro Ile
305                 310                 315                 320
Phe Arg Arg Gln Leu Arg His Thr Ser Trp Thr Gly His Val Leu Leu
                325                 330                 335
Thr Leu Ala Leu Val Ile Val Ala Gly Gly Ala Val Gly Met Thr Leu
            340                 345                 350
Arg Gly Gly Trp Thr Ala Ala Val Val Gly Ser Phe Leu Gly Ser Ile
        355                 360                 365
Met Thr Ala Phe Ala Met Gly Gly Cys Ser Trp Trp Leu Ile Ser Leu
```

```
    370                 375                 380
Gln Lys Tyr Lys Asn Val Val Thr Gly Pro Trp Asp Pro Ala Arg Pro
385                 390                 395                 400
Ile Ile Arg Arg Gln Trp Asp
                405
```

<210> 36453
<211> 98
<212> PRT
<213> A.fumigatus

<400> 36453

```
Leu Thr Arg Arg Trp Ala Leu Asp Asp Asn Gly Val Leu Gly Arg Gln
1               5                   10                  15
Ala Ser Asn Gln Cys Asn Ala Asn Trp Asn Leu Asp Ile Ala His Ile
            20                  25                  30
Glu Ala Cys Lys Ser Asn Asn Phe Leu Asp Arg Trp Thr Gly Leu Glu
        35                  40                  45
Tyr Phe Thr Tyr Glu Glu Ile Ile His Asp Arg Met Lys Gly His Val
    50                  55                  60
Gln Phe Leu Gln Glu Trp Val Cys Leu Phe Phe Leu Lys His Leu Phe
65                  70                  75                  80
Glu Ser Ser Thr Arg Tyr Val Thr Ala Arg Arg Asp Ile Gln Phe Leu
                85                  90                  95
Lys Gly
```

<210> 36454
<211> 342
<212> PRT
<213> A.fumigatus

<400> 36454

```
Leu Ala Ile Glu Leu Glu Thr Asp Asp Phe His Lys Ile Phe Ala Ser
1               5                   10                  15
Met Pro Ala Leu Asn Ser Val Asn Leu Arg Phe Ala Gly Gln Ile Lys
            20                  25                  30
Asp Arg Val Phe Glu Tyr Val Ile Asp Arg Asp Leu Gln Ile Arg Gln
        35                  40                  45
Leu Gln Leu Asp Ala Ala Asn Leu Val Ser Asp Thr Tyr Trp Arg Arg
    50                  55                  60
Leu Phe Gln Lys Leu Gly Ser Gln Leu Glu Ser Leu Lys Leu Ser Asn
65                  70                  75                  80
Leu Asp Phe Ser Phe Asp Asp Glu Thr Val Glu Thr Leu Cys Arg Asn
                85                  90                  95
Cys Thr Ala Leu Lys Arg Leu Lys Leu Lys Gln Cys Trp Lys Ile Gly
            100                 105                 110
Ser Asp Ser Leu Arg Thr Ile Ser Thr Leu Pro Thr Leu Glu His Leu
        115                 120                 125
Ser Leu Asp Thr Ile Gln Asp Leu Glu Ile Glu Pro Leu Leu Gln Met
    130                 135                 140
Val Asn Thr Leu Gly Pro Asn Leu His Thr Leu Ser Leu Glu Gly Phe
145                 150                 155                 160
His Asn Ala Asp Asp Arg Leu Leu Asp Leu Ile His Asp Lys Cys Arg
                165                 170                 175
Leu Leu Ser Lys Leu Arg Phe Ser Asp Asn Ala Leu Cys Ser Asp Arg
```

```
            180                 185                 190
Gly Phe Val Asn Leu Phe Thr Asn Trp Ala Asn Pro Pro Leu Arg Phe
        195                 200                 205
Val Asp Leu Ser Ser Thr Arg Asp Val Asp Asn Ala Asn Pro Asp Gly
    210                 215                 220
Pro Val Glu Ala Ile Gly Leu Ala Ser His Gly Phe Ile Ala Leu Met
225                 230                 235                 240
Asn His Ser Gly Ser Thr Leu Gln Lys Leu Asn Ile Ser Ser Cys Arg
                245                 250                 255
His Ile Ser Arg Ala Ala Phe Glu Glu Val Phe Gln Glu Glu Lys Thr
            260                 265                 270
Tyr Pro Phe Leu Gln Glu Leu Asp Val Ser Phe His Thr Val Met Asp
        275                 280                 285
Asp Phe Leu Ile Arg Lys Ile Phe Gln Ser Cys Pro Ala Ile Lys Lys
    290                 295                 300
Val Val Ala Phe Ala Cys Phe Asn Val Arg Asp Val Gln Val Pro Val
305                 310                 315                 320
Gly Val Ala Leu Val Gly Gly Leu Thr Ala Gln His Ser Ile Val Ile
                325                 330                 335
Glu Gly Pro Ala Ser Gly
            340
```

<210> 36455
<211> 270
<212> PRT
<213> A.fumigatus

<400> 36455

```
Ser Asn Asn Ile Ser Ala Ala Gln Ile His Gln Asp Tyr Gln Arg Arg
1               5                   10                  15
Val Arg Gln Ala Glu Arg Glu Val Ala Ala Asn Glu Pro Ala Asp Glu
            20                  25                  30
Leu Glu Glu Glu Asp Glu Tyr Glu Asp Asn Asp Gly Glu Thr Ala Glu
        35                  40                  45
Gln Arg Lys Lys Arg Lys Arg Lys Glu Ala Ala Thr Leu Ala Lys Ile
    50                  55                  60
Lys Gln Ser Lys Glu Phe Ala Arg Arg Lys Ala Arg Arg Thr Gly Lys
65                  70                  75                  80
Pro Asp Asp Asp Asp Asp Val Ile Ala Arg Glu Met Met Tyr Gln Lys
                85                  90                  95
Ser Arg Pro Met Pro Gly Gln Leu Glu Asn Cys Glu Leu Cys Asn Lys
            100                 105                 110
Arg Phe Thr Val Thr Pro Tyr Ser Lys Thr Gly Pro Asn Gly Gly Leu
        115                 120                 125
Leu Cys Ala Lys Cys Ser Lys Asp Val Ala Asp Asp Glu Arg Lys Ser
    130                 135                 140
Lys Ala Lys Lys Arg Gly Pro Arg Ser Gly Arg Arg Gln Asn Gln Ser
145                 150                 155                 160
Asn Leu Leu Asp Gly Ile Val Gln Gln Gly Ala Leu Ser Leu Val Glu
                165                 170                 175
Met Cys Ala Lys Val Asn Ile Leu Glu Gln Ser Phe Asp Lys Ser Cys
            180                 185                 190
Trp Arg Thr Asp Arg Ile Gln Lys Val Ala Asp Asn His Asn Asp Ile
        195                 200                 205
Glu Glu Phe Gly Asp Leu Pro Ser Arg Leu Leu Arg Arg Leu Ser Gln
    210                 215                 220
```

```
Ile Phe Ser Lys Arg Arg Ile Leu Thr Ser Arg Thr Leu Asn Leu Phe
225                 230                 235                 240
Leu Arg Pro Glu Leu Asn Phe Ile Asp Ile Tyr Asp Ala Ala Ser Met
                245                 250                 255
Ser Leu Leu Val Leu Ser Asn Phe Gln Arg Ile Asn Leu Pro
            260                 265                 270
```

<210> 36456
<211> 99
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (77)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36456

```
Ser Ser Lys Leu Glu His Gly Thr Phe His Arg Leu Ser Phe Tyr Ala
1               5                   10                  15
Ser Leu Leu Glu Val Asn Thr Ala Gln Leu Gln Trp Asn Ala Pro Val
            20                  25                  30
Ala Ser Cys Leu Ser Val Asp Met Pro Ile Gly Met His Tyr Thr His
        35                  40                  45
Leu Pro His Ile Ser Ser Thr Thr Ser Gly Leu Ala Lys Asn Cys Ser
    50                  55                  60
His Gln Pro Ser Asp Asp Ser Gln Pro Ala Asn Asp Xaa Thr Lys Val
65                  70                  75                  80
Glu Tyr Gln Gly Pro Trp Lys Pro Glu Asp Val Trp Pro Ser Asp Glu
                85                  90                  95
Ile Pro His
```

<210> 36457
<211> 791
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (60)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36457

```
Ser Val Gly Gly Gln His Ser Ser Ile Ala Val Glu Cys Pro Arg Cys
1               5                   10                  15
Leu Met Ser Leu Gly Arg His Ala Tyr Arg His Ala Leu His Pro Ser
            20                  25                  30
Ser Thr Tyr Leu Ile Asp His Ile Trp Ile Ser Glu Glu Leu Leu Ala
        35                  40                  45
Ser Thr Phe Arg Arg Phe Ala Thr Ser Gln Arg Xaa Tyr Glu Ser Arg
    50                  55                  60
Val Pro Gly Pro Leu Glu Ala Arg Arg Arg Leu Ala Lys Arg Arg Asn
65                  70                  75                  80
Thr Ala Leu Ala Gly Ile Ala Gly Ser Gly Pro Leu Glu Asp Ile Ala
                85                  90                  95
```

```
Cys Leu Phe Gly Arg Asn Gly Arg Glu His Met Lys Trp Thr Asp Arg
            100                 105                 110
Glu Gly Arg Asn Val His Pro Glu Thr His Gly Lys Asn Leu Leu Pro
        115                 120                 125
Cys Gln Ser Phe Glu Lys Met Tyr Arg Ile Pro Asn Cys Thr Lys Asp
    130                 135                 140
Ser Pro Pro Phe Pro Leu Arg Pro Pro Glu Pro Arg Leu Pro Phe Tyr
145                 150                 155                 160
Ser Glu Ser Val Ala Pro Ile Glu Leu Asp Thr Leu Asp Gly Thr Arg
                165                 170                 175
Gly Phe Pro Asp Ala Ser His Lys Thr Ser Arg Glu Gln Ala Leu Glu
            180                 185                 190
Glu Phe Leu Arg Ser Arg Pro Ser Val Thr Ala Ile Gly Ile Phe Val
        195                 200                 205
Arg Gln Leu Asn Phe Asp Leu Gln Arg Glu Pro Thr Tyr Ser Arg Leu
    210                 215                 220
Ile Leu Glu His Leu Leu Arg Arg Ser Ala Asn Asp Glu Gly Ala Met
225                 230                 235                 240
Lys Lys Val Val Glu Phe Leu Asp Asp Pro Tyr Leu Asn Thr Arg Gly
                245                 250                 255
Ala Gly Asn Tyr Leu Cys Ala Leu Lys His Thr Leu Ser Thr Ala Ala
            260                 265                 270
Val Leu Arg Lys Gln Pro Val Phe Asp Ala Val Ile Arg Ser Leu Glu
        275                 280                 285
Leu Gly Leu Leu His Pro Ser Glu Leu Gln Asp Ile Ile Lys Thr Ile
    290                 295                 300
Ser Asn Val Arg Phe Lys Arg Ser Asn Gly Phe Thr Thr Arg Asn Ser
305                 310                 315                 320
Arg Phe Leu Val Arg Phe His Arg Glu Met Trp Asp Ala Ile Gly Arg
                325                 330                 335
Cys Asp Val Tyr Arg His Arg Asp Leu Gly Lys Glu Ile Val Asp Ala
            340                 345                 350
Trp Leu Ser Ile Leu Cys Glu Arg Gln Thr Tyr Glu Asp Phe Ile Leu
        355                 360                 365
Ala Lys Asp Val Ile Leu Ala Thr Gln Asp Pro Ser Ser Ala Asp Arg
    370                 375                 380
Arg Trp Val Pro Thr Leu Ile Ala Cys Trp Leu Lys Asp Ser Ala Glu
385                 390                 395                 400
Ser Arg Arg Ser Ser Asn Arg His Phe Ile Lys Glu Leu Leu Gly Tyr
                405                 410                 415
Phe His Pro Thr Ala Thr Ser Glu Ile Ile Ile Arg Thr Thr Glu Tyr
            420                 425                 430
Met Val Ser Thr Lys Met Gly Cys Leu Leu Glu Trp Gln Arg Arg Leu
        435                 440                 445
Ser Glu Leu Asp Asn Ile Thr Asn Ile Val Ser Ser Gln Lys Trp Val
    450                 455                 460
Asp Ile Gly Thr Gln His Thr Ala Glu Leu Leu Gly Ser Pro Gln Glu
465                 470                 475                 480
Met Asn Ser Thr Leu Ser Leu Arg His Gln Ile Ile Leu Arg Ile Trp
                485                 490                 495
Met Leu Arg Ala Leu Ser Lys Ser Leu Pro Gln Gly Pro Leu Trp Arg
            500                 505                 510
Lys Asp Gln Arg Val Thr Asp Ser Pro Ile Thr His Leu Cys Thr Ile
        515                 520                 525
Tyr Glu Ser Thr Leu Asp Lys Asp Gly Gly Tyr Glu Asp Leu Leu Ser
    530                 535                 540
```

```
Ser Leu Met Leu Glu Ile His Thr Leu Gly Ile Pro Ser Asn Gly Leu
545                 550                 555                 560
Leu Met Ser Val Val Glu Leu Lys Ala Ala Lys Arg Arg Thr Thr Arg
                565                 570                 575
Ala Gln Arg Arg Thr Leu Ala Lys Leu Glu Thr Thr Lys Val Ser Phe
            580                 585                 590
Ala Glu Met Phe Ser Asp Ile His Ala Tyr Asn Ala Ser Asn Thr His
        595                 600                 605
Phe Phe Ala Ala Tyr Glu Lys Met Val Arg Gln Ile Asp Ile Thr Asp
    610                 615                 620
Pro Ser Phe Val Asn His Ala Ile Glu Ile Ala Arg Asp Gly Asn Ile
625                 630                 635                 640
Gln Arg Ile Trp Thr Leu Ile Arg Leu Phe Arg Cys His Thr Pro Leu
                645                 650                 655
Lys Ile Ala Ile Ser Ser Phe Trp Pro Arg Val Pro Asp Pro Ser Glu
            660                 665                 670
Lys Ala Leu Val Arg Tyr Tyr Pro Glu Pro Arg Thr Ser Leu Cys Pro
        675                 680                 685
Asp Pro His Leu Ala Val Glu Met Leu His Leu Phe Ala Ile Ser Leu
    690                 695                 700
Ala Cys Ser Arg Asn Ile Ser Pro Arg Arg Ala Tyr Ala Leu Val His
705                 710                 715                 720
Trp Leu Tyr Asn Phe Leu Met Lys His Asn Ala His Val Lys Pro Ser
                725                 730                 735
Leu Val Arg Ala Met Tyr His Ala Gly Val Leu Arg Phe Arg Arg Ala
            740                 745                 750
Gly Leu Asn Val Ala Pro Thr Gln Tyr Ala Tyr Ile Leu Asp Arg Val
        755                 760                 765
Lys Glu Ile Glu Thr Pro Glu Met Val Gln Ala Leu Met Glu Pro Pro
    770                 775                 780
Arg Met Gly Glu Ser Arg Lys
785                 790
```

<210> 36458
<211> 210
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (32),(63)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36458

```
Ser Ile Ile Ser Pro Pro Arg Cys Trp Cys Ala Val Ala Gly Thr Val
1               5                   10                  15
Ala Asp Thr Val Phe Thr Thr Ala Val Ile Arg Ser Asn Ile Val Xaa
            20                  25                  30
His Tyr Leu Ser Thr Gly Gly Pro Pro Arg Leu Val Thr Cys Met Thr
        35                  40                  45
Leu Leu Lys Gln His Leu Phe Arg Tyr Gln Gly His Ile Gly Xaa Tyr
    50                  55                  60
Leu Val Val Ala Gly Val Asp Pro Thr Gly Val Gly Leu Phe Thr Val
65                  70                  75                  80
His Ala His Gly Ser Thr Asp Lys Leu Pro Tyr Val Thr Met Gly Ser
                85                  90                  95
```

```
Gly Ser Leu Ala Ala Met Ser Val Phe Glu Ser Met Trp Lys Pro Gln
            100                 105                 110
Leu Asn Arg Glu Glu Ala Ile Ala Leu Cys Ser Glu Ala Ile Lys Ala
        115                 120                 125
Gly Ile Phe Asn Asp Leu Gly Ser Gly Ser Asn Val Asp Val Cys Val
    130                 135                 140
Ile Gln Lys Asp Lys Pro Thr Gln Leu Leu Arg Asn Tyr Met Arg Pro
145                 150                 155                 160
Asn Glu Arg Gly Glu Lys Glu Arg Asn Tyr Arg Phe Pro Arg Gly Thr
                165                 170                 175
Thr Ala Tyr Leu Asn Glu Lys Ile Ile Thr Lys Gln Asp Leu Arg Lys
            180                 185                 190
Tyr Val Thr Val Glu Asp Val Ser Gly Asp Pro Asn Leu Met Glu Val
        195                 200                 205
Asp Ser
    210
```

<210> 36459
<211> 66
<212> PRT
<213> A.fumigatus

```
<400> 36459
Asn Ser Leu Cys Lys Glu Leu Leu Ser Phe Gln Arg Leu Ala Tyr Gly
1               5                   10                  15
Asp Pro Ile Ser Lys Ala Ser Leu Arg Asn Trp Thr Gly Phe Glu Lys
            20                  25                  30
His Gly Ser Ser Gly Ser Pro Asp Ser Ser Gly Phe Ala Leu Val Leu
        35                  40                  45
Trp Phe Pro Ile Thr Leu Asp Gln Arg Leu Leu Leu Arg Phe Leu Tyr
    50                  55                  60
Ile Val
65
```

<210> 36460
<211> 165
<212> PRT
<213> A.fumigatus

```
<400> 36460
Ile Arg Thr His Pro Ser Thr Leu Ser Asn Asn Tyr Pro Lys Pro Leu
1               5                   10                  15
Phe Pro Thr Ser Lys Met Asp Gln Pro Pro Leu Ser Pro Pro Ala Glu
            20                  25                  30
Pro Glu Ser Ile Ser Thr Ala Asn Leu Pro Ser Asn Ala Pro Val Pro
        35                  40                  45
Leu Asp Ser Pro Leu Arg Thr Asn Pro Ile His Pro Ser Leu Pro Asp
    50                  55                  60
Ile Arg Val Pro Gly Ser Pro Leu Arg Pro Tyr Gln Tyr Asp Pro Val
65                  70                  75                  80
Thr Cys Thr Pro Ile Asp Leu Glu Ser Asp Ser Phe Arg Thr Gln Leu
                85                  90                  95
Asp His Leu Arg Thr Glu Tyr Ala Thr Pro Ser Ala Ala Leu Lys Ala
            100                 105                 110
Gln Glu Gln Val Ala Lys Glu Ala Lys Arg Lys Ile Glu Glu Ala Glu
        115                 120                 125
```

```
Lys Lys Arg Glu Glu Val Gln Lys Ala Met Asp Lys Lys Val Lys Glu
    130                 135                 140
Arg Asp Thr Glu Met Lys Val Leu Ser Lys Tyr Gln Lys Val Arg Gly
145                 150                 155                 160
Leu Asp Ile Pro Ser
                165
```

<210> 36461
<211> 369
<212> PRT
<213> A.fumigatus

<400> 36461

```
Pro Arg Phe Glu Phe Ile Leu Arg Val Ser Leu Thr Val Leu Ala Tyr
1               5                   10                  15
Arg Arg Phe Leu Leu Thr Lys Ile Phe Ala Gln Ile Ile Asp Leu Asn
            20                  25                  30
Asn Val Pro Leu Val Ser Gly Thr Ala Phe Val Lys Trp Arg Leu Pro
        35                  40                  45
Ser Ser Ser Thr Ala Glu His His Gly His Thr Asp Lys Ala Ile Ile
    50                  55                  60
Leu Asp His Arg Ala Tyr Trp Asn Tyr Glu Lys Thr Leu Gln Val Arg
65                  70                  75                  80
Leu Thr Ile Asp Arg Asn Gln Thr Leu His Glu Cys Glu Leu Val Leu
                85                  90                  95
Asp Ile Ile Gln Glu Phe Gly Ser Gly Gly His Ser Asp Lys Asn Phe
            100                 105                 110
Leu Gly Arg Ile Arg Leu Asn Leu Ala Glu Tyr Val Asp Lys Ser Asp
        115                 120                 125
Asp Glu Glu Gly Ile Val Arg Arg Tyr Leu Met Gln Asp Ser Lys Val
    130                 135                 140
Asn Ser Thr Leu Arg Val Gly Ile Val Met His Gln Ile Asp Gly Asp
145                 150                 155                 160
Arg Asn Phe Ile Thr Tyr Ala Leu Leu Ser Leu Ile Ile Ile Ser Leu
                165                 170                 175
Val Leu Ile Ala Ser Ser Pro Pro Leu Arg Ser Ala Ala Val Phe Ala
            180                 185                 190
Gly Ile Ala Gly Val Val Ser Ser Glu Gln Ala Asp His Asp Glu Leu
        195                 200                 205
Gly Arg Leu Pro Ser Ile Asn Thr Gln Ser Arg Glu Val Ala Asp Met
    210                 215                 220
Gln Asp Met Tyr Arg Arg Thr Leu Ala Ala Ser Trp Leu Cys Gly Thr
225                 230                 235                 240
Asp Asp Ile Pro Ala Asp Lys Leu Ile Glu Asp Leu Phe Ala Thr Gly
                245                 250                 255
Ser Cys Gly Asn Asp Glu His Pro Asp Ala Arg Ser Arg Arg Thr Ala
            260                 265                 270
Asp Asn Asn Asn Glu Leu His Pro Asp Arg Asp Thr Asp Thr Arg Gln
        275                 280                 285
Thr Arg Ser Gly Asn Arg Leu Ser Pro Ser Phe Glu Arg Arg Pro Lys
    290                 295                 300
Ser Ser Ser Ser Gln Phe Leu Asn Glu Ser Lys Gly Ser Asp Ser Ser
305                 310                 315                 320
Gly His Ile Arg Lys Gly Gly Ser Ile Gln Glu Gln Leu Gln Asp Ser
                325                 330                 335
Ala Asn Gly Lys Thr Trp Lys Ser Arg Ser Glu Val Asp Glu Leu Ser
```

```
            340                 345                 350
Glu Phe Asp Val Arg Glu Asp Leu Arg Ser Trp Glu Val Ser Val Lys
        355                 360                 365
Glu
```

<210> 36462
<211> 67
<212> PRT
<213> A.fumigatus

<400> 36462
Arg Ile Leu Thr Asp Lys Ile Ala Ser Lys Ala Leu Lys Lys Leu Ser
1 5 10 15
Ile Thr Lys Asn Phe Met Glu Arg Leu Ala Arg Asn Asn Leu Pro Ile
 20 25 30
Phe Pro Tyr Ala Phe Thr Val Arg Glu Ala Gly Ser Arg Ala Ser Gly
 35 40 45
Leu Ser Met His His Pro Leu Gln Arg Tyr Ser Thr Ile Ile Ser Glu
 50 55 60
Ser Pro Ala
65

<210> 36463
<211> 73
<212> PRT
<213> A.fumigatus

<400> 36463
Cys Leu Leu Pro Tyr Gly Ser Val Ser Asn Asp Ser Leu Pro Trp Tyr
1 5 10 15
Asp Arg Val Arg Leu Gly Gly Ser Glu Gly Leu Val Arg Asn Cys Val
 20 25 30
Val Ala Thr Val Lys Phe Gln His Pro Gln Asn Ala Asn Val His Ala
 35 40 45
Leu Cys Leu Ile Leu Gly Ser Val Asn Pro Thr Ser Thr Lys Gln Val
 50 55 60
Gln Gly Ser Arg Ser Pro Pro Glu Ser
65 70

<210> 36464
<211> 76
<212> PRT
<213> A.fumigatus

<400> 36464
Leu Ser Gly Gln Arg Tyr Thr Ile Ala Thr Glu Thr Thr Pro Leu Pro
1 5 10 15
Asn Lys Thr Val Gly Ala Glu Val Met Gln Arg Tyr Tyr Asp His Trp
 20 25 30
Phe Asn Val Thr Asn Thr Val Leu Glu Val Pro Asn Met Leu Gly Ser
 35 40 45
Ile Ala Phe Gln Pro Met Pro Arg Thr Ile Thr Ser Lys Ala Lys Ala
 50 55 60
Arg Gly Gly Val Ile Ala Glu Ser Leu His Ser Ile
65 70 75

<210> 36465
<211> 129
<212> PRT
<213> A.fumigatus

<400> 36465
Lys Ala Gln Val Trp Gly Gly Asn Tyr Ile Phe Thr Ala Asp Lys Thr
1 5 10 15
Pro Gln Val Leu Ser Ala Leu Arg Asp Phe Thr Glu His Tyr Pro Asp
20 25 30
Asp Lys Ala Ala Ile Ile Val Thr Cys Glu His Gly Leu Leu Ile His
35 40 45
Thr Trp Ile Met Phe Leu Phe Tyr Asp Gly Pro Glu Pro Pro Glu Gly
50 55 60
Val Phe Thr Asn Phe Thr Ala Ile Gly Pro Thr Asp Thr Thr Lys Thr
65 70 75 80
Trp Asp Ser Tyr Tyr Asp Leu Val Ser Asn Pro Ala Val Ser His Leu
85 90 95
Glu Trp Leu Ile Ser Tyr Arg Asn Ser Leu Asn Ile Thr Ile Phe Leu
100 105 110
Phe Cys Ser Lys Met Ile Phe Ser Val Leu Val Ser Ala Thr Asp Phe
115 120 125
Asp

<210> 36466
<211> 121
<212> PRT
<213> A.fumigatus

<400> 36466
Ser Leu Lys Ala Phe Ile Ala Ser Lys Asn Ala Leu Thr Thr His Lys
1 5 10 15
Asp Leu Leu Asp Phe Pro Thr Asp Gln Asp Tyr Ile Ile Ile Glu Leu
20 25 30
Asp Phe Ser Tyr Ala Phe Ala Ala Asp Asp Gly Lys Ile Asp Ala Ala
35 40 45
Asn Gln Asn Leu Tyr Arg Gly Phe Asp Asn Ile Ile Ser Asp Asn Ile
50 55 60
Asp Lys Gly Leu Leu Pro Asp Val Tyr Arg Pro Leu Phe Leu Asn Asp
65 70 75 80
Ala Tyr Phe Arg Gln Asp Tyr Trp Gly Arg Ile Arg Thr Arg Glu Gln
85 90 95
Ala Leu Gln Thr Arg Ile Lys Tyr Asp Pro Asp Gly Phe Phe Gln Lys
100 105 110
Arg Thr Ser Gly Gly Phe Arg Leu His
115 120

<210> 36467
<211> 180
<212> PRT
<213> A.fumigatus

<400> 36467
Arg Thr Ile Met Thr Arg Gly Gln Pro Trp Arg Ala Ala Val Ala Ile

```
1               5                   10                  15
Thr Val Ala Ala Leu Ala Arg Leu Ser Ala Ala Asp Ile Cys Ser Val
            20                  25                  30
Ile Lys Gln Gln Gly Ile Glu Ile Gln Lys Pro Leu Ser Pro His Tyr
        35                  40                  45
Tyr Lys Asp Leu Ala Asn Tyr Trp Ser Ala Ala Cys Gly Asp Leu Lys
    50                  55                  60
Pro Thr Cys Ile Ala Thr Pro Thr Ser Ala Leu Glu Met Ser Ala Ile
65                  70                  75                  80
Val Lys Gln Leu His Asn Phe Asp Asp Leu Phe Ala Val Lys Ser Gly
                85                  90                  95
Gly His Met Pro Asn Asn Gly Phe Ala Ser Ile Gln Asp Gly Leu Leu
            100                 105                 110
Ile Ser Thr Glu Asn Leu Asp Gln Val Ile Tyr Asn Pro Glu Asp Gln
        115                 120                 125
Thr Ala Ile Ile Gly Pro Gly Leu Thr Trp Glu Asp Ala Gln Lys Gly
    130                 135                 140
Leu Asp Gly Thr Gly Arg Thr Leu Val Gly Gly Arg Leu Gly Gly Val
145                 150                 155                 160
Gly Val Gly Gly Tyr Met Leu Gly Gly Lys Leu Gln Ser Leu Arg Trp
                165                 170                 175
Leu Thr Ser His
            180
```

<210> 36468
<211> 76
<212> PRT
<213> A.fumigatus

<400> 36468

```
Ala Asp Ile Asn Pro Leu His Ser Phe Asp Thr Ile Gly Tyr His Leu
1               5                   10                  15
Leu Asn Pro Tyr Thr Ile Asn Met Ala Arg Tyr Gly Ala Leu Gly Ala
            20                  25                  30
Thr Phe Gln Ile Gly Arg Asn Val Gln Ala Cys Ser Leu Ile Ala Ile
        35                  40                  45
Ile Gly Leu Thr Ser Gln Phe Asn Gly Glu Asn Val Ser Lys Asn Arg
    50                  55                  60
Thr Ala Ala Ser Arg Phe Phe Gly Gln Ile Pro Gly
65                  70                  75
```

<210> 36469
<211> 452
<212> PRT
<213> A.fumigatus

<400> 36469

```
Leu Trp Pro Pro Lys Met Arg Asn Gly Gln Leu Gly Thr Met Ser Gly
1               5                   10                  15
Val Tyr Gly Thr Phe Ser Asp Leu Ala Asp Pro Val Pro Ala Lys Thr
            20                  25                  30
Pro Val Pro Arg Lys Ala Asp Phe Ile Gln Leu Asp Gly Val Ser Gln
        35                  40                  45
Pro Ala Val Ala Asp Ile Val Arg Ser Phe Val Arg Val Ser Cys Thr
    50                  55                  60
Met Pro Leu Lys Leu Asp Gly Tyr Pro Gln Ala Lys Lys Thr Gly Phe
```

```
65                  70                  75                  80
Gly Leu Val Ile Asp Ala Gly Lys Gly Leu Val Val Val Ser Arg Ala
                85                  90                  95
Ile Val Pro Tyr Asp Leu Cys Asp Ile Asn Ile Thr Val Ala Asp Ser
            100                 105                 110
Ile Ile Val Val Ala Lys Val Ile Phe Met His Pro Leu Gln Asn Tyr
        115                 120                 125
Thr Ile Ile Gln Tyr Asp Pro Ser Leu Val Gln Ala Pro Val Gln Ser
    130                 135                 140
Ala Lys Leu Ser Thr Glu Tyr Ile Lys Gln Gly Gln Glu Thr Ile Phe
145                 150                 155                 160
Val Gly Phe Asn Gln Asn Phe Arg Ile Val Val Ala Lys Thr Ala Val
                165                 170                 175
Thr Asp Ile Thr Thr Val Ser Ile Pro Ala Asn Ala Ser Ala Pro Arg
            180                 185                 190
Tyr Arg Ala Ile Asn Leu Asp Ala Ile Thr Val Asp Thr Gly Leu Ser
        195                 200                 205
Gly Gln Cys Thr Asn Gly Val Leu Ile Gly Glu Asp Gly Val Val Gln
    210                 215                 220
Ala Leu Trp Leu Asn Tyr Leu Gly Glu Arg Thr Pro Asn Ser His Lys
225                 230                 235                 240
Asp Val Glu Tyr His Leu Gly Phe Ala Thr Pro Ala Leu Leu Pro Val
                245                 250                 255
Thr Ser Lys Ile Gln Gln Gly Ile Ile Pro Lys Leu Arg Ile Leu Asn
            260                 265                 270
Met Glu Ser Tyr Val Val Gln Met Ser Gln Ala Arg Ile Met Gly Val
        275                 280                 285
Ser Glu Glu Trp Ile Gln Lys Val Ala Gln Ala Asn Pro Ser Arg His
    290                 295                 300
Gln Leu Phe Met Val Arg Lys Val Asp Cys Pro Pro Pro Gln Phe Thr
305                 310                 315                 320
Ser Asn Ala Asp Ser Leu Gln Glu Gly Asp Ile Ile Leu Thr Leu Asp
                325                 330                 335
Gly Gln Leu Ile Thr Arg Val Ser Glu Leu Asp Lys Met Tyr Glu Lys
            340                 345                 350
Glu Val Leu Asp Ala Leu Ile Val Arg Asn Gly Gln Glu Ile His Leu
        355                 360                 365
Lys Leu Pro Thr Val Pro Thr Glu Asp Leu Glu Thr Asp Arg Ala Val
    370                 375                 380
Val Phe Cys Gly Ala Val Leu Gln Lys Pro His His Ala Val Arg Gln
385                 390                 395                 400
Gln Ile Ser Lys Leu His Ser Glu Val Tyr Val Ser Ala Arg Val Cys
                405                 410                 415
Ser Thr Leu Tyr Leu Lys Phe Asn Val Ala Met Val Leu Thr Phe Ser
            420                 425                 430
Arg Val Ala Val Arg Arg Arg Ile Asn Met Ala Trp His Arg Gln Ile
        435                 440                 445
Ser Ser Pro Pro
    450
```

<210> 36470
<211> 69
<212> PRT
<213> A.fumigatus

<400> 36470

```
Phe Gly Thr Leu Asp Pro Leu Ala Lys Ser Tyr Phe Val Thr Ile His
1               5                  10                  15
Val Ser Gly Asp Ser Arg Tyr Ser His Asn Met Asp Leu Ile Ser Ser
            20                  25                  30
Glu Trp Met Asn Ser Glu His Ser Asp Leu Tyr Tyr Gln Pro Ala Gln
        35                  40                  45
Ala Ile Thr Phe Gly Pro Leu Pro Tyr Phe Ser Met Asn Ile Ile Thr
    50                  55                  60
Ser Pro Ala Ala Arg
65
```

<210> 36471
<211> 148
<212> PRT
<213> A.fumigatus

<400> 36471

```
Cys Ser His Gly Thr Asn Leu Leu Gln Ser Arg Gly Ser Pro Ala Tyr
1               5                  10                  15
Gln Tyr Gly Leu Ala Pro Thr Asn Phe Ile Thr Ala Val Asn Gly Val
            20                  25                  30
Ser Thr Pro Asn Leu Asp Ser Phe Val Arg Glu Val Ser Met Ile Pro
        35                  40                  45
Asp Asn Thr Tyr Phe Arg Leu Arg Ala Val Thr Phe Asp Asn Val Pro
    50                  55                  60
Trp Val Val Thr Met Lys Lys Asn Asp His Tyr Val Gly Tyr Leu Phe
65                  70                  75                  80
Ser Ser Val Gly Tyr Leu Leu Thr Ala Gly Gln Phe Pro Met Ser Glu
                85                  90                  95
Tyr Val Lys Asp Pro Ser Gln Pro Leu Gly Trp Arg Thr Val Ser His
            100                 105                 110
Glu Arg Asp Arg His Lys Asp Gly Ile Thr Pro Asp Ala Ala Asn Leu
        115                 120                 125
Asn Pro Asp Ala Met Asp Glu Val Tyr Glu Glu Val Ser Asp Val Glu
    130                 135                 140
Pro Glu Val Asp
145
```

<210> 36472
<211> 266
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (257),(258),(261)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36472

```
Gly His Gly Arg Leu Asp Asp Ile Tyr Asp Ser Val Thr Arg Ser Ala
1               5                  10                  15
Thr Arg Arg Gly Trp Asp Gly Val Asp Leu Val Val Ile Gly Gly Asp
            20                  25                  30
Phe Gln Val Arg Leu Ile Pro Asn Ser Ser Val Leu Phe Ala Ser Asn
        35                  40                  45
Phe Pro Thr Gln Ala Val Arg Asn Ser Asn Asp Leu Ala Cys Met Ser
```

```
    50                  55                  60
Val Pro Gln Lys Tyr Lys Ala Ile Gly Asp Phe His Glu Tyr Tyr Ser
65                  70                  75                  80
Gly Lys Lys Thr Ala Pro Tyr Leu Thr Ile Phe Ile Gly Gly Asn His
                85                  90                  95
Glu Ala Ser Asn Tyr Leu Phe Glu Leu Tyr Tyr Gly Gly Trp Val Ala
            100                 105                 110
Pro Asn Ile Tyr Tyr Leu Gly Ala Ala Asn Val Ile Arg Cys Gly Pro
        115                 120                 125
Leu Arg Ile Ala Gly Leu Ser Gly Ile Trp Lys Gly Tyr Asp Tyr Arg
    130                 135                 140
Lys Pro His Phe Glu Arg Leu Pro Tyr Asn Asn Asp Asp Val Gln Ser
145                 150                 155                 160
Ile Tyr His Val Arg Glu Leu Asp Val Arg Lys Leu Leu Gln Ile Arg
                165                 170                 175
Thr Gln Val Asp Leu Gly Leu Ser His Asp Trp Pro Asn Arg Val Glu
            180                 185                 190
Leu Cys Gly Asp His Glu Thr Leu Phe Ala Lys Lys His Gly Phe Arg
        195                 200                 205
Glu Asp Ser Asn Asn Gly Arg Leu Gly Ser Ile Ala Ala Arg Phe Val
    210                 215                 220
Leu Asp Arg Leu Arg Pro Ala Phe Trp Phe Ser Ala His Leu His Val
225                 230                 235                 240
Lys Phe Asn Ala Val Val Gln His Ala Arg Gln Leu Phe Leu His Gln
                245                 250                 255
Xaa Xaa Arg Lys Xaa Pro Arg Met Ala Leu
            260                 265
```

<210> 36473
<211> 219
<212> PRT
<213> A.fumigatus

<400> 36473

```
Ala Asp Ile His Lys Ser Leu Phe Ser His Ile Ser Ser Ser Pro Phe
1               5                   10                  15
Thr Phe Asp Asp Met Pro Ile Ser Asp His Thr Pro Arg Leu Asn Phe
            20                  25                  30
Leu Lys Asp Ser Ala Ser Val Leu Asp Ser Leu Ser Pro Ser Thr Ala
        35                  40                  45
Ser His Leu Leu Met Val His Asn Arg Val Leu His Asp Glu Phe Lys
    50                  55                  60
Pro Leu Thr Gln Arg Gln Leu Asp Phe Ala Cys Gly Ala Cys Gly Ser
65                  70                  75                  80
Ile Arg Lys Pro Glu Arg Thr Lys Thr Ile Glu Ile Arg Lys Lys Lys
                85                  90                  95
Ala Lys Ser Ser Ser Ser Phe Ala Pro Lys Lys Ser Ser Ala Leu Gly
            100                 105                 110
Ala Thr Val Tyr Lys Cys Leu Arg Cys His Arg Arg Thr Val Lys Pro
        115                 120                 125
Ala Ala Arg Pro Asn Ile Lys Ser Lys Pro Asp Thr Thr Ala Ala Pro
    130                 135                 140
Val Pro Thr Thr Gln Ser Thr Thr Ser Thr Thr Thr Ala Lys Tyr Val
145                 150                 155                 160
Ser Pro Thr Ala Gln Ser Gly Glu Ala Asp Arg Ser Ser Lys Thr Ala
                165                 170                 175
```

```
Asp Asn Ala Ser Ser Lys Lys Arg Ala Lys Ala Arg Lys Gln Gly Gly
            180                 185                 190
Leu Gln Ala Leu Leu Ala Ser Lys Gln Gln Ser Gln Ser Lys Ser Ser
        195                 200                 205
Ala Ser Leu Asp Leu Phe Asp Phe Leu Gln Gln
    210                 215
```

<210> 36474
<211> 213
<212> PRT
<213> A.fumigatus

<400> 36474

```
Thr Gln Ser Ala Arg Gln Met Ser Ser Asp Ser Met Ser Asp Tyr Ser
1               5                   10                  15
His Asp Glu Glu His Asp Pro Gln Ala Asp Glu Leu Arg Glu Thr Ala
            20                  25                  30
Leu Val Thr Leu Glu Thr Leu Ile Ser Ser Cys Ser Gln Gln Met Gln
        35                  40                  45
Pro Tyr Leu Ala Asn Ala Val Lys Ser Ser Leu Arg Phe Leu Lys Tyr
    50                  55                  60
Asp Pro Asn Val Ala Asp Val Glu Asp Asp Glu Glu Met Gly Gly Thr
65                  70                  75                  80
Gln Asp Asp Gly Ser Glu Asp Asp Ala Thr Glu Glu Pro Asp Leu Glu
                85                  90                  95
Asp Asp Glu Phe Gly Asp Phe Glu Asp Glu Gly Gly Tyr Ser Asp Ile
            100                 105                 110
Asp Asp Met Ser Trp Lys Val Arg Arg Cys Ala Ala Lys Leu Leu Tyr
        115                 120                 125
Thr Val Ile Ser Thr Tyr Gly Arg Thr Arg Ala Leu Asp Asp Thr Ser
    130                 135                 140
Leu Tyr Gln Gln Ile Ala Pro Ala Leu Ile Ala Arg Phe Lys Lys Glu
145                 150                 155                 160
Arg Glu Glu Ser Val Lys Leu Glu Val Val Ser Thr Met Thr Ala Leu
                165                 170                 175
Val Arg Lys Thr Ser Glu Gly Ala Met Ile Ile Thr Ser Asn Gly Phe
            180                 185                 190
Leu Glu Ser Val Gly Gly Ser Lys Asn Ser Arg Lys Arg Arg Arg Gln
        195                 200                 205
Glu Thr Thr Leu Val
    210
```

<210> 36475
<211> 64
<212> PRT
<213> A.fumigatus

<400> 36475

```
Ile Leu Arg Pro Lys Trp Arg Glu Leu Tyr Ala Ala Arg Arg Arg Gln
1               5                   10                  15
Arg Cys Ala Ala Phe His Leu Pro Glu Leu Pro Asp Thr Phe Phe Gly
            20                  25                  30
Trp Met Pro Val Leu Phe Arg Ile Thr Asp Glu Gln Val Leu Asn Ser
        35                  40                  45
Ala Gly Leu Asp Ala Phe Val Val Ser Ser Leu Leu Val Leu Ser Pro
    50                  55                  60
```

<210> 36476
<211> 400
<212> PRT
<213> A.fumigatus

<400> 36476

```
Phe Leu Ser Phe Phe Lys Phe Ala Ile Arg Phe Ser Asn Ile Val Phe
1               5                  10                  15
Val Phe Pro Val Ile Ile Met Gly Pro Val His Phe Lys Tyr Thr Gly
            20                  25                  30
Lys Tyr Gly Met Pro Asp Trp Asp His Asp Asp Gly Asp Asp Gly Lys
        35                  40                  45
Asp Gly Lys Lys Lys Leu Ile Ser Asp Pro Asn Tyr Leu Trp Met Tyr
    50                  55                  60
Val Val Phe Thr Tyr Ile Phe Ser Gly Leu Ala Ile Tyr Met Leu Leu
65                  70                  75                  80
Gln Glu Thr Asn Lys Ile Ile Ser Ile Arg Gln Tyr Tyr Leu Gly Ser
                85                  90                  95
Gln Thr Ser Thr Thr Asp Arg Thr Ile Arg Leu Ser Gly Ile Pro Lys
            100                 105                 110
Glu Leu Ala Ser Glu Glu Lys Ile Lys Glu Phe Met Glu Gly Leu Arg
        115                 120                 125
Val Gly Asn Val Glu Ser Val Thr Leu Cys Arg Asp Trp Arg Glu Leu
    130                 135                 140
Asp His Leu Ile Asp Glu Arg Leu Lys Ile Leu Arg Lys Leu Glu Trp
145                 150                 155                 160
Ala Trp Thr Lys His Leu Gly Tyr Lys Arg Pro Lys His Ser Glu Asn
                165                 170                 175
Ser Ile Ser Leu Thr Arg Gln Gln Pro Arg Gly Ser Ser Leu Leu Ser
            180                 185                 190
Asp Gly Asp Ser Glu His Thr Gln Leu Leu Ser Glu Ser Gly Arg Ala
        195                 200                 205
His Ile Ser Glu His Val Gln Arg Arg Pro Thr Ile Arg Leu Trp Tyr
    210                 215                 220
Gly Pro Leu Lys Leu Arg Tyr Arg Asn Val Asp Ala Ile Asp Tyr Tyr
225                 230                 235                 240
Glu Glu Lys Leu Arg Arg Ile Asp Glu Lys Ile Gln Ala Ala Arg Glu
                245                 250                 255
Lys Glu Tyr Pro Pro Thr Glu Met Ala Phe Val Thr Met Glu Ser Ile
            260                 265                 270
Ala Ser Ser Gln Met Val Val Gln Ala Ile Leu Asp Pro His Pro Met
        275                 280                 285
Gln Leu Phe Ala Arg Leu Ala Pro Ala Pro Ala Asp Val Val Trp Lys
    290                 295                 300
Asn Thr Tyr Val Ser Arg Pro Arg Arg Met Met Gln Ser Trp Phe Ile
305                 310                 315                 320
Thr Gly Val Ile Ser Phe Leu Thr Val Phe Trp Ser Val Leu Leu Ile
                325                 330                 335
Pro Val Ala Tyr Leu Leu Glu Leu Glu Thr Leu His Lys Val Phe Pro
            340                 345                 350
Gln Leu Ala Glu Ala Leu Ala Arg Asn Pro Ile Leu Ser Ser Leu Val
        355                 360                 365
Gln Thr Gly Leu Pro Thr Leu Val Leu Ser Leu Leu Thr Val Ala Val
    370                 375                 380
Pro Tyr Leu Tyr Asn Cys Met Phe Thr Phe Phe Leu Ala Val Ser Ala
```

385 390 395 400

<210> 36477
<211> 188
<212> PRT
<213> A.fumigatus

<400> 36477
Thr Asp His Asn Thr Gly Leu Ser Asn Gln Gln Gly Met Val Ser Arg
1 5 10 15
Gly Asp Ile Glu Leu Ser Val Ile Ser Lys Asn Phe Phe Phe Ser Phe
20 25 30
Phe Asn Leu Phe Leu Ile Phe Thr Val Phe Gly Thr Ala Thr Thr Phe
35 40 45
Tyr Gln Phe Trp Glu Thr Leu Arg Asp Ala Phe Lys Asp Ala Thr Ala
50 55 60
Ile Ala Phe Ala Leu Ala Lys Ser Leu Glu Ser Phe Ala Pro Phe Tyr
65 70 75 80
Ile Asn Leu Ile Ile Leu Gln Gly Leu Gly Leu Phe Pro Phe Arg Leu
85 90 95
Leu Glu Phe Gly Ser Val Ala Leu Tyr Pro Phe Leu Phe Leu Ser Ala
100 105 110
Lys Thr Pro Arg Asp Tyr Ala Glu Leu Gln Thr Pro Pro Thr Phe Ser
115 120 125
Tyr Gly Tyr Ser Ile Pro Gln Thr Ile Leu Ile Leu Ile Ile Cys Val
130 135 140
Val Tyr Ser Val Phe Pro Ser Ser Trp Leu Ile Cys Leu Phe Gly Leu
145 150 155 160
Val Tyr Phe Thr Ile Gly Lys Phe Ile Tyr Lys Tyr Gln Leu Leu Tyr
165 170 175
Ala Met Asp His Gln Gln His Ser Thr Gly Arg Ala
180 185

<210> 36478
<211> 95
<212> PRT
<213> A.fumigatus

<400> 36478
Phe Lys Ile Ser Glu Ile Leu Asp Thr Ala Ala Lys Thr Gln Ala Thr
1 5 10 15
Thr Pro Gln Cys Phe Phe Thr Ser Thr Ile Ser Leu Gln Ser Asp Cys
20 25 30
Ile Pro Ser Gln Thr Ala Thr Ser Cys Ser Ile Arg Asn Ser Thr Pro
35 40 45
Asp Val Ser Ser Arg Leu Pro Lys Pro Leu Pro Leu Gly His Asn His
50 55 60
Val Pro Asp Ala Tyr Val Asn Ala Thr Ile Glu Thr Tyr Ile Gln His
65 70 75 80
Thr Leu Gly Ala Ser Arg Glu Pro Cys Leu Ser Gln Ser Pro Pro
85 90 95

<210> 36479
<211> 82
<212> PRT
<213> A.fumigatus

<400> 36479
Asp Lys Arg Met Gly Leu Arg Val Ser Ser Met Val Tyr Gly Tyr His
1 5 10 15
Asn Phe Ile Tyr Phe Lys Tyr Ala Asn Gly Ile Ser Asn Pro Leu Gln
20 25 30
Gln Ile Ile Asn Ile Lys Ala Ser Leu Thr Lys Phe His Val Trp Arg
35 40 45
Arg His Asn Ile Gly Gln Val Ser Asn Leu Pro Thr Met Thr Glu Trp
50 55 60
Asp Thr Ile Ala Glu Leu His Gln Leu Ser Arg Met Glu Val Gln Gln
65 70 75 80
Val Gly

<210> 36480
<211> 425
<212> PRT
<213> A.fumigatus

<400> 36480
Glu Arg Ser Leu Lys Met Phe His Thr Phe Ala Leu Arg His Ser Asn
1 5 10 15
Pro Arg Ala Ala Thr Gly Glu Glu Arg Arg Gly Arg Arg Pro Gly Leu
20 25 30
Arg Ala Cys Lys Glu Cys Arg Arg Arg Lys Ile Arg Cys Thr Gly Thr
35 40 45
His Pro Cys Glu Pro Cys Leu Tyr Tyr Lys Lys Pro Glu Leu Cys Arg
50 55 60
Tyr Ser Asp Pro Arg Val Pro His Ile Gly Thr Arg Gly Asn Gly Ser
65 70 75 80
His Ala Asp Ser Gln Tyr Leu Ser Val Leu Glu Arg Leu Phe Pro Ser
85 90 95
Val Ser Leu Gln Ser Leu Ala Ser Leu Thr Arg Glu Glu Leu Leu Asp
100 105 110
Leu Leu Arg Asp Ser Ile Leu Gly Ser Asp Arg Pro Pro Ser Gln Pro
115 120 125
Pro Glu Gly Ala Glu Asp His Ser Arg Ser Ser Phe Glu Ala Met Ser
130 135 140
Thr Gly Asn Ala Asp Ser Gly Asp Val Asn Ala Val Asn Asp Lys Ala
145 150 155 160
Asp Val Ser Asp Asp Val Asn Ala Leu Ser Met Ala Thr Arg Pro Pro
165 170 175
Ser Thr Tyr Leu Gly Ile Ser Ser Ile Asn Ala Val Leu Lys Val Ile
180 185 190
Ser Trp Val Asn Pro Glu Ser Ile Ala Arg Pro Phe Thr Thr Ala Pro
195 200 205
Leu Arg Asn Lys Pro Arg Pro Lys Ala Gln Val Ser Arg Pro Pro Ser
210 215 220
Thr Asp Cys His Ala Pro Asp Gln Leu Ile Asp Ala Tyr Phe Asn Phe
225 230 235 240
Ile His Pro Phe Met Pro Leu Leu Asp Glu Thr Asp Phe Arg Gln Thr
245 250 255
Tyr Val Ser Asn Thr Arg Arg Asp Glu Gln Trp Leu Ala Leu Met Asn
260 265 270
Met Val Leu Ala Leu Gly Ser Ile Ser Phe Tyr Pro Ser Asp Asp Thr

```
        275                 280                 285
Thr His Ile Thr Tyr Cys Lys Arg Ala Arg Gln His Leu Ser Leu Glu
    290                 295                 300
Ser Leu Gly Ser Ala His Ile Glu Thr Val Gln Thr Leu Gly Ile Met
305                 310                 315                 320
Ala Gly His Tyr Leu His Tyr Ile Ser Gln Pro Asn Leu Ala Tyr Val
                325                 330                 335
Leu Ile Gly Ala Ala Ile Arg Met Ala Thr Ala Leu Gly Leu His Lys
            340                 345                 350
Glu Thr Ala Asp Thr Asp Ala Ser Glu Ser Arg Pro Leu Gln Ser Ser
        355                 360                 365
Ser Val Pro Val Asp Leu Arg Arg Arg Ile Trp Trp Ser Leu Tyr Cys
    370                 375                 380
Leu Asp Thr Trp Gly Cys Met Thr Leu Gly Arg Pro Thr Leu Gly Arg
385                 390                 395                 400
Thr Ser Met Ala Val Ser Thr Lys Pro Pro Ala Val Arg Ser Pro Phe
                405                 410                 415
Pro Ser Val Val Leu Ala Leu Leu Asn
            420                 425
```

<210> 36481
<211> 195
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (157)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36481

```
Ala Arg Asn Pro Arg Pro Ser Pro Trp Asn Ser Asn Leu Ile Ser Pro
1               5                   10                  15
Thr Pro Gly Arg Ser Thr Met Ala Glu Gly Val Phe Arg Asn Met Ala
            20                  25                  30
Ser Thr His Pro Leu Ile Asn Glu Ile Asp Ser Ala Gly Thr Gly Ala
        35                  40                  45
Tyr His Thr Leu Glu Pro Pro Asp Ser Arg Thr Met Ser Thr Leu Arg
    50                  55                  60
Arg His Gly Ile Thr Asn Tyr Asn His Ala Ala Arg Lys Ile Thr Lys
65                  70                  75                  80
Asp Asp Phe Leu His Phe Asp Tyr Leu Leu Ala Met Asp Lys Tyr Asn
                85                  90                  95
Leu Arg Asp Leu Leu Asp Val Arg Glu Ser Val Val Ala Ser Leu Arg
            100                 105                 110
Lys Ser Gly Gly Ala Lys Gly Thr Arg Ala Ser Ser Gly Gly Ala Gly
        115                 120                 125
Ala Lys Val Ala Glu Val Arg Leu Phe Gly Asp Phe Gly Pro Gly Gly
    130                 135                 140
Val Leu His Asp Arg Ile Gly Gly Gly Glu Val Val Xaa Asp Pro Tyr
145                 150                 155                 160
Tyr Gly Gly Val Asn Gly Phe Glu Glu Val Tyr Gln Gln Val Val Arg
                165                 170                 175
Phe Ser Lys Ser Phe Leu Glu Tyr Leu Glu Lys Lys Gln Gly Ser Glu
            180                 185                 190
Val Glu Glu
```

195

<210> 36482
<211> 218
<212> PRT
<213> A.fumigatus

<400> 36482
Tyr Ser Val Glu Arg Ile Pro Asn Ser Tyr Gly His Asn Glu Ala Tyr
1 5 10 15
Glu Gln Arg His His Glu Gln Tyr Pro Ala Tyr Asp Tyr Ala Val Asn
20 25 30
Pro Glu Ala His His Asp Ala Tyr Tyr Thr Gln Pro Tyr Glu Pro Thr
35 40 45
Val Thr Pro Gln Ser His Tyr Asp Leu Gly Gln Tyr His Glu Gln His
50 55 60
Gln Pro Tyr Gln Asp Asp Gln Val Pro Ile Leu Gln Pro Glu Asn Pro
65 70 75 80
Phe Gly Pro Asp Pro Tyr Ser Glu Glu Tyr His Asp Asp Pro Ala Ala
85 90 95
Val Pro Thr Pro Ser Pro Ala Pro Ile Arg Arg Trp Lys Thr Val Lys
100 105 110
Glu Val Gln Leu Phe His Gly Asn Leu Val Leu Asp Cys Pro Ile Ala
115 120 125
Pro Lys Leu Val Ser Gln Val Pro His Ala Glu Pro Pro Gly Arg Asp
130 135 140
Glu Phe Thr His Met Arg Tyr Ser Ala Ala Thr Cys Asp Pro Ala Asp
145 150 155 160
Phe Tyr Glu Glu Arg Phe Thr Leu Arg Gln Lys Leu Phe Ala Lys Pro
165 170 175
Arg His Thr Glu Leu Phe Ile Val Ile Thr Met Tyr Asn Glu Asp Asp
180 185 190
Phe Leu Phe Ala Arg Thr Leu Ile Gly Val Phe Lys Asn Ile Glu Tyr
195 200 205
Met Cys Asn Arg Thr Gln Ser Lys Thr Trp
210 215

<210> 36483
<211> 105
<212> PRT
<213> A.fumigatus

<400> 36483
Gly Trp Ser Ala Ala Thr Met Gly Arg Gly Arg Pro Met Ala Cys Thr
1 5 10 15
Glu Ala Val Glu Thr Glu Ile Gly Thr His Tyr His Asp Gln Val Arg
20 25 30
Glu Ile Leu Ser Trp Glu Ala Asp Ala Lys Ser Arg Gly Glu Glu Leu
35 40 45
Asp Asp Glu Leu Lys Glu Met Leu Val Thr Phe Arg Arg Ile Arg Asp
50 55 60
Glu Glu Leu Glu His Leu Asp His Ala Ile Glu Asn Asp Ala Lys Glu
65 70 75 80
Ala Gln Pro Tyr Asp Pro Leu Val Asn Val Ile Arg Leu Gly Cys Arg
85 90 95
Ala Ala Ile Lys Ile Ser Glu Arg Val

100 105

<210> 36484
<211> 111
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (16)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36484
Glu Asn Arg Gly Asp Arg Pro Lys Ser Tyr Ile Leu Ser Met Phe Xaa
1 5 10 15
Tyr Pro Ser Gly Thr Leu His Met Gly His Leu Arg Val Tyr Thr Ile
20 25 30
Ser Asp Val Leu Ala Arg Phe Tyr Arg Met Arg Gly His Glu Val Leu
35 40 45
His Pro Met Gly Trp Asp Ala Phe Gly Leu Pro Ala Glu Asn Ala Ala
50 55 60
Ile Glu Arg Gly Ile Asp Pro Ala Glu Trp Thr Lys Gln Asn Ile Ala
65 70 75 80
Lys Met Lys Glu Gln Leu Arg Ser Ile Ser Thr Ser Phe Asp Trp Asp
85 90 95
Arg Val Cys Leu Ala Tyr Val Ser Ile Gly Leu Val Asp Ser Arg
100 105 110

<210> 36485
<211> 781
<212> PRT
<213> A.fumigatus

<400> 36485
Leu Leu Gln Val Asp Ser Asn Gly Phe Ser Trp Arg Ser Gly Ala Lys
1 5 10 15
Val Glu Lys Leu Lys Leu Lys Gln Trp Phe Phe Arg Ile Thr Asp Phe
20 25 30
Lys Glu Met Leu Leu Lys Asp Leu Asp Ser Leu Thr Gly Ala Trp Pro
35 40 45
Glu Arg Val Leu Thr Met Gln Arg Asn Trp Leu Gly Lys Ser Tyr Gly
50 55 60
Ala Lys Ile Lys Phe Gln Val Ala Val Asp Ala Ser Gly Asp Ala Asn
65 70 75 80
Leu His Val Asn Val Phe Thr Thr Arg Pro Asp Thr Leu Tyr Gly Val
85 90 95
Glu Tyr Leu Ala Leu Ser Leu Asp His Pro Ile Val Leu Glu Ala Ala
100 105 110
Glu Lys Asp Ala Ala Leu Arg Lys Phe Leu Asp Glu Ala Ala Ser Leu
115 120 125
Pro Pro Asp Ser Lys Val Gly Tyr Lys Leu Ala Asn Val Thr Ala Ser
130 135 140
Asn Pro Leu His Ile Ile Asp Lys Glu Ser Pro His Ile Ala Arg Arg
145 150 155 160
Leu Pro Ile Phe Val Ala Pro Tyr Val Leu Ser Asp Tyr Gly Glu Gly
165 170 175

```
Ala Val Met Gly Val Pro Gly His Asp Ser Arg Asp Leu Ala Phe Phe
            180                 185                 190
Lys Glu Asn Thr Asn Ser Glu Ser Ile Pro Val Val Ile Glu Pro Glu
        195                 200                 205
His Leu Ser Asn Pro Asn Asn Asp Ser Ala Gly Thr Val Thr Arg Pro
    210                 215                 220
Asn Asp Met Lys Ala Phe Thr Gln Glu Gly Ile Leu Thr Ser Arg Cys
225                 230                 235                 240
Trp Lys Tyr Gln Gly Leu His Ser Arg Glu Ala Lys Lys Gln Ile Val
                245                 250                 255
Thr Asp Leu Lys Gly Val Gly His Gly Asp Phe Val Glu Gln Trp Arg
            260                 265                 270
Leu Arg Asp Trp Leu Ile Ser Arg Gln Arg Tyr Trp Gly Ala Pro Ile
        275                 280                 285
Pro Ile Ile His Cys Glu Ser Cys Gly Pro Val Pro Val Pro Glu Asp
    290                 295                 300
Gln Leu Pro Val Arg Leu Pro Lys Ile Glu Gly Asp Trp Leu Lys Gly
305                 310                 315                 320
Lys Lys Gly Asn Pro Leu Glu Ser Ser Gln Asp Trp Val Asn Thr Lys
                325                 330                 335
Cys Pro Ser Cys Ser Gly Pro Ala Lys Arg Asp Thr Asp Thr Met Asp
            340                 345                 350
Thr Phe Val Asp Ser Ser Trp Tyr Tyr Leu Arg Phe Pro Asp Ala His
        355                 360                 365
Asn Lys Glu Gln Pro Phe Ser Pro Ser Thr Ala Arg Gln Val Asp Ile
    370                 375                 380
Tyr Ile Gly Gly Val Glu His Ala Ile Leu His Leu Leu Tyr Ala Arg
385                 390                 395                 400
Phe Ile Tyr Lys Phe Leu Ser Gln Thr Glu Leu Phe Pro Glu Ile Ala
                405                 410                 415
Arg Ser Gly Asp Gly Leu Gly Pro Ser Glu Pro Phe Lys Thr Val Leu
            420                 425                 430
Thr Gln Gly Met Val His Gly Lys Thr Tyr Thr Glu Pro Ser Thr Gly
        435                 440                 445
Arg Phe Leu Leu Pro Ser Glu Val Asp Leu Ser Asn Pro Asn Lys Pro
    450                 455                 460
Leu Ile Lys Gly Thr Gln Val Ala Pro Asn Ile Ser Phe Glu Lys Met
465                 470                 475                 480
Ser Lys Ser Lys His Asn Gly Val Asp Pro Thr Ser Cys Ala Leu Gln
                485                 490                 495
Tyr Gly Ala Asp Ala Thr Arg Ala His Val Leu Phe Ser Ala Pro Val
            500                 505                 510
Ser Glu Val Leu Glu Trp Asp Asp Thr Lys Ile Val Gly Ile Glu Arg
        515                 520                 525
Trp Phe Gly Arg Leu Trp Lys Leu Val Leu Asp Ala Lys Gln Ser Leu
    530                 535                 540
Ala Ser Ala Ser Phe Thr Val Ser Gln Asn Asp Leu Gln Lys Ser Pro
545                 550                 555                 560
Tyr Ala Thr Ser Lys Leu Pro Ser Leu Leu Gln Gly Leu Gly Asp Ser
                565                 570                 575
Asp Ala Glu Gly Leu Leu His Thr His Gln Thr Ile Val Ser Val Thr
            580                 585                 590
Asn Cys Ile Glu Asn Asn Pro Tyr Gly Leu Asn Thr Val Ile Ser Asp
        595                 600                 605
Leu Thr Lys Leu Thr Asn Thr Leu Thr Ser Ser Asn Pro Thr Ser Pro
    610                 615                 620
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```
Gln Val Leu Tyr Leu Cys Val Ser Ser Leu Val Arg Leu Leu Ala Pro
625                 630                 635                 640
Val Ala Pro Ala Leu Ala Ser Glu Cys Trp Glu Val Leu Asn Asp Thr
                645                 650                 655
Leu Ile Asp Gln Asn Ala Asn Thr Gly Ala Arg Val Pro Asp Ile Phe
            660                 665                 670
Asp Cys Ala Trp Pro Ser Pro Leu Leu Thr Ser Glu Gln Ala Asp Val
        675                 680                 685
Leu Ser Ala Arg Gly Gly Gln Ile Val Ala Val Gln Ile Asn Gly Lys
    690                 695                 700
Leu Arg Phe Thr Val Thr Ile Pro Arg Arg Leu Ser Pro Thr Thr Ser
705                 710                 715                 720
Ala Asp Ser Ser Asp Ser Gly Ala Val Thr Asp Glu Gln Asp Trp Ile
                725                 730                 735
Ile Ser Arg Ile Leu Glu Thr Asp Glu Gly Arg Val Trp Leu Arg Glu
            740                 745                 750
Lys Asn Asp Trp Glu Lys Arg Arg Arg Val Val Val Val Lys Gly Gly
        755                 760                 765
Lys Leu Val Asn Ile Val Phe Tyr Thr Gly Met Leu Leu
    770                 775                 780
```

<210> 36486
<211> 185
<212> PRT
<213> A.fumigatus

<400> 36486

```
Thr Leu Arg Ala Phe Phe Cys Ser Phe Leu Val Ser Ala Gly Val Asp
1               5                   10                  15
Ser Ser Cys Cys Phe Val Phe Phe Phe Phe Phe Phe Gly Ser Ser Leu
            20                  25                  30
Ser Ile Arg Thr Gly Trp Ile Ser Ser Lys Ser Arg Ile Ser Val Thr
        35                  40                  45
Leu Ile Leu Cys Ala Phe Ser Thr Val Arg His Cys Thr Ser Ser Ile
    50                  55                  60
Ser Ser Thr Ser Ser Ala Ser Asp Val Ser Ser Arg Cys Ser Cys Cys
65                  70                  75                  80
Ser Cys Cys Ser Phe Ala Cys Ser Leu Ala Ile Glu Ala Leu Asp Arg
                85                  90                  95
Arg Ala Leu Leu Glu Pro Lys Lys Phe Ser Ser Ala Ser Ser Ser Ser
            100                 105                 110
Ser Asn Ser Ala Ala Ser Gly Pro Ala Thr Leu Phe Leu Phe Phe Pro
        115                 120                 125
Trp Leu Ala Ser Ser Arg Thr Leu Ser Ala Ser Glu Leu Arg Lys Ser
    130                 135                 140
Cys Gly Phe Ala Ala Leu Pro Val Asp Gly Arg Arg Val Lys Leu Cys
145                 150                 155                 160
Val Asp Asp Gly Ala Ala Pro Leu Phe Asn Leu Val Ala Leu Val Ser
                165                 170                 175
Asn Leu Lys Ala Ser Ile Phe Asn Ala
            180                 185
```

<210> 36487
<211> 104
<212> PRT
<213> A.fumigatus

<400> 36487
Leu Leu Arg Lys His Ile His His Arg Ala Lys His Gln Val His Thr
1 5 10 15
Gln Ser Ala Asp Phe His Ile Ser Asn Leu Ala Thr Phe Gln Ala Tyr
20 25 30
Phe Gln Pro Leu Val Asn Ala Ala Arg Asn Pro Ala Thr Leu Lys Asn
35 40 45
Phe Ser Phe Gln Asn Val Ile Ser Arg Val Arg Asn Ala Ser Lys Lys
50 55 60
Glu Leu Ala Phe Ala Gly Val Thr Ala Ala Glu Val Ile Gly Phe Phe
65 70 75 80
Thr Val Gly Glu Met Ile Gly Arg Met Asn Ile Val Gly Tyr Arg Gly
85 90 95
His Ala Asp His Gly Asp His His
100

<210> 36488
<211> 698
<212> PRT
<213> A.fumigatus

<400> 36488
Ser Asp Gln Ala Arg Ser Arg Thr Ser Thr Tyr Leu His Lys His Leu
1 5 10 15
Pro Ser Tyr Ala Leu Lys Met Asp Ala Phe Lys Leu Leu Thr Arg Ala
20 25 30
Thr Lys Leu Lys Ser Gly Ala Ala Pro Ser Ser Thr Gln Ser Leu Thr
35 40 45
Arg Leu Pro Ser Thr Gly Lys Ala Ala Asn Pro Gln Leu Phe Arg Ser
50 55 60
Ser Glu Ala Asp Lys Val Leu Glu Glu Ala Ser His Gly Lys Lys Arg
65 70 75 80
Lys Arg Val Ala Gly Pro Glu Ala Ala Glu Leu Asp Asp Asp Asp Asp
85 90 95
Ala Glu Leu Asn Phe Phe Gly Ser Ser Lys Ala Arg Arg Ser Ser Ala
100 105 110
Ser Met Ala Lys Glu Gln Ala Lys Glu Gln Gln Glu Gln Gln Glu His
115 120 125
Arg Asp Asp Thr Ser Asp Ala Asp Asp Val Asp Glu Met Asp Glu Val
130 135 140
Gln Cys Arg Thr Val Leu Asn Ala His Lys Ile Lys Val Thr Asp Met
145 150 155 160
Arg Asp Leu Glu Glu Ile Gln Pro Val Arg Ile Glu Ser Glu Glu Pro
165 170 175
Lys Lys Lys Lys Lys Lys Thr Lys Gln Gln Glu Glu Ser Thr Pro Ala
180 185 190
Leu Thr Lys Lys Glu Gln Lys Lys Ala Arg Arg Val Tyr Pro Gln Pro
195 200 205
Leu Val Ser Phe Lys Glu Leu Arg Thr Arg Tyr Lys Ile Ser Arg Arg
210 215 220
Leu Ala Glu Asn Ile Ala Glu Gln Gly Phe Thr Val Pro Thr Glu Val
225 230 235 240
Gln Leu Gly Thr Leu Pro Leu Leu Leu Gly Gly Phe Lys Ala Ser Gly
245 250 255
Asn Ser Lys Ser Ala Glu Ser Ile Glu Pro Asp Leu Leu Val Val Ala

```
            260                 265                 270
Pro Thr Gly Ser Gly Lys Thr Leu Ser Phe Leu Ile Pro Val Ile Asn
        275                 280                 285
Lys Ile Val Arg His His His Glu Gln Glu Lys Glu Arg Gly Ile Phe
    290                 295                 300
Ser Val Ile Val Ala Pro Thr Lys Glu Leu Ala Ser Gln Ile Val Asn
305                 310                 315                 320
Glu Gly Arg Lys Leu Val His Gly Thr Gly Val Lys Ile Thr Leu Met
                325                 330                 335
Lys Lys Gly Met Arg Val Val Asp Arg Glu Asp Asp Asp Asp Glu Asn
            340                 345                 350
Ser His Ser Glu Asp Ser Glu Glu Gly Ser Asp Ser Glu Gln Asp Glu
        355                 360                 365
Pro Ser Thr Thr Arg Lys Lys Lys Gly Lys Ala Pro Ile Thr Lys Ser
    370                 375                 380
Asp Ile Leu Val Thr Thr Pro Leu Leu Leu Val Asn Ala Leu Ser Ala
385                 390                 395                 400
Asn Arg Thr Lys Pro Met Ala Thr Leu Pro Leu Val Arg Asn Ile Val
                405                 410                 415
Leu Asp Glu Ala Asp Val Leu Leu Asp Glu Leu Phe Arg Glu Gln Thr
            420                 425                 430
Leu Asp Ile Trp Arg Ala Cys Thr His Pro Glu Leu Arg Ala Ser Leu
        435                 440                 445
Trp Ser Ala Thr Met Gly Ser Asn Ile Glu Asp Leu Ala Lys Ser Thr
    450                 455                 460
Ile Lys Glu Arg Lys Gln Ala Tyr Asp Gln Thr Lys Ser Tyr Pro Leu
465                 470                 475                 480
Leu Arg Leu Val Val Gly Leu Lys Asp Ser Ala Ile Pro Asn Ile Glu
                485                 490                 495
His Lys Leu Val Tyr Ala Ala Thr Glu Gln Gly Lys Leu Leu Gly Leu
            500                 505                 510
Arg Gln Leu Leu His Pro Ala Ala Ala Ser Val Ser Asp Val Arg Leu
        515                 520                 525
Arg Pro Pro Phe Leu Ile Phe Thr Gln Thr Ile Pro Arg Ala Ile Ala
    530                 535                 540
Leu His Ser Glu Leu Arg Tyr Asp Ile Pro Ala Glu Ala Gly Gly Ser
545                 550                 555                 560
Ser Arg Ile Ala Val Leu His Ser Asp Leu Ser Asp Gly Gln Arg Ser
                565                 570                 575
Glu Ile Met Lys Asn Phe Arg Lys Gly Glu Ile Trp Ile Leu Val Thr
            580                 585                 590
Thr Asp Leu Leu Ala Arg Gly Val Asp Phe Arg Gly Ile Asn Gly Val
        595                 600                 605
Val Asn Tyr Asp Ile Pro Asn Ser Ala Ala Val Tyr Val His Arg Val
    610                 615                 620
Gly Arg Thr Gly Arg Ala Gly Arg Glu Gly Gly Ile Ala Val Thr Tyr
625                 630                 635                 640
Tyr Thr Lys Glu Asp Ile Pro Tyr Val Lys Ser Ile Ala Asn Ile Ile
                645                 650                 655
Asp Val Ser Glu Lys Leu Arg Gly Lys Asp Gly Glu Lys Ser Ile Gln
            660                 665                 670
Asn Trp Leu Leu Asp Ala Leu Pro Asp Leu Ser Gln Ile Asp Lys Ile
        675                 680                 685
Glu Leu Lys Thr His Gly Val Asn Ala Arg
    690                 695
```

<210> 36489
<211> 250
<212> PRT
<213> A.fumigatus

<400> 36489
Thr Phe Phe Ser Thr Ser Asn Asn Lys Phe Leu Val Lys Ser Leu Pro
1 5 10 15
Arg His Phe Glu His Ser Phe Phe Arg Glu Asp Leu Leu Glu Pro Tyr
20 25 30
Tyr Glu Phe Met Ser Thr His Ala Asp Ser Ile Leu Val Trp Ile Thr
35 40 45
Asp Tyr Val Tyr Ala Pro Tyr Arg Thr Ile Gly Ser Met Leu Lys Thr
50 55 60
Thr Pro Ala His His Ile Ile Met Glu Asn Met Leu Val Gly Lys Glu
65 70 75 80
Glu Asp Ser Ala Lys Asp Asp Trp Glu Thr Tyr Asp Leu Lys Pro Ile
85 90 95
Asp Tyr Phe Tyr Pro Glu Arg Asp Leu Leu Pro Asp Pro Leu Val Ser
100 105 110
Glu Glu Thr Leu Asn Arg Leu Ala Asp Lys Phe Glu Asp Lys Ile His
115 120 125
Met Pro Gln Ser Asp Tyr Glu Arg Phe Arg Glu Val Leu Glu Ala Asp
130 135 140
Thr Arg Phe Leu Gln Ser Ala Asn Ala Val Asp Tyr Ser Leu Phe Leu
145 150 155 160
Ile Arg Tyr Pro Ala Ser Ser Asn Pro Gly Val Val Gly Lys Lys Asn
165 170 175
Pro Trp Arg Val Gly Phe Gln Ser Leu Asp Gly Lys Trp Lys Tyr Arg
180 185 190
Ala Val Ile Leu Asp Phe Phe Trp Ala Lys His Lys Leu His Ala Gln
195 200 205
Ala Met Thr Thr Val Val Gln Thr Phe Asn Val Ile Gly His His Gly
210 215 220
Pro Met Thr Ile Thr Thr Thr Ala Asp Glu Tyr Arg Gln Lys Phe Leu
225 230 235 240
Asp Met Val Asp Glu Leu Leu Glu Val His
245 250

<210> 36490
<211> 172
<212> PRT
<213> A.fumigatus

<400> 36490
Ser Gln Arg Arg Lys Lys Leu Phe Pro Ser Arg Gly Leu Glu Asp Ser
1 5 10 15
Pro Pro Ser Met Gly Arg Tyr Leu Leu Ser Gly Ala Arg Arg Phe Ser
20 25 30
Ser Asp Ile Phe Leu Thr Val Arg Ser Tyr Ser Pro Leu His Ser Arg
35 40 45
Cys Pro Ser Tyr Phe Arg Thr Ser Thr Asp Leu Gln Tyr Asn Thr Pro
50 55 60
Arg Pro Ser Leu Tyr Pro Arg Ala Phe Gly Thr Ser Ala Ser Leu Tyr
65 70 75 80
Ala Leu Ser Gly Lys Ser Ser Lys Leu His Ala Ala Met Ala Ser Ala

```
                85                  90                  95
Ala Asp Leu Pro Val Ala Val Glu Gly Leu Thr Leu Gln Ser Thr Ala
            100                 105                 110
Glu Thr Ser Lys Phe Pro Asn Cys Tyr Pro Ser Leu Asn Pro Val Asp
        115                 120                 125
Val Tyr Arg Val His Ile Ala Glu Lys Leu Gly Ala Ala Ala Gly Ile
    130                 135                 140
Glu Pro Glu Lys Leu Tyr Pro Lys Leu Gln Trp Thr Asn Thr Leu Asp
145                 150                 155                 160
Lys Gly Asp Leu Val Leu Pro Val Arg Thr Ile Ala
                165                 170
```

<210> 36491
<211> 393
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (44),(53)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36491

```
Lys Lys Asn Ala Gly Phe Arg Val Pro Tyr Gly Asn Gln Gly Leu Arg
1               5                   10                  15
Arg Pro Leu Gly Phe Phe Pro Arg Glu Arg Lys Asp Ser Ser Ser Ser
            20                  25                  30
Phe Gly His Leu Thr Met Ala Arg Pro Phe Asn Xaa Gly Ser Leu Arg
        35                  40                  45
Ser Pro Ile Ile Xaa Gly Phe Leu Ala Asn Leu Tyr Thr Val Met Gly
    50                  55                  60
Trp Asp Val Ile Lys Met Asn Tyr Leu Gly Asp Trp Gly Lys Gln Tyr
65                  70                  75                  80
Gly Leu Leu Ala Asn Gly Phe Lys Arg Phe Gly Asn Glu Glu Glu Leu
                85                  90                  95
Leu Lys Asn Pro Ile Asn His Leu Phe Asp Val Tyr Val Lys Ile Asn
            100                 105                 110
Gln Ile Val Ala Gln Gln Glu Gly Pro Ile Lys Glu Leu Lys Glu Gln
        115                 120                 125
Ile Lys Ala Lys Lys Glu Lys Asn Glu Asp Val Ser Val Leu Glu Ala
    130                 135                 140
Glu Leu Ala Lys Leu Val Asp Val Ser Glu Asp Glu Lys Ala Arg Arg
145                 150                 155                 160
Tyr Phe Lys Ser Met Glu Asp Gly Asp Glu Glu Ala Leu Ala Leu Trp
                165                 170                 175
Arg Arg Phe Arg Asp Leu Ser Ile Glu Lys Tyr Lys Gln Thr Tyr Ala
            180                 185                 190
Arg Leu Asn Ile Asp Phe Asp Val Tyr Ser Gly Glu Ser Gln Ile Lys
        195                 200                 205
Asn Glu Ser Met Thr Ala Ala Tyr Glu Thr Met Glu Lys Thr Gly Val
    210                 215                 220
Ser Glu Lys Ser Glu Gly Ala Val Ile Val Asp Phe Thr Lys His Gly
225                 230                 235                 240
Ala Lys Lys Leu Gly Lys Ala Ile Ile Val Arg Lys Asp Gly Thr Pro
                245                 250                 255
Leu Tyr Leu Thr Arg Asp Ile Gly Ala Ile Met Glu Arg Asp Glu Ala
```

```
            260                 265                 270
Tyr His Phe Asp Lys Met Ile Tyr Val Val Ala Ala Gln Gln Asp Leu
        275                 280                 285
His Leu Ala Gln Leu Phe Lys Ile Thr Glu Leu Met Gly Arg Lys Asp
    290                 295                 300
Leu Ala Ser Arg Cys Gln His Ile Lys Phe Gly Met Val Arg Gly Met
305                 310                 315                 320
Ser Thr Arg Lys Gly Thr Val Lys Phe Leu Asp Asp Ile Leu Arg Asp
                325                 330                 335
Val Ala Asp Lys Met His Glu Val Met Lys Gly Asn Ala Glu Lys Tyr
            340                 345                 350
Ala Gln Val Glu Asn Pro Glu Glu Thr Ala Asp Ile Leu Gly Leu Thr
        355                 360                 365
Ser Val Met Val Gln Asp Met Thr Gly Lys Arg Cys Val Tyr Phe Thr
    370                 375                 380
Ser Asn Leu Glu Ser Ser Pro Arg Asn
385                 390
```

<210> 36492
<211> 272
<212> PRT
<213> A.fumigatus

<400> 36492

```
Cys Leu Leu Leu Arg Ile Thr Asp Ile Phe Pro Cys Lys Phe Tyr Val
1               5                   10                  15
Val Leu Tyr Leu Val Ala Pro Glu Pro Arg Lys Pro Leu Pro Glu Glu
            20                  25                  30
Lys Arg Tyr Arg Thr Leu Ser Glu Asp Gly Ala Val Thr Gln Pro Glu
        35                  40                  45
Gln Leu Pro Cys Trp Gln Asp Ala Leu Asp Arg Gln Lys Arg Pro Gly
    50                  55                  60
Arg Ile Phe Asp His Ser His Met Glu Lys Ala Glu Leu Phe Met Ser
65                  70                  75                  80
Leu Val Val Pro Ala Tyr Asn Glu Glu Asp Arg Leu Ala Gly Met Leu
                85                  90                  95
Glu Glu Ala Val Asn Tyr Leu Glu Arg Met Tyr Gly Thr Leu Ala Ala
            100                 105                 110
Ser Ser Ala Ser Asn Lys Lys Ala Gly Asp Ala Val Arg Gln Arg Lys
        115                 120                 125
Pro Thr Asn Gly Tyr Ala Asn Gly His Ala Thr Thr Met Val Thr Pro
    130                 135                 140
Ser Gly Lys Val Pro Pro Glu Lys Gly Trp Glu Ile Ile Ile Val Ser
145                 150                 155                 160
Asp Gly Ser Lys Asp Lys Thr Glu Glu Val Ala Phe Ala Phe Ala Arg
                165                 170                 175
Asp His Gln Leu Ser Leu His Pro Lys Gly Tyr Ala Gly Pro Trp Thr
            180                 185                 190
Pro Thr Pro His Glu Gly Val His Ile Pro Pro Gly Thr Ile Arg Val
        195                 200                 205
Val Thr Leu Ala Glu Asn Arg Gly Lys Gly Gly Ala Val Thr His Gly
    210                 215                 220
Met Arg His Val Arg Gly Gln Tyr Val Val Phe Ala Asp Ala Asp Gly
225                 230                 235                 240
Ala Ser Asn Phe Glu Asp Leu Gly Lys Leu Val Thr Ala Cys Arg Asp
                245                 250                 255
```

```
Ile Glu Asp Val Phe Thr His Gly Ala Trp Asp Val Pro Arg Leu Lys
            260                 265                 270

<210> 36493
<211> 74
<212> PRT
<213> A.fumigatus

<400> 36493
Val Pro Val Gly Cys Cys Gly Val Glu Ala Ser Arg Leu Val Lys Asp
1               5                  10                  15
His Leu Cys Lys Lys Asp Pro Glu Asp Arg Ile Lys Gln Pro Pro Ile
            20                  25                  30
Tyr Tyr Ser Leu Asn Pro Lys Pro Lys Gly Gln Val Gly Tyr Pro Val
        35                  40                  45
Leu Arg Pro Gln Phe Tyr Gly Ile Pro Arg Met Met Ala Ile Val Cys
    50                  55                  60
Ser Asp Phe Asn Asp Gln Cys Lys His Tyr
65                  70

<210> 36494
<211> 577
<212> PRT
<213> A.fumigatus

<400> 36494
Arg Val Ser Gly Ile Ala Cys Pro Ser Ser Pro Ala Val Lys Ile Ser
1               5                  10                  15
Thr Leu Gln Pro Ser Val Arg Gln Glu Lys Leu Ala Ala Arg Pro Lys
            20                  25                  30
Gly Gln Pro Ala Glu Pro Val Glu Gly Leu Ser Phe Asp Gln Lys Ser
        35                  40                  45
Ala Gly Gly Asp Ser Ala Val Ala Gly Gly Thr Ala Ser His Gly Ile
    50                  55                  60
Phe Leu Gln Pro Glu Thr His Pro Ile Thr Glu Glu Gln Leu Ile Asn
65                  70                  75                  80
Glu Val Arg Gly Ile Tyr Ala Gly Leu Phe Met Val Glu Lys Lys Cys
                85                  90                  95
Ile Glu Ile Asp Lys Gln Gln Ser Glu Ser Lys Thr Pro Leu Ser Pro
            100                 105                 110
Val Gln Trp Gln Ala Leu Ile Ala Leu His Arg Thr Leu Leu Asn Glu
        115                 120                 125
His His Asp Phe Phe Leu Ala Ser Gln His Pro Ser Ala Ser Pro Val
    130                 135                 140
Leu Lys Arg Leu Ala Glu Lys Tyr Ala Met Pro Ala Arg Met Trp Arg
145                 150                 155                 160
Tyr Gly Ile His Ser Phe Leu Glu Leu Leu Arg His Arg Leu Pro Asp
                165                 170                 175
Ser Leu Glu His Met Leu Thr Phe Ile Tyr Met Ala Tyr Ser Met Met
            180                 185                 190
Thr Leu Leu Phe Glu Ser Val Arg Ala Phe Glu Asp Thr Trp Ile Glu
        195                 200                 205
Cys Leu Gly Asp Leu Ala Arg Tyr Arg Met Ala Val Glu Glu Val Asp
    210                 215                 220
Val Arg Asp Arg Glu Ile Trp Ala Gly Val Ala Arg Tyr Trp Tyr Asn
225                 230                 235                 240
```

```
Lys Ala Ala Asp Lys Asn Pro Asp Val Gly Arg Ile Gln His His Leu
                245                 250                 255
Ala Val Leu Ala Arg Pro Asp Val Val Gln Gln Leu Phe Tyr Tyr Thr
            260                 265                 270
Lys Ser Leu Val Ser Val His Ser Phe Pro Ser Thr Arg Glu Ser Ile
        275                 280                 285
Pro Ser Leu Phe Asn Pro Leu Leu Asn Ala Pro Lys Ala His His His
    290                 295                 300
Tyr Pro Leu Ile Ala Ala Phe Val Leu Ala His Gly Tyr Leu Phe Tyr
305                 310                 315                 320
Arg Asn Pro Ser Pro Gln Phe Ser Arg Ser Ala Glu Glu Phe Leu Thr
                325                 330                 335
His Leu Glu Thr His Val Gly Arg Met Gly Ala Ala Phe Lys Met Gln
            340                 345                 350
Gly Val Tyr Met Ser Ser Cys Asn Phe Ala Ala Ile Phe Glu Tyr Asn
        355                 360                 365
His Pro Asp Ala Ala Leu Pro Ala Lys Phe His Pro Arg Glu Thr His
    370                 375                 380
His Gly Arg Pro Ala Leu Glu Thr Gln Pro Thr Pro Ala Lys Thr Ser
385                 390                 395                 400
Thr Ser Ala Cys Asp Val Pro Leu Thr Ala Asp Gly Ser Met Ala Ser
                405                 410                 415
Pro Asp Gly Arg Arg Tyr Ser Pro Leu Ser Leu Tyr Ala Ser Cys Leu
            420                 425                 430
Thr Phe Gln Thr Leu Ser Val Leu Leu Asp Gln Ile Gly Asn Lys Asn
        435                 440                 445
Val Tyr Pro Thr Val His Ile Ser Met Ala Phe Leu Trp Cys Leu Ala
    450                 455                 460
Leu Asn Gly Arg Ser Ser Met Glu Tyr Ile Glu Ala Phe Val Pro Trp
465                 470                 475                 480
Arg Lys Ile Ala Ile Phe Leu Asn Thr Met Ile Arg Asp Asp Val Asp
                485                 490                 495
Ile Gln Ile Phe Glu Gly Pro His Phe Pro Thr Val Glu Glu Arg Lys
            500                 505                 510
Gln Leu Pro Glu Asp Phe Phe Ile Arg Gly Gln Ile Trp Ser Gln His
        515                 520                 525
Tyr Phe Pro Pro Arg Phe Phe Glu Asp Ser Leu Ile Glu Asp Glu Gly
    530                 535                 540
Arg Phe Ile Glu Leu Pro Ser Leu Asn Val Ser Arg Met Tyr Arg Cys
545                 550                 555                 560
Leu Trp Leu Gly Met Lys Leu Ala Thr Val Cys Leu Lys Asn His Gly
                565                 570                 575
Glu
```

<210> 36495
<211> 166
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (2)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36495

```
Ser Xaa Ile Ser Phe Pro Gly Asp Gly Asn Thr Asp Ala Thr Ser Ser
1               5                  10                  15
Phe Asp Ala Asp His Ser Gly Asp Asp Glu Trp Ala Leu Ser Phe Cys
            20                  25                  30
Arg Val Ala Tyr Gly Leu Arg Ala Lys Leu Asn Ala Ile Asp Asp Asp
        35                  40                  45
Tyr Ile Arg Asp Tyr Ile Leu Tyr Val Gln Lys Ser Pro Cys His Leu
    50                  55                  60
Ser Val Thr Leu Asp Thr Glu Asn Leu Tyr Leu Ser Asn Trp Arg Glu
65                  70                  75                  80
Ile Gly Val Tyr Asp Ala Asp Phe Gly Gly Met Leu Gly Lys Pro Leu
                85                  90                  95
Arg Met Arg Ala Pro Asp Gly Tyr Thr Asp Gly Leu Ile Phe Val Met
            100                 105                 110
Ala Gln Arg Ser Asp Asp Lys Phe Ala Pro Trp Glu Phe Asn Ile Ser
        115                 120                 125
Leu Glu Ala Ser Thr Ile Lys Arg Ile Val His Asp Pro Leu Arg Cys
    130                 135                 140
Lys Tyr Val Glu Leu Asp Glu Phe Trp His Ser Glu Leu His Phe Gln
145                 150                 155                 160
Gly Pro Ala Asp Phe Arg
                165
```

<210> 36496
<211> 78
<212> PRT
<213> A.fumigatus

<400> 36496

```
Arg Ala Ser Leu Ser Gly Thr Gly Arg Phe Ser Ile Ala Ile Tyr Ala
1               5                  10                  15
Ser Phe Leu Lys Ser Cys Gly Tyr Ile Tyr Cys Arg His Ala Pro Asp
            20                  25                  30
Ile Leu Thr Gln Leu Arg Pro Tyr Pro Ala Val Thr Leu Ile Arg Val
        35                  40                  45
Tyr Phe Val Met Ser Leu Pro Phe Thr Leu Phe Ser Ser Trp His Leu
    50                  55                  60
Leu Ala Ser Glu Thr Val Gln Gly Val Gly Glu Thr Ala Thr
65                  70                  75
```

<210> 36497
<211> 103
<212> PRT
<213> A.fumigatus

<400> 36497

```
Gln Gly Cys Gly His Trp Pro Cys Val Ser Met Pro Arg Ser Thr Pro
1               5                  10                  15
Val Ala Ser Glu Gln Val Asp Phe Val Met Lys Leu Leu Gly Asn Thr
            20                  25                  30
Thr Lys Gln Ile Thr Thr Ala Thr Tyr Ile Lys Leu Ala Trp Ala Val
        35                  40                  45
Val Ile Ser Cys Asn Thr Gly Ser Asn Asp Thr Val Phe Gly Ile Thr
    50                  55                  60
Val Asn Gly Arg Gly Ala Pro Ile Asp Gly Ala Gly Glu Met Thr Gly
65                  70                  75                  80
```

```
Ala Thr Ile Ala Thr Ile Pro Gln Arg Ile Lys Leu Lys Pro Asp Gln
                  85                  90                  95
Ala Ala Thr Asn Cys Ile Gly
            100
```

<210> 36498
<211> 631
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (39),(220)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36498

```
Gln Asn His Ser Gly Ala Phe Ala Gly Gly Lys Gly Gly Leu Tyr Val
1               5                  10                  15
Pro Lys Pro Thr Asp His Ser Thr Leu Ser Ser Glu Pro Ala Gly Phe
            20                  25                  30
Phe Arg Asp Leu Arg Pro Xaa Cys Asn Ser Asp Gly Cys Ile Leu Arg
        35                  40                  45
Val Trp Ser Leu Pro Arg Met Pro Ala Gly Met Ile Ser Arg Glu Arg
    50                  55                  60
Val Gln Arg Leu Leu Gln His Leu Glu Leu Val Leu Gln Asp Leu Met
65                  70                  75                  80
Ala Asp Pro Ser Cys Lys Val Gly Asp Leu Pro Arg Met Ser Arg Gln
                85                  90                  95
Glu Trp Asp Gln Ile Gln Arg Trp Ser Gly Thr Leu Pro Pro Val Ser
            100                 105                 110
Arg Gln Cys Val His Glu Ile Val Asn Gln Arg Ser Leu Gln Phe Pro
        115                 120                 125
Asn Ala Cys Ala Val Ser Ala Pro Asp Gly Asp Leu Ser Tyr Ala Glu
    130                 135                 140
Leu Ile Arg Ser Ala Asn Ala Val Ala Ala Glu Leu Leu Val His Gly
145                 150                 155                 160
Val Glu Arg Gly Asn Tyr Ile Pro Val Leu Phe Glu Lys Cys Lys Trp
                165                 170                 175
Ser Pro Val Ala Met Leu Gly Val Leu Lys Ala Gly Ala Ala Phe Val
            180                 185                 190
Leu Leu Asp Ser Ser Tyr Pro Pro Gln Arg Leu His Thr Ile Cys Gly
        195                 200                 205
Gly Leu Lys Thr Gln Ile Ile Leu Cys Ser Lys Xaa Met Tyr Ala Arg
    210                 215                 220
Ala Ala Ser Leu Gly Pro Thr Ala Ile Ala Ile Gln Glu Asn Ala Ala
225                 230                 235                 240
Phe Leu Ala Asp Ile Pro Asp Val Thr Phe Pro Val Val Ser Pro Glu
                245                 250                 255
Asn Ala Ala Tyr Val Val Phe Thr Ser Gly Ser Thr Gly Thr Pro Lys
            260                 265                 270
Gly Ala Val Ile Asp His Gln Ser Tyr Cys Ser Gly Ala Leu Ala His
        275                 280                 285
Asn Arg Ala His Val Leu Gly Arg Asn Ser Arg Val Leu Gln Tyr Ala
    290                 295                 300
Ser Tyr Ala Phe Asp Val Ser Ile Met Glu Thr Leu Ser Thr Leu Met
305                 310                 315                 320
```

```
Ala Gly Gly Cys Val Cys Ile Leu Ser Asp Leu Glu Arg His Asp His
                325                 330                 335
Phe Ala Asn Ser Val Gln Arg Leu Ala Val Thr His Ala Phe Leu Thr
            340                 345                 350
Pro Ser Thr Ala Arg Leu Leu Met Gln Arg Glu Leu Pro Ser Leu Cys
        355                 360                 365
Val Leu Val Leu Gly Gly Glu Ala Met Ser Leu Ala Asp Arg Ser Tyr
    370                 375                 380
Trp Met Ser Arg Val Arg Leu Met Asn Glu Tyr Gly Ile Ala Glu Cys
385                 390                 395                 400
Ser Val Ala Ser Thr Ile Arg Glu Val Ser His Val Glu Gln Lys Asp
                405                 410                 415
Ile Gly Phe Pro Met Gly Val Val Ala Trp Val Val Asp Gln Asn Asp
            420                 425                 430
His Glu Lys Leu Val Ala Ile Gly Ala Thr Gly Glu Leu Leu Leu Glu
        435                 440                 445
Gly Pro Ser Val Gly Arg Gly Tyr Leu Asp Asn Pro Lys Ala Thr Cys
    450                 455                 460
Arg Ala Phe Ile Glu Gln Pro Gly Trp Leu Arg Ala Val Arg Asn Gly
465                 470                 475                 480
Lys Pro Ser Arg Val Tyr Lys Thr Gly Asp Leu Val Arg Tyr Asn Glu
                485                 490                 495
Asp Gly Ser Leu Ser Phe Ile Ser Arg Lys Asp Ser Gln Ile Lys Ile
            500                 505                 510
Arg Gly Gln Arg Phe Glu Leu Glu Glu Val Glu Gln His Leu Arg Arg
        515                 520                 525
Ile Asp Glu Ile Gln Glu Ala Thr Thr Val Val Ala Ala Pro Ser Asp
    530                 535                 540
Arg Pro Lys Gln Pro Tyr Leu Val Ala Phe Ile Val Pro Arg Ala Arg
545                 550                 555                 560
Glu Ser Phe Cys Val Cys Ser Ala Arg Ala Leu Ile Pro His Pro Thr
                565                 570                 575
Glu Glu Phe Arg Leu Gln Ala Ala Thr Ile Gln Thr Lys Leu His Ser
            580                 585                 590
Ile Leu Pro Ala His Met Val Pro Ser Ile Tyr Leu Pro Val Asn Arg
        595                 600                 605
Met Pro Lys Thr Ser Ser Asp Lys Val Asp Arg Cys Arg Leu Lys Glu
    610                 615                 620
Glu Val Gly Lys Trp Ser Ser
625                 630
```

<210> 36499
<211> 239
<212> PRT
<213> A.fumigatus

<400> 36499

```
Asn Gly Gln Asp Ala Phe Ile Asp Ala Thr Ser Thr Pro Asp Pro Ser
1               5                   10                  15
Val Ala Ile Arg Leu Ile Asp Ala Ser Val Ala Ala Gly Ile His Arg
            20                  25                  30
Phe Ile Pro Ala Glu Phe Ser Ile Asp Pro Ala Ala Thr Asn Cys Arg
        35                  40                  45
Ala Leu Pro Val Phe Ala Gly Lys Ala Lys Val Tyr Asp Tyr Leu Arg
    50                  55                  60
Gln Val Gly Ala Ala Gly Arg Ile Thr Tyr Thr Ser Ile Ser Thr Gly
```

65 70 75 80
Ala Phe Leu Glu Leu Ser Leu Arg Thr Gly Phe Val Asn Ile Asp Ile
85 90 95
Ala Thr Lys Arg Ile Asp Leu Leu Asn Ala Gly Ser Arg Val Thr Pro
100 105 110
Trp Thr Arg Leu Ser Ser Val Gly Ser Ala Val Ala Asn Ala Leu Leu
115 120 125
Arg Ala Asp Glu Thr Lys Asn Arg Thr Cys Tyr Val Cys Ser Ile Met
130 135 140
Lys Ser Gln Arg Glu Val Gly Glu Leu Ala Gln Glu Ala Leu Gly Lys
145 150 155 160
Glu Gly Trp Arg Val Gln Ser Gln Asp Ala Ala Lys Ala Leu Glu Gly
165 170 175
Ala Ile Ala Gln Phe Gln Val Gly Asn Val Thr Val Glu Val Ile Gly
180 185 190
Ala Met Ile Arg Trp Thr Leu Thr Gln Pro Glu Ser Ala Ala Gly Trp
195 200 205
Ala Thr Asn Asp Asn Glu Leu Leu Gly Val Pro Thr Met Thr Asp Asp
210 215 220
Glu Ile Lys Gln Leu Ile Gln Gln Ile Ala Glu Glu Met Lys Ala
225 230 235

<210> 36500
<211> 60
<212> PRT
<213> A.fumigatus

<400> 36500
Val Ala Cys Thr Leu Ser Asn Leu Cys Val Arg Tyr Asp Met Tyr Lys
1 5 10 15
Asp Val Glu Glu Val Leu Ala Lys Arg Arg Gly Lys Pro Phe Met Gln
20 25 30
Gln Tyr Ile Arg Gly Leu Pro Ile Gly Leu Lys Leu Ser Asn Gly Thr
35 40 45
Val Val Gly Gln Gln Pro Ser Ala Glu Val Lys Leu
50 55 60

<210> 36501
<211> 82
<212> PRT
<213> A.fumigatus

<400> 36501
Ala Asn Asp Gly Asn His Leu Leu Gln Ser Val Tyr Tyr Gln Gln Ile
1 5 10 15
Tyr Ile Leu Val Lys Leu Ser Arg Ile Leu Lys Tyr Thr Ile Lys Arg
20 25 30
Arg Ile Thr Ser Tyr Ala Lys Leu Asp Met Ile Gly Asn Val Leu Arg
35 40 45
Gly Glu Trp Leu Cys Leu Leu Gln Ile Leu Gln Val Ser Ile Leu Val
50 55 60
Met Thr Gln Tyr Leu Gln Cys Thr Ile Ser Ser Pro Glu Gly Leu Ala
65 70 75 80
Thr Pro

<210> 36502
<211> 560
<212> PRT
<213> A.fumigatus

<400> 36502
Leu Arg Asp Leu Met Leu Ser Trp Leu Ile Ala Ala Asn Phe Glu Tyr
1 5 10 15
Leu Phe Ser Leu Pro Cys Asp Asn Leu Pro Gly Tyr Ser Tyr Leu Tyr
20 25 30
Arg Ser Leu Ile Pro His Cys Pro Gly Ser Ala Gln Gln Leu Thr Met
35 40 45
Val Ala Thr Thr Ala Val Asp Ser Pro Gln Ser Pro Arg Asp Asp Lys
50 55 60
Ala Pro Ala Ile Arg Val Lys Gln Asp Lys Leu Pro Thr Lys Gly Asp
65 70 75 80
Ala Ala Leu Gln Leu Leu Ala Gly Arg Asp Thr Glu Asn Gly Val Leu
85 90 95
Asp Pro Asp Ala Ser Arg Arg Leu Val Arg Lys Ile Asp Leu Tyr Val
100 105 110
Met Pro Leu Ile Cys Ile Val Tyr Phe Cys Gln Tyr Leu Asp Lys Ile
115 120 125
Ala Ile Ser Tyr Ala Ser Val Thr Gly Ile Arg Glu Ser Ala His Leu
130 135 140
His Gly Asn Gln Phe Asn Trp Ile Ser Ser Ile Phe Phe Phe Gly Gln
145 150 155 160
Leu Thr Phe Gln Phe Pro Thr Met Arg Leu Ile Gln Ala Phe Pro Leu
165 170 175
Ala Arg Tyr Val Ala Thr Asn Val Thr Leu Trp Gly Ile Ile Leu Ala
180 185 190
Cys Met Ala Ala Cys Lys Ser Phe Ala Ser Leu Met Val Cys Arg Thr
195 200 205
Leu Leu Gly Cys Ala Glu Ala Ala Ile Val Pro Ala Trp Val Val Phe
210 215 220
Thr Ser Gln Trp Tyr Arg Lys Glu Glu Gln Ala Phe Arg Val Gly Leu
225 230 235 240
Trp Phe Ser Met Cys Gly Trp Ala Gln Met Phe Gly Gly Tyr Val Ala
245 250 255
Tyr Gly Val Ala Val His Val Gly Ser Asp Pro His Ala Ala Leu Arg
260 265 270
Gly Trp Gln Val Ile Phe Leu Ile Leu Gly Val Phe Thr Thr Leu Val
275 280 285
Gly Val Leu Phe Phe Phe Ile Leu Pro Asp Ser Pro Val Thr Ala Gly
290 295 300
Phe Leu Ser Ala Glu Glu Lys Ala Leu His Ala Glu Arg Leu Arg Gly
305 310 315 320
Asn Glu Gln Gly Ile Gly Ser Thr Val Phe Lys Arg Glu Gln Phe Tyr
325 330 335
Glu Ala Leu Arg Asp Pro Lys Thr Trp Leu Tyr Ser Phe Trp Val Phe
340 345 350
Ala Ala Asn Ile Pro Asn Ser Ile Ala Thr Ser Phe Gly Asn Ile Leu
355 360 365
Val Thr Gly Met Gly Tyr Ser Ala Thr Gln Ser Leu Leu Leu Val Thr
370 375 380
Pro Leu Gly Ala Tyr Glu Val Val Val Leu Val Gly Leu Thr Tyr Leu
385 390 395 400

```
Ala Met Arg Thr Asn Gln Arg Leu Leu Trp Cys Ile Ile Gly His Ile
                405                 410                 415
Pro Ser Ile Val Gly Ala Ile Leu Met Ala Thr Thr Asn Lys Ala Pro
            420                 425                 430
Ala Leu Val Gly Tyr Tyr Leu Ser Gly Gly Ile Pro Ile Gly Trp Thr
        435                 440                 445
Thr Ile Leu Gly Leu Thr Ser Thr Asn Val Ala Gly Ser Thr Lys Lys
    450                 455                 460
Ile Thr Val Ser Cys Ile Gln Thr Ile Ala Tyr Thr Val Gly Asn Ile
465                 470                 475                 480
Ile Ser Pro Gln Thr Phe Gln His Lys Asp Ala Pro Arg Tyr Leu Pro
                485                 490                 495
Ala Lys Ile Ser Ile Val Ile Leu Tyr Val Leu Ile Thr Leu Asp Leu
            500                 505                 510
Cys Leu Ile Arg Trp Leu Ser Ile Arg Glu Asn Lys Lys Arg Asp Ala
        515                 520                 525
Glu Arg Glu Ala Leu Gly Asp Ala Tyr Val Val Glu Lys Asp His Glu
    530                 535                 540
Phe Leu Asp Gln Thr Asp Phe Glu Asn Arg Glu Phe Arg Tyr Ala Ile
545                 550                 555                 560
```

<210> 36503
<211> 90
<212> PRT
<213> A.fumigatus

<400> 36503

```
Ile Leu Ala His Tyr Pro Ser Glu Gly Ser Lys Gly Leu Ala Ile Gly
1               5                   10                  15
Val Arg Phe Lys Glu Gln Cys Met Ser Val Ile Asn Arg Asn Gln Lys
            20                  25                  30
Phe Cys Arg Ser Cys Gly Leu Gln Ser Asp Ser Phe Asn Thr Asp Gly
        35                  40                  45
Asp Ile Ala Tyr Phe Gln Thr Asp Pro Gly His Tyr Ile Ile Ser Thr
    50                  55                  60
Ile Val Phe Gln His Pro Ser Ser Ser Arg Lys Thr Glu Leu Phe Ser
65                  70                  75                  80
Leu Gln Trp Ser Glu Leu His Gln Leu Tyr
                85                  90
```

<210> 36504
<211> 83
<212> PRT
<213> A.fumigatus

<400> 36504

```
Pro Val Leu Lys Arg Arg Val Ala Leu Leu Arg Ala Leu Ser Arg Pro
1               5                   10                  15
Thr Asp Ala Ile His Ser Leu Ile Asp Leu Leu Lys Ala Ala Pro Thr
            20                  25                  30
Asp Ala Glu Ala Trp Cys Glu Leu Ser Asp Leu Tyr Lys Ser Gln Gly
        35                  40                  45
Leu Gly Leu Gln Ala Ile Phe Cys Leu Glu Glu Ala Leu Leu Ile Ala
    50                  55                  60
Pro Asn Ala Trp Asn Val Thr Thr Ser Lys His Ile Thr Val His Lys
65                  70                  75                  80
```

Lys Arg Gly

<210> 36505
<211> 78
<212> PRT
<213> A.fumigatus

<400> 36505
Tyr Ile Pro Asp Lys Lys Ala Thr Ala Leu Leu Lys Ile Ile Tyr Leu
1 5 10 15
Glu Met Phe Gly Tyr Asp Met Ser Trp Ala Ser Phe His Val Leu Glu
20 25 30
Val Met Ser Ser Ser Arg Tyr Leu Gln Lys Arg Ala Gly Tyr Leu Gly
35 40 45
Ala Val Gln Ser Phe Arg Pro Asp Thr Asp Val Leu Met Leu Ala Thr
50 55 60
Asn Leu Leu Lys Lys Val Phe Lys Val Pro Asn Ser Val Leu
65 70 75

<210> 36506
<211> 152
<212> PRT
<213> A.fumigatus

<400> 36506
Asp Leu Ile Ser Ser Ser Thr Pro Ser Leu Ser Leu Pro Leu Thr Thr
1 5 10 15
Leu Pro His Ile Ile Thr Pro Ser Leu Ala Met Ser Leu Leu Pro Asp
20 25 30
Val Leu Ser Arg Leu Ser His Ser Arg Gly Val Val Arg Lys Lys Ala
35 40 45
Val Val Cys Leu Tyr Arg Leu Ala Leu Ile Tyr Pro Glu Ala Leu Lys
50 55 60
Phe Ala Trp Pro Lys Leu Arg Glu Arg Leu Met Asp Asp Glu Glu Glu
65 70 75 80
Gly Ser Val Thr Thr Ala Val Ile Asn Val Ile Cys Glu Leu Gly Trp
85 90 95
Arg Arg Pro Arg Asp Phe Leu Pro Leu Ala Pro Arg Leu Phe Glu Leu
100 105 110
Leu Val Asp Gly Gly Asn Asn Trp Met Ala Ile Lys Ile Ile Lys Leu
115 120 125
Val Trp Cys Ser Leu Phe Ala Gly Tyr Met Leu Leu Thr Arg Leu Val
130 135 140
Cys Asp Phe Asp Thr Leu Arg Thr
145 150

<210> 36507
<211> 62
<212> PRT
<213> A.fumigatus

<400> 36507
Leu Glu Val Pro Arg Phe Glu Lys Ser Leu Tyr Asp Leu Ile Lys Gly
1 5 10 15
Leu Arg Asn His Lys Gly Ala Glu Glu Glu Phe Ile Gln Glu Ser Leu

```
            20                  25                  30
Arg Glu Cys Arg Thr Glu Ile Lys Ser Gln Asp Met Gly Val His Phe
        35                  40                  45
His Leu Gln Asp Thr Ala Ser Ser Pro Leu Ile Tyr Ser Arg
    50                  55                  60
```

<210> 36508
<211> 83
<212> PRT
<213> A.fumigatus

<400> 36508

```
Phe Ala Thr Leu Thr Pro Leu Glu Pro Arg Leu Ile Arg Lys Leu Ser
1               5                   10                  15
Gly Pro Leu Met Asn Ile Ile Glu Thr Thr Thr Ala Met Ser Leu Leu
            20                  25                  30
Tyr Glu Cys Ile Asn Gly Val Ile Gln Gly Gly Ile Leu Asp Gly Asp
        35                  40                  45
Glu Ala Leu Glu Glu Arg Asp Glu Val Ala Ser Leu Cys Val Gly Lys
    50                  55                  60
Leu Arg Gly Met Ile Val Ala Asn Ser Asp Pro Asn Arg Lys Phe Leu
65                  70                  75                  80
Cys Gly Lys
```

<210> 36509
<211> 299
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (85)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36509

```
Ile Val Val Lys Tyr Val Ala Leu Leu Ala Phe Asn Arg Ile Leu Leu
1               5                   10                  15
Ser His Pro Ala Leu Val Ser Val His Cys Asp Val Ile Met Asp Cys
            20                  25                  30
Leu Glu Asp Ala Asp Val Ser Ile Arg Met Gln Ala Leu Glu Leu Ala
        35                  40                  45
Ala Arg Met Val Thr Ser Asp Thr Leu Gln Ser Val Val Asp Arg Leu
    50                  55                  60
Leu Lys Gln Leu Arg Asp Ala Thr Thr Phe Asp Pro Val Glu Ser Gly
65                  70                  75                  80
His Pro Ala Pro Xaa Glu Asn Leu Asn Asn Gln Lys Gly Ser Met Ile
                85                  90                  95
Leu Pro Ala Ser Tyr Arg Ile Asp Val Ile His Arg Ile Leu Asp Ile
            100                 105                 110
Cys Ser Phe Asn Asn Tyr Ser Asp Leu Tyr Asp Phe Glu Trp Tyr Val
        115                 120                 125
Asp Leu Leu Val Glu Leu Met Lys Leu Arg Pro Leu Gln Thr Lys Gln
    130                 135                 140
Phe Arg Phe Pro Arg Ala Thr Arg Val Leu Glu Asp Asp Arg Gly Asp
145                 150                 155                 160
```

```
Asp Ile Met Ser Arg Ile Cys Leu Glu Ile Arg Asn Val Ala Val Arg
                165                 170                 175
Val Lys Gly Val Arg Leu Gln Ala Thr Arg Ala Ala Glu Leu Leu Ile
            180                 185                 190
Ser Val Asp Asn Arg His Ala Leu Phe Leu Glu Pro His Thr Asp Ser
        195                 200                 205
Gln Ala Leu Gly Ser Leu Ala Trp Val Val Gly Glu Tyr Ser Gly Cys
    210                 215                 220
Leu Cys Asn Pro Arg Arg Thr Leu Gln Ser Leu Ile Asp Ile Ser Asn
225                 230                 235                 240
Met Ser Leu Pro Ala Lys Val Leu Ser Leu Cys Val Gln Ala Val Pro
                245                 250                 255
Lys Val Leu Ile Gln Val Ala Asn Asp Pro His Gln Asp Trp Asn Thr
            260                 265                 270
Ala Thr Val Cys Glu Ile Ser Leu Leu Phe Gly Pro Val Ile Lys Phe
        275                 280                 285
Leu Leu Thr Gln Pro Gly Ser Lys Glu Val Arg
    290                 295
```

<210> 36510
<211> 456
<212> PRT
<213> A.fumigatus

<400> 36510

```
Pro Ser Trp Asn Pro Gly Ile Lys Val Arg His Thr Ala Arg Glu Tyr
1               5                   10                  15
Gly Cys Gly Val Ala Ala Asp Phe Val Leu His Thr Glu Leu Leu Lys
            20                  25                  30
Ala Tyr Arg Met Ala His Ala Arg Val Leu Ser Ile Glu Pro Phe Glu
        35                  40                  45
Ala Ala Leu Arg Glu Asn Thr Pro Leu Thr Ser Ile Ala Asp Pro Lys
    50                  55                  60
Ala Leu Thr Glu Tyr Leu Asn Gln Ile Thr Leu Lys Gly Asp Met Val
65                  70                  75                  80
Ile Glu Glu Leu Lys Arg Val Thr Thr Glu Arg Asp Asp Tyr Lys Lys
                85                  90                  95
Lys Leu Glu Glu Ala Gln Lys Ser Thr Lys Glu Ala Cys Asp Ala Val
            100                 105                 110
Ala Asp Leu Lys Lys Asp Lys Thr Gln Gly Ala Lys Glu Glu Lys Thr
        115                 120                 125
Ala Ser Thr Glu Asp Thr Ala Ser Lys Lys Glu Leu Pro Ala Lys Glu
    130                 135                 140
Glu Ser Glu Glu Phe Phe Ser Phe Asp Asn Glu Leu Pro Arg Leu Glu
145                 150                 155                 160
Ser Glu Leu Lys Glu Lys Gln Glu Glu Val Glu Thr Leu Lys Ser Gln
                165                 170                 175
Val Glu Ser Leu Lys Arg Asp Leu Ala Val Ala Arg Glu Ser Thr Glu
            180                 185                 190
Gly Met Val Gln Asn Leu Glu Ser Ala Thr Arg Glu Leu Val Glu Leu
        195                 200                 205
Arg Asp Ile Arg Asp Lys Gln Asp Ser Glu Ile Lys Lys Leu Lys Asp
    210                 215                 220
Thr Arg Gln Ala Glu Val Asp Asp Val Lys Ala Lys Leu Ala Glu Ser
225                 230                 235                 240
Glu Asn Thr Ile Ala Lys Ala Gly Glu Glu Ala Glu Lys Leu Lys Ala
```

```
                245                 250                 255
Glu Leu Lys Gln Lys Thr Glu Glu Ile Glu Lys Leu Gln Asp Gln Val
            260                 265                 270
Thr Gln Gln Lys Asp Asn Asp Gln Gln Lys Glu Leu Gln Glu Lys Leu
        275                 280                 285
Glu Glu Val Ala Lys Glu Lys Asp Ala Ser Glu Lys Lys Leu Gly Val
    290                 295                 300
Leu Gln Gly Leu Val Asp Asn Leu Arg Ser Gln Leu Lys Asp Thr Glu
305                 310                 315                 320
Val Val Val Ser Asp Leu Lys Ala Asp Met Lys Gly Lys Val Glu Glu
                325                 330                 335
Leu Gly Lys Leu Gln Asn Val Val Asp Tyr Leu Asn Asn Asn Leu Lys
            340                 345                 350
Asp Asn Ala Glu Trp Gln Gln Thr Arg Asp Gln Ala Ala Ser Gly Gln
        355                 360                 365
Ser Pro Asp Phe Asp Ser Leu Arg Lys Ser Leu Ala Pro Leu Gln Gln
    370                 375                 380
Glu Pro Gly Gly Gly Asn Leu Ala Thr Glu Pro Glu Pro Pro Ala Asn
385                 390                 395                 400
Gly Ala Thr Gly Gly Ala Gly Ala Ser Lys Lys Lys Lys Asn Lys Lys
                405                 410                 415
Lys Lys Gly Gly Lys Gly Gly Glu Asp Thr Ala Lys Val Pro Val Leu
            420                 425                 430
Leu Trp Ser Arg Thr Arg Asn Arg Thr Gln Gln Ser Pro Thr Lys Gln
        435                 440                 445
Leu Arg Thr Trp Pro Thr Ser Ser
    450                 455
```

<210> 36511
<211> 174
<212> PRT
<213> A.fumigatus

<400> 36511

```
Ser Phe Ser Ile Ser Ser Val Phe Cys Phe Asn Ser Ala Phe Ser Phe
1                   5                   10                  15
Ser Ala Ser Ser Pro Ala Leu Ala Met Val Phe Ser Asp Ser Ala Ser
            20                  25                  30
Leu Ala Phe Thr Ser Ser Thr Ser Ala Cys Leu Val Ser Phe Ser Phe
        35                  40                  45
Leu Ile Ser Glu Ser Cys Leu Ser Leu Ile Ser Leu Asn Ser Thr Ser
    50                  55                  60
Ser Arg Val Ala Asp Ser Arg Phe Cys Thr Met Pro Ser Val Asp Ser
65                  70                  75                  80
Arg Ala Thr Ala Arg Ser Arg Leu Ser Asp Ser Thr Cys Asp Leu Arg
                85                  90                  95
Val Ser Thr Ser Ser Cys Phe Ser Phe Ser Ser Asp Ser Asn Arg Gly
            100                 105                 110
Ser Ser Leu Ser Asn Glu Lys Asn Ser Ser Leu Ser Ser Phe Ala Gly
        115                 120                 125
Asn Ser Phe Phe Glu Ala Val Ser Ser Val Leu Ala Val Phe Ser Ser
    130                 135                 140
Leu Ala Pro Cys Val Leu Ser Phe Leu Arg Ser Ala Thr Ala Ser Gln
145                 150                 155                 160
Ala Ser Phe Val Asp Phe Cys Ala Ser Ser Ser Phe Phe Leu
                165                 170
```

<210> 36512
<211> 165
<212> PRT
<213> A.fumigatus

<400> 36512
Pro Val Gly Gln Thr Val Ser Leu Pro Leu Asn Arg Ile Leu Asn Arg
1 5 10 15
Ala Asn Pro Arg Arg Thr Ala Met Asn Leu Ile Leu Ala Phe Ala Val
20 25 30
Ala Leu Lys His Lys Leu Arg Phe Glu Pro Asp Ile Gly Tyr Glu Asp
35 40 45
Leu Ala Gly Leu Val Gly His Leu Asp Thr Phe Ala Lys Asp Ala His
50 55 60
Asp Arg Ala Leu Leu Gln Pro Pro Lys Lys Ser Ser Trp Lys Ala Met
65 70 75 80
Gly Glu Tyr Leu Gly Val Ser Phe Ala Glu Ser Asn Pro Arg Lys Leu
85 90 95
Val Lys Arg Ser Lys Lys Pro Leu Gly His Leu Pro Leu Glu Ile Leu
100 105 110
Asn Tyr Leu Ser Ala Tyr Ile Asp Arg Cys Ile Ala Asn Gly Thr Leu
115 120 125
Ser Val Ser Leu His Gln Ser Gln Ala Ser Lys Ser Pro Ser Cys Gln
130 135 140
Gly Pro Phe Ala Phe Trp Ile Gly Leu Leu Ile Cys Phe His Gln Leu
145 150 155 160
Val Leu Cys Val Pro
165

<210> 36513
<211> 153
<212> PRT
<213> A.fumigatus

<400> 36513
Gln Tyr Met Leu Pro Asp Asn Ser Val Met Tyr Ile Gly Cys Val Gly
1 5 10 15
Lys Asp Lys Tyr Ala Asp Ile Leu Lys Glu Ala Cys Asn Gln Ala Gly
20 25 30
Val His Thr Glu Tyr Arg Val Asp Asp Val Gln Pro Thr Gly Lys Cys
35 40 45
Gly Val Ile Ile Thr Gly His Asn Arg Ser Met Cys Thr His Leu Ala
50 55 60
Ala Ala Asn Glu Tyr Lys Ile Asp His Leu Lys Gln Pro His Val Trp
65 70 75 80
Ser Leu Val Glu Lys Ala Gln Tyr Tyr Tyr Val Gly Gly Tyr His Leu
85 90 95
Thr Val Cys Val Pro Ala Ile Leu Ala Leu Ala Glu Glu Ala Ala Ala
100 105 110
Lys Asn Lys Val Ser Lys Met Ala Phe Pro Pro His Pro Ala Arg Pro
115 120 125
Arg Leu Thr Phe Asp Ser Gly Leu His Ala Phe Ser Phe Arg Pro Leu
130 135 140
His Ser Ser Val Leu Gln Arg Pro Ala
145 150

<210> 36514
<211> 117
<212> PRT
<213> A.fumigatus

<400> 36514
Arg Leu Thr Gln Val Phe Met Leu Ser Leu Ser Ala Pro Phe Ile Pro
1 5 10 15
Gln Phe Phe Lys Asp Gln Leu Asp Ser Val Leu Pro Tyr Thr Asp Tyr
20 25 30
Thr Phe Cys Asn Glu Thr Glu Ala Arg Ala Tyr Ala Glu Ser His Glu
35 40 45
Trp Asn Thr Asp Asp Val Val Glu Ile Ala Lys Lys Leu Ala Gln Leu
50 55 60
Pro Lys Lys Asn Ser Ser Arg Pro Arg Val Ala Ile Val Thr Gln Gly
65 70 75 80
Thr Leu Pro Thr Ile Thr Ala Thr Val Lys Pro Asp Gly Glu Val Glu
85 90 95
Val Lys Glu Phe Pro Val His Glu Ile Ser Lys Ser Ser Ile Asn Asp
100 105 110
Thr Asn Gly Ala Gly
115

<210> 36515
<211> 203
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (10)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36515
Leu Glu Leu Thr Thr Ala Asp Pro Ser Xaa Pro Val Val Lys Thr Arg
1 5 10 15
Ala Ala Gly Met Leu Tyr Arg Gly Gly Arg Arg Phe Gly Leu Arg Thr
20 25 30
Val Arg Leu Val Ala Leu Gly Asp Val Asp Val Arg His Arg Met Leu
35 40 45
His His Arg Cys Arg Arg Pro Leu Gly Asp Pro Ile Arg Leu Pro Ala
50 55 60
Leu Pro Lys Gly Arg Asp Thr Pro Val Arg Leu Tyr Arg Val Ser Pro
65 70 75 80
Gly Arg Cys Arg Leu Ala Leu Ala Gln Tyr Leu Met Glu Pro Ser Thr
85 90 95
Asn Arg Trp Leu Val His Ala Leu Cys Leu Cys Leu Ile Asp Trp Trp
100 105 110
Ile Pro Cys Ser Gly Ser Leu Cys Ala Ala Gly Thr Ala Arg Ala Gly
115 120 125
Asp Pro Ile Leu Asp Val Ser Ile Phe Ser Arg Trp Val Val Ala Ile
130 135 140
Leu Val Thr Thr Gly Leu Gly Trp Ser Ser Phe Gly Val Trp Phe Tyr
145 150 155 160
Tyr Leu Phe Gln Phe Ile Gln Gln Phe Arg His Val Ser Pro Leu Asp

```
                165                 170                 175
Ser Ala Val Gln Phe Ala Pro Gly Ala Ile Ser Gly Asn Ser Ala Cys
            180                 185                 190
Pro Cys His Thr Leu Ser Asp Gly Gly His His
        195                 200
```

<210> 36516
<211> 442
<212> PRT
<213> A.fumigatus

<400> 36516

```
Phe Gly Ser Ala Glu Pro Ile Lys Ile Thr Gly Met Thr Ser Lys Leu
1               5                   10                  15
Ala Tyr Ser Cys Pro Asn Arg Ala Ser Lys Trp Pro Asp Gln Gly Arg
            20                  25                  30
Ser Trp Ser Ser Cys Ser Leu Ala Leu Gly Lys Tyr Phe Ile Glu Pro
        35                  40                  45
His Cys Arg Arg Ser Glu Val Pro Val Arg Gly Ser Cys Thr Arg Gln
    50                  55                  60
Val Thr Thr Leu Gln Leu Pro Thr Asn Pro Thr Thr Thr Gly Leu Gln
65                  70                  75                  80
Ala Val Ser Leu Ser Leu Ser Pro Ser Leu Lys Cys Leu Ala Gly Gln
                85                  90                  95
Gln Ser Arg Pro Cys Pro Leu Val Ala Pro Val Arg Thr Ile Cys Gln
            100                 105                 110
Lys Lys Leu Gln Gln Ala Ala His Gln Gly Phe Lys Gly Ile Glu Phe
        115                 120                 125
Phe Phe Tyr Glu Asp Leu Glu Thr Phe Ala Ala Gln Ser Ser Gly Gly
    130                 135                 140
Ala Ser Arg Leu Asn Ile Leu Lys Gly Ala Leu Arg Met Arg His Leu
145                 150                 155                 160
Cys Thr Ser Leu Gln Leu Glu Ile Ile Ala Leu Gln Pro Phe Trp Phe
                165                 170                 175
Tyr Glu Gly Val Leu Asp Glu Ala Glu His Asn Arg Leu Ile Asp Asp
            180                 185                 190
Lys Leu Arg Phe Cys Phe Glu Ile Cys His Ile Leu His Thr Asp Met
        195                 200                 205
Ile Leu Ile Pro Ser Asn Phe Leu Pro Pro Asp Pro Glu Thr Gly Glu
    210                 215                 220
Pro Arg Thr Thr Gly Asn Arg Arg Val Ile Val Ser Asp Leu Arg Gln
225                 230                 235                 240
Ala Ala Asp Leu Gly Leu Ala Gln Ser Pro Pro Ile Arg Phe Ser Tyr
                245                 250                 255
Glu Ala Leu Ala Trp Gly Asn His Val Asp Thr Trp Glu Gln Ser Trp
            260                 265                 270
Asp Ile Val Arg Arg Val Asp Arg Pro Asn Phe Gly Leu Cys Leu Asp
        275                 280                 285
Thr Phe Asn Ile Ala Ala Arg Val Tyr Ala Asp Pro Ala Ser Ala Ser
    290                 295                 300
Gly Met Thr Tyr Asn Gly Ala Lys Glu Leu Gln Arg Ser Leu Ala Arg
305                 310                 315                 320
Leu Arg Gln Thr Val Asp Pro Lys Arg Val Phe Leu Phe Gln Val Val
                325                 330                 335
Asp Gly Glu Arg Leu Lys Ala Pro Leu Val Met Gly His Glu Trp Tyr
            340                 345                 350
```

```
Val Ala Glu Gln Pro Ser Arg Met Ser Trp Val Ser Glu Cys Lys Thr
        355                 360                 365
Val Cys Leu Arg Arg Lys Gly Ile Ser Ser Gly Glu Gly His Cys Pro
    370                 375                 380
Asn Cys Leu Cys Ser Gly Ile Arg Gly Leu Gly Phe Asp Gly Ile Val
385                 390                 395                 400
Leu Pro His Asn Leu Arg Pro Arg Pro Gln Tyr Ser Leu Arg Pro Cys
                405                 410                 415
Thr Thr Trp Asp Arg Ile Met Glu Asp Thr Val Thr Glu Met Gln Gly
            420                 425                 430
Glu Met Val Cys Ala Lys Ala Asp Ser Val
        435                 440
```

<210> 36517
<211> 128
<212> PRT
<213> A.fumigatus

<400> 36517

```
Arg Pro Ala Pro Leu Gly Cys Phe Thr Ala Gly Val Val Gly Ser Val
1               5                   10                  15
Phe Ala Gln Tyr Val Trp Trp Pro Trp Val Met Trp Thr Tyr Gly Ile
            20                  25                  30
Gly Cys Phe Ile Ile Ala Ala Val Gly Leu Trp Val Ile Pro Ser Asp
        35                  40                  45
Tyr Pro Arg Cys Gln Lys Ala Ala Thr Leu Gln Phe Asp Tyr Ile Gly
    50                  55                  60
Ser Val Leu Gly Val Ala Gly Leu Leu Leu Leu Asn Ile Ser Trp Asn
65                  70                  75                  80
Gln Ala Pro Ile Asp Gly Trp Ser Thr Pro Tyr Val Tyr Val Leu Leu
                85                  90                  95
Ile Gly Gly Phe Leu Val Leu Gly Leu Phe Val Leu Gln Glu Arg Arg
            100                 105                 110
Ala Pro Gly Ile Arg Ser Trp Met Tyr Pro Ser Leu Val Asp Gly Leu
        115                 120                 125
```

<210> 36518
<211> 95
<212> PRT
<213> A.fumigatus

<400> 36518

```
Asp Gly Ala Val Leu Ala Ser Gly Ser Ile Thr Cys Ser Ser Leu Ser
1               5                   10                  15
Ser Asn Phe Ala Met Cys Leu Leu Trp Ile Gln Gln Cys Ser Ser Arg
            20                  25                  30
Gln Gly Pro Ser Gln Gly Ile Leu Pro Ala Leu Ala Thr Pro Tyr Leu
        35                  40                  45
Met Ala Val Ile Thr Ser Gly Trp Leu Met Ala Ile Ala Cys Ala Ala
    50                  55                  60
Phe Leu Gly Gly Cys Ile Leu Gln Ser Thr Ala Pro Val Glu Gln Ser
65                  70                  75                  80
Tyr Trp Met Asn Thr Phe Trp Ser Phe Val Ile Met Ala Trp Gly
                85                  90                  95
```

<210> 36519

<211> 66
<212> PRT
<213> A.fumigatus

<400> 36519
Ala Gly Ser Arg Asn Ala Arg Leu Phe Ala Phe Glu Glu Arg Gly Tyr
1 5 10 15
Leu Pro Val Lys Asp Ile Ala Arg Thr Val Phe Ala Leu Gly Tyr Glu
20 25 30
Gly Trp Val Ser Thr Glu Leu Phe Ser Arg Thr Thr Phe Asp Pro Asp
35 40 45
Pro Asn Thr Pro Tyr Gly His Ala Gln Arg Gly Ile Ala Ser Trp Lys
50 55 60
Thr Leu
65

<210> 36520
<211> 176
<212> PRT
<213> A.fumigatus

<400> 36520
Ile Arg Ser Gly Arg Leu Leu Ser Trp Pro Gly Gly Lys Ala Pro Ile
1 5 10 15
Ala Pro Val Ala Leu Tyr Ile Asp Lys Thr Asp Leu Met Ile Arg Arg
20 25 30
Met Asp Ile Ser Phe Pro Ala Ser Thr Thr Ile Leu Ser Asp Ala Val
35 40 45
Pro Val Lys His Gln Gly Ala Ser Ala Ser Leu Val Asn Thr Val Ile
50 55 60
Asn Tyr Ser Ile Ala Ile Gly Leu Gly Ile Ala Gly Thr Val Glu Ala
65 70 75 80
Glu Val Ser His Gln Gly Val Asn Gln Leu Arg Gly Tyr Arg Ala Ala
85 90 95
Leu Trp Ser Ser Val Gly Leu Ala Ala Leu Ala Phe Gly Ile Ala Leu
100 105 110
Val Tyr Ala Val Arg Thr Phe Gln Glu Gln Arg Asn Ser Arg Lys Ser
115 120 125
Ser Gln Glu Arg Glu Gln Arg Ala Cys Ile Glu Gly Cys Ile Leu Gly
130 135 140
Leu Thr Leu Thr Pro Asp Arg Glu Trp Glu Arg Val Glu Leu Gly Arg
145 150 155 160
Leu Leu Ser His Val Ser Gln Thr Gly Gly Leu Arg Asn Gln Ser Val
165 170 175

<210> 36521
<211> 338
<212> PRT
<213> A.fumigatus

<400> 36521
Ala His Arg Arg Val Glu Ser Cys Phe Ser Val Arg Arg Ser Tyr Arg
1 5 10 15
Gly Met Arg Asp Arg Leu Pro Asn Ser Pro Leu Glu Gln Phe Arg Arg
20 25 30
Leu Thr Lys Asn Leu Phe Asn Ala Met Gln Ser Lys Phe Lys Arg Leu

```
        35                  40                  45
Lys Arg Gly His Lys Asp His Arg Gln Ala Ser Gln Gly Ile Asp Asp
    50                  55                  60
Ile Phe Asn Ser Asp Glu Asp Glu Glu Ala Ala Gly Asp Tyr Gly Arg
65                  70                  75                  80
Pro Ser His Arg Arg Pro Met His Asp Glu Met Lys Asp Phe Ile Glu
                85                  90                  95
Glu Asp Val Phe Thr Asp Asp Glu Leu Glu Arg Glu Arg Glu Asp Leu
            100                 105                 110
Glu Ile Ala Arg Pro Ala Lys Arg Gly Val Thr Gly Leu Gly Ala Thr
        115                 120                 125
Asp Ala Ala Gly Leu Asp Glu Asn Ala Leu Glu Asp Met Arg Ala Ala
    130                 135                 140
Phe Gly Asp Gly Asn Glu Tyr Leu Phe Ala Leu Glu Met Glu Glu Gln
145                 150                 155                 160
Glu Glu Glu Gln Glu Glu Asp Gln Glu Lys His Leu Asp Leu Lys Asp
                165                 170                 175
Val Phe Glu Pro Ser Gln Leu Ala Glu Arg Met Leu Thr Glu Glu Asp
            180                 185                 190
Asn Gln Ile Arg Leu Leu Asp Glu Pro Glu Arg His Gln Leu Ala Arg
        195                 200                 205
Lys Pro Tyr Arg Asn Leu Val Leu Thr Glu Glu Gln Phe Arg Glu Glu
    210                 215                 220
Ala Ala Trp Ile Ala Asn Leu Met Leu Leu Lys Lys Arg Ile Glu Pro
225                 230                 235                 240
Glu Leu Arg Glu Pro Phe Gln Arg Ser Val Ala Lys Val Leu Glu Phe
                245                 250                 255
Leu Val Thr Asp Asp Trp Glu Val Pro Phe Ile Phe Gln His Arg Lys
            260                 265                 270
Asp Tyr Met Ile His Ala Thr Lys Val Pro Val Ala Gly Ala Pro Ala
        275                 280                 285
Asp Gly Asp Thr Ser Gln Tyr Thr Ile Lys Ala Glu Lys Leu Leu Asn
    290                 295                 300
Met Thr Asp Leu Trp Asp Ile Phe Asp His Asp Leu Lys Phe Arg Ala
305                 310                 315                 320
Leu Val Glu Lys Arg Asn Thr Ile Gln Lys Thr Tyr Asp Asn Leu Gln
                325                 330                 335
Ser Leu
```

<210> 36522
<211> 67
<212> PRT
<213> A.fumigatus

<400> 36522

```
Ser Gly Thr Asp Trp Arg Val His Leu Asp Asn Asp Glu Arg Leu Thr
1               5                   10                  15
Glu Val Val Glu Arg Pro Leu Glu Leu Met Gly Gln Leu Leu Gly Thr
            20                  25                  30
Glu Asp Ala His Lys Arg Arg Glu Ser Gly Lys Leu Lys Ala Thr Val
        35                  40                  45
Pro Glu Glu Glu Val Leu Gly Leu Arg Tyr Leu Asp Tyr Gly Leu Tyr
    50                  55                  60
His Tyr Phe
65
```

<210> 36523
<211> 389
<212> PRT
<213> A.fumigatus

<400> 36523
Gly Gly Asn Phe Gly Pro Asn Leu Gly Asn Pro Arg Gly Leu Pro Gln
1 5 10 15
Gly Arg Phe Lys Val Ser Pro Asn Ile Arg Trp Asp Leu Pro Leu Asp
20 25 30
Asp Pro Ala Val Ile Ile Asp Ala Thr Gln Leu Leu Leu Leu Phe Ile
35 40 45
Asp Arg Asn Ser Ala Gly Phe Gly Ala Asp Pro Ser Lys Val Met Ala
50 55 60
Phe Ile Lys Asp Phe Val Pro Ile Phe Tyr Gly Met Asp Arg Asp Thr
65 70 75 80
Phe His Met Tyr Met Asn Glu Ile Ser Ser Asp Ala Pro Ser Gly Glu
85 90 95
Asp Gly Asp Asp Glu Ser Leu Ala Ala Glu Asp Ala Ser Thr Trp Arg
100 105 110
Asn Arg Arg Gly Val Asn Ala Lys Lys Met Asp Leu Leu Arg Asp Val
115 120 125
Leu Glu Arg Arg Ser Glu Lys Ala Asn Arg Ser Asp Lys Asp Arg Asn
130 135 140
Thr Pro Ala Ser Arg Asp Gly Thr Pro Asp Ala Val Leu Val Pro Ser
145 150 155 160
Thr Pro Val Pro Glu Pro Ala Glu Ala Phe Asp Val Ala Glu Leu Lys
165 170 175
Trp Met Glu His Pro Gly Gln Gly Asn Phe Asn Leu Gln Arg Glu Tyr
180 185 190
Ala Leu Asn Glu Ser Tyr Val Lys Lys Val His His Leu Tyr Ala Asn
195 200 205
Leu Asn Ile Tyr Cys Phe Phe Arg Thr Phe Glu Ile Leu Tyr Ser Arg
210 215 220
Leu Leu Arg Ile Lys Met His Glu Lys Asp Ala His Glu His Val Arg
225 230 235 240
Arg Ala Leu Ile Pro Lys Pro Ala Arg Asp Leu Gly Leu Ile Asp Lys
245 250 255
Leu Pro Thr Asp Phe Phe Tyr Asp Cys Asp Pro Lys Ala Asn Leu Tyr
260 265 270
Gln Gln Ile Val Arg Met Cys Glu Glu Val Ile Lys Gly Asp Met Asp
275 280 285
Ala Ser His Leu Glu Glu Thr Leu Arg Arg Tyr Tyr Leu Arg Ser Gly
290 295 300
Tyr Gln Leu Tyr Asn Leu Glu Lys Met Phe Ala Gly Ile Ala Lys Phe
305 310 315 320
Ala Gly Ser Ile Phe Asn Gly Asp Ser Lys Asp Arg Ser Ala Asp Ile
325 330 335
Ile Asn Leu Phe Phe Lys Glu Arg Asp Arg Glu Glu Thr Thr His Asn
340 345 350
Gln Glu Ile Gln Tyr Arg Lys Gln Val Glu Arg Leu Val Lys Asp Gly
355 360 365
Asp Ile Tyr Arg Ile Thr Tyr Val Ser Ala Pro Ser Val Gly Pro Ser
370 375 380
Leu Gln Val Gln Ser

385

<210> 36524
<211> 209
<212> PRT
<213> A.fumigatus

<400> 36524
Asn Pro Gln Thr Lys Lys Thr Thr Val Gln Leu Leu Thr Pro Glu Asp
1 5 10 15
Ala Thr Leu Glu Asn Glu Glu Leu Ser Gln Glu Ala Arg Trp Ser Tyr
20 25 30
Tyr Val Ser Ala Tyr Thr Met Arg Asp Pro Thr Glu Gly Val Pro Phe
35 40 45
Ser Gln Met Arg Met Pro Phe Leu Lys Arg Asn Leu Pro Pro Lys Leu
50 55 60
Glu Gln Glu Glu Glu Tyr Asn Arg Tyr Tyr Arg Pro Leu Val His Gln
65 70 75 80
Asp Gly Leu Ile Ile Arg Ile Cys Ala Asn Ser Tyr His Ile Leu Tyr
85 90 95
Glu Pro Gly Ser Cys Asp Trp Trp Trp Arg Pro Lys Ala Leu Ser Glu
100 105 110
Glu Ser Pro Glu Asp Ile Ala Lys Glu Glu Ala Ala Val Lys Glu Arg
115 120 125
Arg Arg Asp Arg Phe Met Glu Lys Phe Val Asn Asn Pro Ser Trp Ala
130 135 140
Gln Gly Leu Ser Lys Asp Gln Val Asp Glu Ser Asn Gln Arg Phe Arg
145 150 155 160
Ser Trp Ile Arg Gly Pro Glu Ser Glu Lys Glu Lys Glu Lys Ala Ser
165 170 175
Val Gly Ala Thr Glu Glu Ala Gly Phe Glu Lys Lys Ala Asp Asn Glu
180 185 190
Asp Ala Glu Met Pro Asp Ala Asp Pro Thr Ala Pro Glu Ser Lys Asp
195 200 205
Gln

<210> 36525
<211> 455
<212> PRT
<213> A.fumigatus

<400> 36525
Ala Ser Thr Cys Pro Ala Ser Pro Lys Pro Gly Tyr Tyr Arg Cys Phe
1 5 10 15
Ala Val Cys Cys Arg Ile Ala Val Leu Trp Lys Ser Asp Leu Leu Gln
20 25 30
Arg Thr Leu Gln Leu Ile Val Ser Lys Leu Ala Gly Ala Pro Gly Phe
35 40 45
Glu Asn Tyr Glu Glu Ile Ile Ser Pro Ser Leu Leu Lys Ala Leu Ile
50 55 60
Trp Ser Pro Tyr Gln Cys Pro Ser Ile Pro Leu Pro Ala Ser Gln Thr
65 70 75 80
Lys Asn His Asp Thr Ile Val Arg Trp Asn Pro Gly Ile Ser Phe Ala
85 90 95
His Trp Ala Arg Ser Ile Gly Leu Phe Leu Thr Lys Ala Ala Pro Gln

```
            100                 105                 110
Asp Pro Val Ile Gly Pro Leu Arg Asn Ile Leu His Val Ile Pro Ser
        115                 120                 125
Leu Ala Val Arg Ile Leu Pro Tyr Ile Leu His Asp Val Leu Leu Thr
    130                 135                 140
Glu Pro Asp Gly Val Ala Asn Val Arg Lys Thr Ile Ser Asp Val Phe
145                 150                 155                 160
Gln Gln Gly Leu His Glu Ala Asp Asp His Ser Ile Pro His Val Arg
                165                 170                 175
Leu Ile Ile Asn Cys Leu Leu Tyr Leu Arg Asn Gln Pro Arg Pro Gln
            180                 185                 190
Glu Ala Thr Ile Val Glu Arg Asp Glu Trp Leu Glu Ile Asp Phe Ala
        195                 200                 205
Val Ala Ser Arg Ala Ala Asn Thr Cys Gly Leu Pro Lys Thr Ala Leu
    210                 215                 220
Leu Phe Leu Glu Ile Gln Ala Ser Arg Ala Val Ser Gly Ser Arg Arg
225                 230                 235                 240
Ser Ser Leu Val Lys Tyr Glu Pro Pro Pro Asp Leu Leu His Asp Ile
                245                 250                 255
Phe Arg Asn Val Asp Asp Pro Asp Leu Phe Tyr Gly Val Gln Gln Ser
            260                 265                 270
Ser Ser Leu Glu Ser Val Met Glu Thr Leu Glu His Glu Ser Ser Gly
        275                 280                 285
Phe Lys Asn Leu Leu Phe Gln Ser Ala Gln Tyr Asp Cys Glu Ile Gln
    290                 295                 300
Met Ser Gly Asp Ala Asp Ala His Gly Leu Leu Lys Ala Leu Asn Ser
305                 310                 315                 320
Ser Asn Leu Gln Gly Ile Ala Asn Ser Leu Thr Ser Thr Leu Arg Gly
                325                 330                 335
Ser Lys Ser Ser Val Ser Phe Asp Ser Met Met Gln Ala Ala Ile Asp
            340                 345                 350
Leu Arg Gln Trp Asp Leu Pro Val Ser Pro Met Asn His Ser Pro Ser
        355                 360                 365
Ala Ala Leu Phe Arg Thr Phe Gln Ser Leu Asn Thr Ser Thr Ser Leu
    370                 375                 380
Val Asp Val Ser Asn Ser Val Asn Glu Ser Leu Leu Ala Ile Leu Gly
385                 390                 395                 400
Ser Leu Gly Ser Thr Ser Arg Ser Ala Met Ser Phe Arg Ala Ala Met
                405                 410                 415
Arg Asp Leu Gly Ile Val Thr Glu Ile Ser Asp Val Leu Ser Ala Thr
            420                 425                 430
Ser Leu Glu Glu Leu Ser Glu Glu Trp Arg Lys Ile Ala Glu Arg Asn
        435                 440                 445
Ser Trp Leu Lys Ala Thr Arg
    450                 455
```

<210> 36526
<211> 608
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (504),(513)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36526

```
Leu Ser Ser Lys Asp Phe Leu Pro Asp Val Tyr Arg Ala Cys Ala Gly
1               5                  10                  15
Tyr Glu Arg Thr Ser Leu Leu Asp Leu Leu Glu Asp Met Gly Glu Lys
            20                  25                  30
Cys Leu His Thr Tyr Gln Leu Glu Arg Cys Glu Thr Ser Gln Val Leu
        35                  40                  45
Cys Ile His Met Leu Asp Ser Phe Ile Lys Ser Trp Thr Thr Gly Asp
    50                  55                  60
Gly Asp His Leu Ser Asp Ser Ala Ser Asp Ile Tyr Asn Trp Val Thr
65                  70                  75                  80
Asp Val Leu Leu Val Lys Gly Arg Ala Ser Ser Arg Val Ser Ile Ala
                85                  90                  95
Phe Ser Arg Leu Leu Glu Glu Ile Phe Ser Thr Asn Pro Ala Tyr Thr
            100                 105                 110
Ser Gly Glu Ser Asn Pro Ser Pro Arg Thr Thr Leu Phe Met Ile Leu
        115                 120                 125
Gln Glu Ser Asp Ile Leu Thr Lys Tyr Asn Val Gly Asn Leu Val Pro
    130                 135                 140
Lys Leu Phe Arg His Phe Pro Leu Lys Asp His Asp Ala Ile Phe Asp
145                 150                 155                 160
Asp Ile Leu Glu Ser Leu Pro Arg Asp Pro Asp Trp Thr Glu Gly Ile
                165                 170                 175
Ala Leu Arg Leu Phe Ile Leu Ala Arg Leu Ala Ser Gln Trp His Thr
            180                 185                 190
Leu Leu Arg Arg Ser Ile Tyr His Met Phe Glu Thr Pro Ala Gln Leu
        195                 200                 205
Pro His Ser Arg Trp His Ala Glu Lys Cys Ile Arg His Val Ala Ser
    210                 215                 220
Val Leu Gly Leu Glu Asp Ala Arg Gln Leu Phe Arg Leu Phe Ser Ser
225                 230                 235                 240
Gln Ile Leu Tyr Thr Trp Thr Glu Asn Glu Ser Val Met Thr Met Pro
                245                 250                 255
Phe Ser Ile Phe Gly Tyr Ser Thr Ile Glu Asp Met Leu Ser Asp Val
            260                 265                 270
Gln Asp Glu Ile Val Gly Gln Ile Met Met Arg Ala Asn Glu His Glu
        275                 280                 285
Ala Ser Glu Leu Ser Thr Arg Leu Lys Ile Pro Phe Ile Glu Leu Leu
    290                 295                 300
Ala Thr Ser Phe Tyr Lys Ala Glu Ala Tyr Ser Ile Ala Arg Asp Ile
305                 310                 315                 320
Ser Thr Pro Pro Gly Gln Ser Ser Gln Pro Lys Gly Val Glu Asn Arg
                325                 330                 335
Leu Lys Lys Ile Leu Gly Ala Asp Arg Phe Val Ser Leu Val Glu Lys
            340                 345                 350
Gln Phe Pro Gln Val Ile Ala Thr Phe Phe Gly Thr Leu Asp Gln Cys
        355                 360                 365
Glu Gln Ile Glu Arg Ala Phe Ser Lys Arg Ala Asn Phe Gln Glu Ala
    370                 375                 380
Phe Ser Ile Leu Lys Ser Ile Thr Ala Lys Gly Ala Ser Lys Glu Ile
385                 390                 395                 400
Leu Pro Pro Asn Gln Gln Pro Ser Phe Arg Ala Arg Tyr Leu Leu Asp
                405                 410                 415
Glu Leu Glu Phe Leu Cys Lys Arg Ser Gly Tyr Glu Leu Glu Thr Ile
            420                 425                 430
Trp Thr Pro Thr Leu Ala Ser Tyr Val Cys Arg Thr Leu Leu Glu Ser
```

```
        435                 440                 445
Ile His Pro Ala Leu Gly Ser Leu His Ala Cys Ser Val Ile Arg Lys
    450                 455                 460
Ile Arg Ile Leu Ile Cys Ile Thr Gly Pro Val Met Leu Arg Asp Tyr
465                 470                 475                 480
Pro Phe Glu Met Leu Leu His Ala Leu Arg Pro Phe Leu Thr Asp Ile
                485                 490                 495
His Cys Ser Glu Asp Ala Leu Xaa Met Phe Trp Tyr Leu Leu Asp Ala
            500                 505                 510
Xaa Arg Ser Tyr Leu Thr Glu Asn Pro Ser Phe Thr Ala Gly Ile Ala
        515                 520                 525
Val Ser Thr Leu Leu Ser Phe Arg Lys Phe Leu Ala Ser Thr Ser Ala
    530                 535                 540
Thr Met Gln Glu Ser Glu Ser Val Ala Val Leu Thr Ile Val Gln Thr
545                 550                 555                 560
Phe Leu Gln Trp Phe Glu Asp Leu Leu Glu Ile Leu Arg Val Thr Ser
                565                 570                 575
Ser Glu Pro Arg Gly Ala Cys Leu Leu Ser Ala Ser Asp Gly Val Phe
            580                 585                 590
Ala Gln Asp Leu Tyr Ser Arg Gln Arg Val Gly Trp Tyr Gly Gly Val
        595                 600                 605
```

<210> 36527
<211> 129
<212> PRT
<213> A.fumigatus

<400> 36527

```
Thr Asp Asp Pro Ser Ser Ala Gln Ile His Pro Pro Ser Val Gly Tyr
1               5                   10                  15
Pro Arg Leu Leu Val Tyr Arg Gln Ile His Glu Gly Met Ala Ile Pro
            20                  25                  30
Val Ala Cys Thr Ser Thr Ala Tyr His Ala Thr Ile Gln Ile Leu Tyr
        35                  40                  45
Ala Gln Gly Thr Leu Leu Gly Pro Val Ile Phe Phe Ala Lys Ser Ser
    50                  55                  60
Ile Phe Leu Leu Cys Arg Gln Ile Phe Thr Ile Gln Lys Gln Met Lys
65                  70                  75                  80
Tyr Ala Ile Arg Phe Gly Leu Leu Phe Thr Phe Leu Leu Tyr Trp Pro
                85                  90                  95
Gly Val Gly Leu Glu Ser Tyr Phe Ala Ala Pro His Val Gly Glu Thr
            100                 105                 110
Ser Glu Asp Arg Leu His Leu Arg Glu Arg Pro Asp Pro Arg Arg Val
        115                 120                 125
Pro
```

<210> 36528
<211> 114
<212> PRT
<213> A.fumigatus

<400> 36528

```
Arg Ala Leu Val Gly Phe Val Leu Ile Ala Leu Val Leu Ser Ala Thr
1               5                   10                  15
Tyr Asn Ala Leu Val Leu Asp Ser Gln Phe Leu Val Tyr Glu Ile Cys
```

```
            20                  25                  30
Arg Leu Ile Arg Leu Met Ile Arg Leu Val Leu Lys Tyr Thr Arg His
        35                  40                  45
Gln Trp Asp Ile Pro Ala Cys Trp Phe Thr Ala Arg Tyr Met Lys Ala
    50                  55                  60
Trp Gln Ser Leu Leu Leu Ala Leu Arg Leu Leu Thr Met Arg Leu Ser
65                  70                  75                  80
Arg Tyr Ser Thr His Lys Ala Pro Ser Leu Gly Pro Ser Ser Phe Leu
                85                  90                  95
Arg Asn Pro Pro Phe Ser Tyr Ser Val Asp Arg Ser Ser Pro Ser Arg
            100                 105                 110
Asn Arg
```

<210> 36529
<211> 263
<212> PRT
<213> A.fumigatus

<400> 36529

```
Ser Leu Ile Ser Gly Arg Phe Ile Val Ala Ser Pro Gly Leu Glu Leu
1               5                   10                  15
Val Val Leu Ser Thr Gly Leu Ile Gln Thr Leu Phe Pro Thr Ser Val
            20                  25                  30
Val Arg His Phe Gln Thr Arg Leu Phe Ala Leu Ser Val Asn Met Ser
        35                  40                  45
Val Asn Pro Arg Lys Pro Gly Thr Ser Gly Ser Gly Ser Lys Thr Thr
    50                  55                  60
Thr Thr Asp Asn Asn Thr Val Asn Gly Thr Pro Ser Arg Val His Thr
65                  70                  75                  80
Arg Ser Pro Ser Ala Ser Thr Asn Gly Leu Ser Arg Ser Pro Ser Leu
                85                  90                  95
Arg Gly Ser Ala Pro Val Ser Ala Arg Ala Ala Ala Arg Lys Pro Gly
            100                 105                 110
Arg Ser Asn Leu Ser Met Ser Asn Val Pro Lys Val Ala Ala Asp Ser
        115                 120                 125
Ser Glu Glu Glu Ala Arg Ala Gln Asn Ala Ala Leu Ile Glu Glu Leu
    130                 135                 140
Lys Glu Gln Leu Gln Lys Ala Glu Ser Ala Ser Glu Gln Tyr Arg Lys
145                 150                 155                 160
Gln Leu Gly Val Leu Gln Met Arg Leu Asp Glu Ala Ile Ser Glu Gln
                165                 170                 175
Gly Lys Leu Glu Asp Gln Ala His Glu Lys Asp Ser Lys Ile Glu Ala
            180                 185                 190
Leu Asn Ser Glu Ile Arg Asp His Ile Arg Gln Ile Arg Asp Leu Glu
        195                 200                 205
Gln Ala His Glu Ser Glu Arg Asn Ala Met Leu Gln Glu Lys Glu Gln
    210                 215                 220
Tyr Leu Ser Arg Glu Glu Glu Met Gln Ala Thr Ile Gln Arg Leu Lys
225                 230                 235                 240
Asp Thr Leu Ala Gln Lys Glu Ile Arg Met Asn Ala Asp Asn Glu Lys
                245                 250                 255
Asn Val Ser Arg Ser Cys Glu
            260
```

<210> 36530

<211> 285
<212> PRT
<213> A.fumigatus

<400> 36530
Ser His Arg Pro Pro Ile Val Val Thr Asp Ala Val Ile Thr Ala Ser
1 5 10 15
Phe Leu Asn Arg Ser Ser Pro Asp Val Glu Gly Gln Phe Ala Pro Ser
20 25 30
Ser Gln Ile Glu Arg Ser Pro Ser Arg Asn Asn Ser Lys Leu Leu Leu
35 40 45
Gln Lys Asp Lys Leu Ile Glu Ser Leu Arg Leu Glu Leu Ala Glu Ser
50 55 60
Gln Ile Lys Leu Val Glu Met Glu Asn Lys Gly Gly Gly Arg Gln Arg
65 70 75 80
Glu Leu Glu Lys Glu Leu Leu Glu Ala Arg Met Ala Asn Ala Arg Leu
85 90 95
Met Glu Asp Asn Glu Ser Tyr Gln Leu Leu Leu Ser Glu Arg Thr Leu
100 105 110
Asn Gly Asp Phe Thr Lys Gly Asp Phe Met Arg Glu Ala His Pro Asp
115 120 125
Tyr Asp Glu Gly Gln Glu Pro Ser Asn Gly Leu Gly Ser Leu Ala Asp
130 135 140
Glu Leu Glu Ser Val Asp Ala Lys Ala Glu Thr Asp Asn Thr Arg Lys
145 150 155 160
Leu Glu Thr Glu Ile Lys Ala Leu Lys Asp Gln Asn Lys Ala Leu Thr
165 170 175
Leu Tyr Ile Glu Arg Ile Ile Ser Arg Leu Leu Gln His Asp Gly Phe
180 185 190
Glu Thr Ile Leu Asp Lys Asn Glu Asn Glu Pro Ser Thr Thr Ala Lys
195 200 205
Gln Val Ser Ser Val Thr Glu Lys Asp Leu Pro Pro Thr Pro Pro Glu
210 215 220
Lys Asp Asp Ser Ser Ser Gln Thr Phe Leu Gln Arg Ala Lys Ser Val
225 230 235 240
Val Ala Gly Gln Pro Asn Arg Ser Gln His Arg Ser Arg Pro Ser Thr
245 250 255
Phe Met Pro Pro Pro Thr Ser Val Pro Thr Ala His Glu Asn Pro Glu
260 265 270
Thr Ala Pro Ser Ile Pro Ile Asn Arg Ala Gln Arg Gly
275 280 285

<210> 36531
<211> 123
<212> PRT
<213> A.fumigatus

<400> 36531
Ser Leu Glu Arg Val Cys Asp Ile Ser Val Lys Leu Thr Met Glu Thr
1 5 10 15
Lys Ser Leu Ile Val Phe Thr Pro Thr Val Thr Leu Gly Tyr Lys Ser
20 25 30
Thr Ile Lys Thr Leu Arg Ser Gly Lys Ala Lys Leu Val Leu Ile Ala
35 40 45
Ala Asn Ala Pro Pro Leu Arg Lys Ser Glu Leu Glu Tyr Tyr Ala Met
50 55 60

```
Leu Ala Lys Thr Pro Val His His Phe Ser Gly Asn Asn Val Ser His
65                  70                  75                  80
Lys Cys Phe Cys Ile Gly Phe Tyr Cys Tyr Ala Pro Thr Leu Val Leu
                85                  90                  95
Leu Arg Trp Arg Glu Gly Asp Ala Gly Ala Ala Leu Arg Arg Ser Arg
            100                 105                 110
Ile Ser Gly Leu Trp Arg Val Asn Asp Asn Gly
        115                 120
```

<210> 36532
<211> 75
<212> PRT
<213> A.fumigatus

<400> 36532

```
Gly Leu Gly Leu Cys His Ser Leu Ala Gly Val Ala Trp Lys Ser Thr
1               5                   10                  15
Ser Arg Leu Ala Arg Arg Arg Arg Ile Pro Pro Ser Leu Leu Asn Ser
            20                  25                  30
Pro Thr Pro Pro Phe Ser Thr Thr Ser Pro Phe Ala Gly Ser Ala Val
        35                  40                  45
Ser Pro Phe Pro Ala Val Thr Met Ala Arg Arg Pro Ala Arg Cys Tyr
    50                  55                  60
Arg Tyr Cys Lys Asn Lys Val Arg Ala Ile Ala
65                  70                  75
```

<210> 36533
<211> 362
<212> PRT
<213> A.fumigatus

<400> 36533

```
Thr Tyr Pro Phe Val Met Lys Trp Glu Ser Phe Leu Leu Thr Ala Ile
1               5                   10                  15
Thr Ala Gly Ser Ala Met Ala Gly Ala His His Ala Asn Glu His Ala
            20                  25                  30
His Leu Arg His Arg Leu Val His Asn Ala Glu Leu Lys Ala Arg Glu
        35                  40                  45
Val Asp Asp Gln Ala Asn Pro Ala Val Ser Thr Lys Thr Ile Val Asn
    50                  55                  60
Leu Glu Val Val Thr Met Tyr Thr Thr Ile Thr Arg Arg Pro His Gly
65                  70                  75                  80
His Lys Pro Thr Thr Thr Val Ala Ala Val Glu Thr Ser Thr Thr Gly
                85                  90                  95
Ser Gln Pro Leu Ala Ser Val Ser Leu Asp Val Asp Ala Asn Leu Leu
            100                 105                 110
Asp Val Arg Ser Ala Thr Thr Ser Thr Ala Thr Thr Leu Ser Thr Ser
        115                 120                 125
Thr Ser Ser Ala Thr Val Ser Ala Ala Thr Ser Ser Ser Gly Asn Ser
    130                 135                 140
Ala Ser Trp Thr Ser Thr Pro Ser Asn Gly Val Tyr Ser Thr Ser Gly
145                 150                 155                 160
Phe Gly Gln Arg Thr Asn Ser Ser Gly Ser Gly Ile Glu Tyr Val Gly
                165                 170                 175
Asn Val Gly Ser Pro Trp Gly Ser Asn Ile Ile Glu Val Thr Ala Ser
            180                 185                 190
```

```
Thr Ala Ser Gln Tyr Lys Tyr Val Val Lys Phe Thr Gly Ser Asn Thr
        195                 200                 205
Asp Asp Trp Phe Val Ser Phe Trp Asn Lys Val Gly Pro Asp Gly Lys
    210                 215                 220
Leu Asp Gly Trp Tyr Gly His Ser Ala Leu Asn Phe Thr Leu Ala Pro
225                 230                 235                 240
Gly Gln Thr Arg Tyr Val Ala Phe Asp Glu Asn Ser Gln Gly Gly Trp
                245                 250                 255
Gly Ala Ala Ala Gly Asp Ser Leu Pro Thr Asp Glu Tyr Gly Gly Tyr
            260                 265                 270
Ala Cys Thr Trp Gly Glu Phe Asp Phe Gly Asn Thr Ser Asn Asp Gln
        275                 280                 285
Trp Ser Gly Trp Asp Val Ser Ala Ile Gln Ala Gln Asn Ala Gly Leu
    290                 295                 300
Thr Val Gln Gly Met Arg Ile Cys Asp His Asn Gly Asp Asp Cys Ser
305                 310                 315                 320
Tyr Ile Thr Thr Asp Ala Ala Lys Val Val Asn Ala Tyr Thr Ala Ala
                325                 330                 335
Glu Ala Ser Val Asp Gly Ile Gly Gly Ser Val Ser Ala Gly Ala Val
            340                 345                 350
Arg Leu Val Val Glu Val Asp Tyr Ser Gly
        355                 360
```

<210> 36534
<211> 74
<212> PRT
<213> A.fumigatus

<400> 36534

```
Ser Ser Arg Tyr Gly Thr Gly Thr Glu Cys Asp Gly Gly Cys Thr Gly
1               5                   10                  15
Thr Val Ala Glu Gln Lys Tyr Leu Asn Thr Lys Ile Thr Leu Ala Ser
            20                  25                  30
Ala Asp Thr Thr Phe Gly Asn Thr Ile Ala Ser Ala Ala Gly Ala Thr
        35                  40                  45
Tyr Ser Gly Leu Ser Ser Ser Glu Gly Gly Lys Val Trp Thr Ile Glu
    50                  55                  60
Ser Ile Thr Ile Pro Ala Met Ser Arg Ser
65                  70
```

<210> 36535
<211> 153
<212> PRT
<213> A.fumigatus

<400> 36535

```
Gln Leu Thr Leu Leu Val Tyr Ile Pro Met Lys Leu Val Leu Gly Leu
1               5                   10                  15
Leu Leu Pro Thr Leu Gly Val Ser Ala Ser Val Ile Lys Arg Glu Asp
            20                  25                  30
Thr Trp Gly Gly Ser Val Ser Leu Gly Pro Thr Lys Ser Thr Ile Val
        35                  40                  45
Asn Ala Val Thr Thr Leu Ile Pro Gly Ala Ala Pro Ala Thr Gln Ser
    50                  55                  60
Gly Glu Leu Phe Leu Trp Pro Gly Met Ser Asn Gly Thr Gly Asp Leu
65                  70                  75                  80
```

```
Val Gln Thr Thr Leu Glu Ser Trp Pro Ser Asn Ala Trp Cys Gly Ala
                85                  90                  95
Thr Thr Gly Gln Trp Cys Val Arg Ala Ser Leu Phe Gly Ser Phe Gly
            100                 105                 110
Gln Leu Asp Gly Asp Ala Ser Pro Val Ser Gly Thr Asp Gln Val Arg
        115                 120                 125
Ile Glu Tyr Thr Leu Leu Asp Asp Gln Glu Thr Trp Val Gln Tyr Val
    130                 135                 140
Ser His Asn Glu Gly Lys Asp Ser Gly
145                 150
```

<210> 36536
<211> 92
<212> PRT
<213> A.fumigatus

<400> 36536

```
Arg Pro Leu Ala Leu Arg Leu Arg Cys Phe Lys Tyr Phe Gln Thr Ala
1               5                   10                  15
Arg Phe Pro Gln Leu Phe Ser Phe Ser Phe Phe Ser Ser Thr Thr Ala
            20                  25                  30
Asp Asn Ile Tyr Gln Gln Leu Leu Ser Leu Val Met Met Lys Leu Phe
        35                  40                  45
Ser Arg Arg Ala Lys Thr Asp Pro Thr Arg Arg Trp Ala Pro Ser Phe
    50                  55                  60
Glu Arg Ser Phe Arg Ser Phe Ala Ile Ile Trp Glu Ser Ala Val Val
65                  70                  75                  80
Thr Ile Asp Leu Val Gln Phe Ala Leu Leu Glu Thr
                85                  90
```

<210> 36537
<211> 204
<212> PRT
<213> A.fumigatus

<400> 36537

```
Ala Gln Val His Glu Leu Gly Tyr Thr Glu Cys Ala Lys Ser Tyr Val
1               5                   10                  15
Phe Arg Gly Ser Lys Glu Tyr Ala Ala Lys Gln Val Gln Glu Met Leu
            20                  25                  30
Gly Leu Leu Ala Ala Gly Pro Arg Pro Asn Met Pro Gln Gln Pro Thr
        35                  40                  45
Arg Pro Pro Val Gly Pro Ala Ala Arg Phe Leu Leu Pro Val Gln Gln
    50                  55                  60
Ala Glu Phe Gln Ile Thr Asn Val Leu Glu Gln Leu Gln Arg Asp Pro
65                  70                  75                  80
Trp Pro Val Ala Asn Asp Lys Arg Pro Leu Arg Cys Thr Gly Val Ala
                85                  90                  95
Leu Ser Val Ala Val Gly Leu Leu Glu Thr Ser Phe Gln Asn Ala Gly
            100                 105                 110
Gly Arg Ile Met Val Phe Thr Ser Gly Pro Ala Thr Glu Gly Pro Gly
        115                 120                 125
His Val Val Gly Pro Glu Leu Lys Glu Pro Met Arg Ser His His Asp
    130                 135                 140
Ile Asp Arg Asp Asn Ile Lys Tyr Tyr Lys Lys Ala Val Lys Val Gly
145                 150                 155                 160
```

```
Val Ile Ser Ser Ser His Thr Gly Cys Ser His Ala Asp Gln Phe Ser
                165                 170                 175
Ser Thr Thr Pro Trp Pro Ser Ala Pro Leu Thr Thr Asp Met Leu Leu
            180                 185                 190
Thr Phe Leu Pro Ala Ala Leu Thr Lys Ser Val Phe
        195                 200
```

<210> 36538
<211> 184
<212> PRT
<213> A.fumigatus

<400> 36538

```
Asn Ala Val Lys Lys Gly Arg Arg Ser Arg Val Gly Thr Ile Gln Lys
1               5                   10                  15
Phe Leu Arg Arg Gly Gln Pro Gly Ala Gly Ala Phe Glu Glu Leu Ser
            20                  25                  30
Phe Asn Ala Ser Ser Ser Tyr Gly Ala Leu Asp Gln Arg Leu Lys Asn
        35                  40                  45
Glu Arg Gln Lys Asp His Tyr Ser His Phe Ile Leu Arg Leu Ala Phe
    50                  55                  60
Ser Ala Thr Glu Asp Leu Arg Arg Arg Phe Val Arg Ala Glu Thr Met
65                  70                  75                  80
Leu Phe Arg Phe Arg Phe Gln Gln Asp Asp Ser Arg Glu Lys Arg Ala
                85                  90                  95
Phe Ile Glu Ser Leu Asn Leu Asp Trp Glu Pro Val Ser Asp Glu Glu
            100                 105                 110
Arg Arg Glu Val Ala Glu Lys Leu Val Ser Ala Thr Pro Gly Leu Arg
        115                 120                 125
Arg Val Asp Glu Glu Thr Trp Tyr Lys Val Asp Trp Glu Arg Val Pro
    130                 135                 140
Glu Leu Val Glu Arg Arg Ala Val Leu Leu Ser Lys Gly Lys Ala Tyr
145                 150                 155                 160
Val Pro Gly Arg Glu Gln Leu Ser Met Ile Ile Ala Glu Phe Thr Ala
                165                 170                 175
Arg Leu Glu Arg Ala Leu Glu Val
            180
```

<210> 36539
<211> 282
<212> PRT
<213> A.fumigatus

<400> 36539

```
Leu Asn Ser Arg His Asp Trp Ser Ala Pro Ser Arg Tyr Glu Ser Phe
1               5                   10                  15
Leu His Cys Gly Cys Tyr Gly Leu Ala Asp His Cys Gln Leu Thr Ser
            20                  25                  30
Arg Ala Leu Pro Arg Leu Asp Glu Asp Asp Arg Leu Thr Pro Ile Leu
        35                  40                  45
Asn His Leu Ser Lys Asn Phe Gly Ser Ala Glu Ser Val Tyr Ser Glu
    50                  55                  60
Gly Glu Gly Phe Val Glu Gly Ala Pro Ile Thr Ala Ser Asn Ile Asp
65                  70                  75                  80
Arg Leu Ser Gln His Phe Pro Leu Cys Met Arg Ser Leu His Met Thr
                85                  90                  95
```

```
Leu Arg Lys Asn Asn His Leu Lys His Phe Gly Arg Leu Gln Tyr Thr
            100                 105                 110
Leu Phe Leu Lys Gly Ile Gly Leu Ser Leu Glu Glu Cys Ile Ile Phe
        115                 120                 125
Trp Arg Gln Ser Phe Lys Gly Phe Thr Asp Asp Glu Phe Asn Ser Arg
    130                 135                 140
Tyr Lys Tyr Asn Ile Arg His Ala Tyr Gly Asp Val Gly Gly Asp Val
145                 150                 155                 160
Asn Arg Arg Gly Arg Gly Tyr Pro Pro Tyr Ser Cys Gln Lys Ile Leu
                165                 170                 175
Asn Asp Ser Asn Pro Gly Val Gly Gln Thr His Gly Cys Pro Tyr Arg
            180                 185                 190
His Phe Ser Val Asp Asn Leu Ile Gly Leu Leu Gln Ser Thr Gly Val
        195                 200                 205
His Asp Lys Asp Val Leu Arg Gly Val Arg Glu Asp Val Glu Lys Thr
    210                 215                 220
Arg Tyr His Ile Ala Cys Asn Arg Val Phe Glu Trp Ala His Lys Ala
225                 230                 235                 240
Asp Ile Lys Arg Val Lys Glu Asp Gly Thr Trp Gly Gln Thr Asp Leu
                245                 250                 255
Asp Thr Ile Val His Pro Asn Thr Tyr Phe Lys Arg Ser Tyr Leu Leu
            260                 265                 270
Lys Gln Met Gly Lys Pro Pro Lys Asp Ala
        275                 280
```

<210> 36540
<211> 76
<212> PRT
<213> A.fumigatus

<400> 36540

```
His Ser His Gly Arg Phe Thr Gly Ser Ala Ser Arg Leu Cys Pro Ser
1               5                   10                  15
Ile Leu Ile His Val Arg Ile Gln Glu Ala Ser Arg Leu Val Val Pro
            20                  25                  30
Ile Ala Ala Val Tyr Thr Pro Leu Lys Glu Lys Pro Asp Ser Pro Leu
        35                  40                  45
Leu Gln Tyr Glu Pro Val Thr Cys Lys Ala Pro Cys Arg Ala Val Leu
    50                  55                  60
Asn Pro Tyr Ala Tyr Asp Leu Arg Pro Cys Arg Leu
65                  70                  75
```

<210> 36541
<211> 114
<212> PRT
<213> A.fumigatus

<400> 36541

```
Leu Thr Lys Asp Ser Asn Val Asp Val Arg Ala Arg Ile Trp Ile Cys
1               5                   10                  15
Pro Phe Cys Leu Met Arg Asn Pro Leu Pro Pro His Tyr Lys Asp Ile
            20                  25                  30
Thr Glu Asn Ala Ile Pro Pro Glu Leu His Pro Gln Ser Thr Thr Ile
        35                  40                  45
Glu Tyr Gln Leu Ala Arg Pro Ala Pro Ala Pro Pro Ile Phe Val Tyr
    50                  55                  60
```

```
Val Val Asp Thr Cys Gln Glu Glu Asp Ser Leu Lys Ala Leu Lys Asp
65                  70                  75                  80
Thr Leu Ile Leu Ser Leu Ser Leu Leu Pro Pro Asn Ala Leu Val Gly
                85                  90                  95
Leu Ile Thr Tyr Gly Thr Met Val Arg Thr Glu Leu His Phe Phe Gly
            100                 105                 110
Phe Gly
```

<210> 36542
<211> 79
<212> PRT
<213> A.fumigatus

<400> 36542

```
Phe Tyr Asp Ala Leu Ala Lys Arg Ala Ala Asn Asn Gly His Val Val
1               5                   10                  15
Asp Ile Phe Ala Gly Cys Leu Asp Gln Val Gly Leu Leu Lys Met Lys
            20                  25                  30
Asn Leu Ala Asn Phe Thr Gly Gly His Met Leu Leu Thr Asp Ser Phe
        35                  40                  45
Thr Ser Ser Gln Phe Lys Pro Ser Phe Val Arg Val Phe Asp Lys Asp
    50                  55                  60
Pro Thr Lys Thr Ser Gly Trp Val Ser Pro Pro Pro Leu Lys Ser
65                  70                  75
```

<210> 36543
<211> 61
<212> PRT
<213> A.fumigatus

<400> 36543

```
Cys Arg Pro Cys Gly Tyr Ser Asn Arg Thr Ser Gly Leu Thr Ser Ile
1               5                   10                  15
Thr Trp Leu Gly Trp His Pro Leu Glu Asp Arg Ala Ile Ile Val Gly
            20                  25                  30
His Tyr Met Gln Thr Ser Thr Asp Ser Gly Thr Leu Arg Pro Ile Thr
        35                  40                  45
Thr Ile Pro Cys Arg Gly Ala Ala Ala Ile Ala Ala Ser
    50                  55                  60
```

<210> 36544
<211> 214
<212> PRT
<213> A.fumigatus

<400> 36544

```
Asp Thr Met Gly Ala Leu Leu Asn Tyr Phe Leu Gly Thr Ala Thr Ala
1               5                   10                  15
Val Leu Ala Val Val Trp Phe Leu Arg Arg Thr Lys Ser Pro Pro Gln
            20                  25                  30
Ala Arg Pro Gln Leu Glu Val Leu Pro Asn Ser Ala Leu Val Ser Lys
        35                  40                  45
Leu Ala Arg Ala Leu Pro His Ile Val Leu Leu His Arg Asp Gly Asp
    50                  55                  60
Ala Phe Arg Thr Ser Ile Asn Thr Tyr Trp Val Gln Gln Glu Arg Glu
```

```
65                  70                  75                  80
Val Val Gln Ala Cys Ile Val Gln Pro Arg Asp Ala Asp Glu Leu Ala
                85                  90                  95
Thr Ala Ile Asp Ile Leu Lys Arg Glu Tyr Asp Glu Arg Arg Thr Leu
            100                 105                 110
Pro Pro Lys Glu Ser Asp Ser Val Leu Phe Ala Val Arg Gly Gly Gly
        115                 120                 125
Gln Ser Pro Val Pro Gly Gly Ala Ser Ala Lys Gly Gly Val Leu Ile
    130                 135                 140
Asp Leu Ala Leu Phe Arg Glu Val Thr Ile Ser Asp Asp Arg Glu Ser
145                 150                 155                 160
Val Thr Leu Gly Ala Gly Val Arg Trp Ala Glu Ala Ser Arg Ile Leu
                165                 170                 175
Asp Glu Lys Gly Leu Gly Val Val Gly Gly Arg Ser Ser Asp Val Gly
            180                 185                 190
Val Ala Gly Tyr Thr Leu Gly Gly Glu His His Cys Ser Val Trp Thr
        195                 200                 205
Cys Ser Gln Leu Thr Leu
    210
```

<210> 36545
<211> 146
<212> PRT
<213> A.fumigatus

```
<400> 36545
Pro Thr Lys Ser Phe Ser Pro Gln Gly Lys Ile Val Thr Ala Thr Ala
1               5                   10                  15
Leu Ser His Pro Asp Leu Trp Arg Ala Leu Lys Gly Gly Ser Asn Asn
            20                  25                  30
Phe Gly Ile Val Pro Arg Phe Thr Val Arg Cys Phe Pro Ser Thr Gln
        35                  40                  45
Ile Trp Ser Gly Phe Met Tyr Ala Pro Asn Ser Gln Ser Thr Lys Ala
    50                  55                  60
Leu Met Ala Leu His Glu Ser Ala Lys His Ala Asp Ser Arg Ile Cys
65                  70                  75                  80
Gly Ala Ala Val Asp Thr His Ala Ala Ala Pro Ile Ala Cys Phe Thr
                85                  90                  95
Tyr Ile Gln Gly Leu Gly Met His Ala Val Thr Val His Leu Gly Tyr
            100                 105                 110
Thr Lys Pro Pro Glu Glu Pro Lys Lys Trp Pro Val Tyr Trp Asn Lys
        115                 120                 125
Ile Arg Gly Ser Gln Leu Ser Gly Asp Ser Gly Ala Pro Ser Lys Ser
    130                 135                 140
Arg Gln
145
```

<210> 36546
<211> 72
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (67)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36546
Ile Phe Pro His Asn Lys Lys Cys Cys Gln Asn Ala Met Val Pro Ser
1 5 10 15
Gly Pro Leu Met Thr Phe Pro Val Ala Phe Ser Ala Ser Met Ser Glu
20 25 30
Ala Ala His Leu Phe Leu Gln Phe Ala Lys Asn Tyr Phe Gly Leu Thr
35 40 45
His Phe Glu Leu Phe Gln Ile Ser Ala Thr His Ile Ser Ile Asn Ser
50 55 60
Met Arg Xaa Phe Leu Asn Gly Asn
65 70

<210> 36547
<211> 87
<212> PRT
<213> A.fumigatus

<400> 36547
Val Ala Ser Ser Leu Thr Arg Thr Trp Gln Leu Asn Asp Glu Asp Ile
1 5 10 15
Phe Asn Trp Asn Val Gly Leu Ile Val Leu Asn Pro Asp Ser Leu Tyr
20 25 30
Tyr Gly Gly Tyr Phe Lys Ala Ser Met Lys Phe Ser Lys Asn Tyr Pro
35 40 45
Tyr Ser Pro Pro Gly Glu Pro Ser Pro Leu Phe Phe Phe Leu Val Ser
50 55 60
Ile Leu Asp Gly Thr Asp Leu Tyr Asn Ser Ser Cys Arg Val Ser Val
65 70 75 80
Ser Pro Pro Ser Ile Pro Pro
85

<210> 36548
<211> 160
<212> PRT
<213> A.fumigatus

<400> 36548
Asn Ser Pro Arg Thr Thr His Thr Pro His Leu Val Ser Leu Pro Pro
1 5 10 15
Ser Ser Phe Ser Leu Cys Pro Ser Trp Thr Ala Leu Thr Phe Thr Ile
20 25 30
Pro His Val Glu Phe Arg Phe Leu Arg Pro Leu Tyr His Pro Asn Ile
35 40 45
Tyr Pro Asp Gly Lys Leu Cys Ile Ser Ile Leu His Ala Pro Gly Glu
50 55 60
Asp Glu Met Ser Gly Glu Leu Ala Ser Glu Arg Trp Ser Pro Ala Gln
65 70 75 80
Arg Val Glu Ser Val Leu Ile Ser Ile Leu Ser Leu Leu Asp Asp Ala
85 90 95
Glu Val Ser Ser Pro Ala Asn Val Asp Ala Gly Val Met Leu Arg Lys
100 105 110
Asp Phe Glu Ser Tyr Lys Ala Leu Val Arg Lys Asp Val Glu Gln Ser
115 120 125
Lys Met Asp Ile Pro Glu Gly Phe Val Met Pro Thr His Glu Ser Ser
130 135 140

```
Met Lys Arg Pro Thr Glu Lys Pro Asp Asp Ala Asp Phe Trp Ala Asp
145                 150                 155                 160

<210> 36549
<211> 474
<212> PRT
<213> A.fumigatus

<400> 36549
Asp Ala Phe Asn Ala Phe Asn Val Val Glu Cys Leu Val Thr Leu Ala
1               5                   10                  15
Lys Thr Tyr Asn Arg Thr Val Ile Phe Thr Ile His Gln Pro Arg Ser
            20                  25                  30
Asn Ile Val Ala Leu Phe Asp Arg Leu Ile Leu Leu Ala His Gly Lys
        35                  40                  45
Thr Val Tyr Ser Gly Pro Phe Ser Thr Cys Gln Gln Tyr Phe Asp Asp
    50                  55                  60
Ser Gly Tyr Ser Cys Pro Pro Gly Phe Asn Ile Ala Asp Tyr Leu Val
65                  70                  75                  80
Asp Leu Thr Met His Ala Ser Val Thr Arg Ser His Glu Asn Gly His
                85                  90                  95
Glu Arg Pro Phe Leu Asp Met Gln Pro Pro Arg Thr Ala Ser Ser Ser
            100                 105                 110
Leu Arg Ala Val Lys Ser Val Ala Ser Ala Ser Asn Ala Ser Ile Glu
        115                 120                 125
Asp Ser Val Glu Ser Ser Arg Arg Pro Lys Ser Lys Arg Arg Ile Ser
    130                 135                 140
Leu Lys Gln Arg Gln Asp Lys Gln Leu Tyr Ser Arg Lys Lys Asp His
145                 150                 155                 160
Gln Thr Pro Pro Thr Pro Lys Thr Asp Glu Glu Asp Gly Gly Glu Ile
                165                 170                 175
Ser Asp Ser Thr Gln Gln Trp Leu Arg Leu Ser Arg Gln Gln Gly His
            180                 185                 190
Val Pro Pro Gln Val Leu Asp Asp Pro Asp His Leu Pro Pro Ala Ala
        195                 200                 205
Pro Gly Pro Thr Asp Leu Asp Ile Leu Ile Ala Asn Tyr Ala Ser Ser
    210                 215                 220
Asp Val Ala Arg Ser Val His Asp Glu Ile Val Ala Ala Val Gln Lys
225                 230                 235                 240
Ala His Val Ala Asn Gly Ser Thr Asn Ala Glu Ile Met Ser Gly Ala
                245                 250                 255
Ala Thr Gly His Ala Lys Ser Tyr Pro Arg Val Ser Leu Leu Arg Gln
            260                 265                 270
Phe Val Ile Leu Ser Gln Arg Thr Trp Arg Asn Leu Tyr Arg Asn Pro
        275                 280                 285
Met Leu Met Leu Thr His Tyr Ala Ile Ser Ile Leu Leu Ala Val Leu
    290                 295                 300
Cys Gly Tyr Leu Phe Tyr Gly Leu Thr Asp Asp Ile Lys Gly Phe Gln
305                 310                 315                 320
Asn Arg Leu Gly Leu Phe Phe Phe Ile Leu Ala Leu Phe Gly Phe Ser
                325                 330                 335
Thr Leu Thr Ser Leu Thr Val Phe Ser Thr Glu Arg Leu Leu Phe Val
            340                 345                 350
Arg Glu Arg Ala Asn Gly Tyr Tyr His Pro Ile Thr Tyr Phe Ala Ala
        355                 360                 365
Lys Val Val Phe Asp Val Val Pro Leu Arg Leu Ile Pro Pro Ile Ile
```

```
    370                 375                 380
Met Gly Ile Ile Val Tyr Pro Met Thr Gly Leu Ile Pro Ala Trp Gly
385                 390                 395                 400
Glu Phe Phe Arg Phe Ile Leu Val Leu Val Leu Phe Asn Leu Ala Ala
                405                 410                 415
Ala Asn Ile Cys Leu Phe Ile Gly Ile Val Phe Arg Asp Gly Gly Val
            420                 425                 430
Ala Asn Leu Ile Gly Ser Leu Val Met Leu Phe Ser Leu Leu Phe Ala
        435                 440                 445
Gly Leu Leu Leu Asn His Asp Ala Ile Pro Lys Ser Ala Leu Trp Leu
    450                 455                 460
Gln Thr Val Ser Phe Gln Pro Ile Ser Pro
465                 470
```

<210> 36550
<211> 73
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (45)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36550

```
Ala Ser Ser Ser Gly Ser Ser Ser Ser Ser Ser Ser Pro Ser Pro Ser
1               5                   10                  15
Pro Glu Ser Ser Ala Ile Ser Asn Met Ser Gly Glu Ala Trp Leu Tyr
            20                  25                  30
Leu Leu Ala Val Leu Ile Asn Ala Val Asn Leu Phe Xaa Gln Val Phe
        35                  40                  45
Phe Thr Ile Met Tyr Ser Asp Leu Glu Trp Ser Val Ser Val Leu Ala
    50                  55                  60
Ile Leu Ser Gln Leu Arg His Pro Asn
65                  70
```

<210> 36551
<211> 78
<212> PRT
<213> A.fumigatus

<400> 36551

```
Leu Ser Ile Phe His Tyr Gly Phe Glu Ala Leu Ile Val Asn Glu Val
1               5                   10                  15
Thr Phe Leu Thr Leu Ile Asp His Lys Tyr Gly Leu Asp Ile Glu Val
            20                  25                  30
Pro Gly Ala Ser Ile Leu Ser Ala Phe Gly Phe Asp Thr Leu Ala Phe
        35                  40                  45
Trp Pro Asp Val Ile Gly Leu Ala Ile Ile Ser Gly Ala Phe Ile Val
    50                  55                  60
Ile Ala Tyr Ala Ala Met His Phe Leu Leu Val Glu Lys Arg
65                  70                  75
```

<210> 36552
<211> 75
<212> PRT

<213> A.fumigatus

<400> 36552
Val Asn Tyr Asp Thr Gln Thr Asn Leu Val Thr Cys Cys Ser Asp Tyr
1 5 10 15
Ile Asn Pro Ile Asp Leu Cys Asn Arg Leu Asn Ala Tyr Ile Ile Pro
20 25 30
Glu Ala Ala Val His Ala Phe Leu Thr Ile Leu Phe Leu Ile Asn Gly
35 40 45
Tyr Trp Leu Ala Leu Ile Leu Asn Leu Pro Leu Leu Ala Phe Asn Ala
50 55 60
Lys Lys Tyr Val Ser Ser Gly Ile Gly Val Pro
65 70 75

<210> 36553
<211> 220
<212> PRT
<213> A.fumigatus

<400> 36553
Thr Pro Cys Leu Leu Phe Ser Gly Cys Leu Arg His Arg Ser Phe His
1 5 10 15
Met Asp Leu Met Ser Ser Arg Phe Lys Ser Phe Gly Phe Lys Arg Asn
20 25 30
Lys Asn Asn Ser Ser Val Ser Val Ser Ala Thr Gln Val Ala Ser Pro
35 40 45
Ser Pro Ser Thr His Thr Leu Val Ala Pro Pro Ser Thr Ala Thr Ser
50 55 60
Pro Ser Ser Pro Pro Ser Gly His Ser Ser Ser Ser Thr Ser Leu Pro
65 70 75 80
Met Asn Asn Gln Asn Thr Leu Gly Arg Pro Pro Ser Tyr Thr Tyr Asn
85 90 95
Thr Ala Gly Arg Pro Thr Ser Pro Met Pro Pro Gly Gln Gln Leu Ala
100 105 110
His His Pro Pro Pro Leu Asn Thr Asn Val Gln Tyr Gly His Gln Pro
115 120 125
Val Gln Pro Val Gly Ala Pro Pro Gly Tyr Pro Leu Gln Gln Pro Val
130 135 140
Pro His Gly Ile Pro Pro Ser Leu Pro Gln Pro Gln Tyr Asn Val Arg
145 150 155 160
Asn Pro Ala Val Glu Val Glu Gly Ala Gly Arg Ser Lys Ala Gln Leu
165 170 175
Ile Val Gly Ile Asp Phe Gly Thr Thr Phe Ser Gly Val Ala Phe Ala
180 185 190
Phe Ala Thr Asn Asn Glu Ala Arg Glu Asp Ile Ile Thr Glu Trp Pro
195 200 205
Gly Ala Gly Thr His Thr Lys Gln Lys Val Gly Ala
210 215 220

<210> 36554
<211> 318
<212> PRT
<213> A.fumigatus

<400> 36554
Ile Pro Thr Val Leu Tyr Tyr Asp Gln Tyr Gln Lys Val Val Gly Trp

```
1               5                   10                  15
Gly Pro Asp Ile Ala Glu Ala Leu Ala Pro Thr Gly Tyr Pro Lys Thr
            20                  25                  30
Gly Val Gln Lys Val Glu Trp Phe Lys Leu Gln Leu Met Leu Ser Gly
        35                  40                  45
Asn Thr Tyr Ile Asp Pro Ile Asn Leu Pro Pro Leu Pro Pro Gly Lys
    50                  55                  60
Ser Glu Ile Asp Val Ala Ala Asp Tyr Leu Phe Lys Leu Arg Gln Ala
65                  70                  75                  80
Met Arg Ala Gln Leu Gln Lys Thr Leu Gly Glu Val Phe Thr Arg Glu
                85                  90                  95
Glu Arg Asn Ile Arg Tyr Tyr Leu Thr Val Pro Ala Ile Trp Asn Asp
            100                 105                 110
Ala Gly Lys Ala Ala Thr Arg Ala Ala Ala Leu Gln Ala Gly Phe Leu
        115                 120                 125
Arg Asp Glu Asn Asp Asn Arg Leu Thr Leu Ile Ser Glu Pro Glu Ala
    130                 135                 140
Ala Ala Leu Phe Cys Ala Lys Thr Gly Leu Leu Gln Leu Lys Val Gly
145                 150                 155                 160
Asp Ala Ile Leu Ile Val Asp Cys Gly Gly Gly Thr Val Asp Leu Ile
                165                 170                 175
Ala Tyr Glu Val Glu Glu Glu Gln Pro Phe Ser Val Ala Glu Cys Thr
            180                 185                 190
Ala Gly Ser Gly Asp Ser Cys Gly Ser Thr Ala Leu Asn Arg Asn Phe
        195                 200                 205
Ser Asn Ile Leu Arg Ala Lys Ile Arg Lys Met Lys Leu Pro Asp Gly
    210                 215                 220
Ser Arg Thr Ala Gly Lys Val Tyr Ala Lys Cys Ile Met Asp Phe Glu
225                 230                 235                 240
Asn Arg Ile Lys Ala Asp Phe Arg Asn Asn Gly Gln Lys Trp Ala Val
                245                 250                 255
Asp Val Gly Ile Glu Ala Asp Phe Pro Glu Ala Asn Ile Glu Glu Gly
            260                 265                 270
Tyr Met Thr Phe Thr Asn Glu Glu Ile Leu Gln Cys Phe Glu Pro Val
        275                 280                 285
Val Asn Arg Ile Leu Glu Leu Val Arg Asn Gln Ile Ile Ala Ile Gln
    290                 295                 300
Ala Gln Asn Arg Ser Leu Gln Val Gly Ser Ser Arg Leu Cys
305                 310                 315

<210> 36555
<211> 74
<212> PRT
<213> A.fumigatus

<400> 36555
Pro Ala Ile Arg Ser Gly Phe Glu Gln Ala Asn Lys Tyr Val Ile Met
1               5                   10                  15
Asp Ala Asn Gly Asn His Ile Gly Tyr Met Ala Glu Gln Glu Lys Gly
            20                  25                  30
Met Ala Asn Met Met Ala Arg Gln Trp Phe Arg Thr His Arg Ser Phe
        35                  40                  45
Val Thr His Val Phe Asp Arg His Glu Asn Glu Val Leu Arg Val Cys
    50                  55                  60
Pro Tyr Pro Phe Val Lys Phe His Gln Gln
65                  70
```

<210> 36556
<211> 376
<212> PRT
<213> A.fumigatus

<400> 36556
Asn Ser Thr Ser Asn Glu Ser Pro Asn Ala Phe Gln Phe His Arg Pro
1 5 10 15
Phe Ser Trp Ile Asn Ser Arg Ile Arg Val Tyr Asp Pro Leu Asp Val
20 25 30
Ala Lys Ser Ala Phe Ser Ser Ser Thr Ala Val Gln Thr Ala Ser Ser
35 40 45
Gly Ser Leu Val Gln Ala Thr Gly Thr Ser Asn Ala Arg Ile Ser Pro
50 55 60
Leu Gly Leu Glu Asp Met Arg Val Ile Gly Glu Ala Gln Gln Gln Trp
65 70 75 80
Ala Pro Leu Arg Arg Lys Tyr Asn Leu Phe Thr Tyr His His Ser Pro
85 90 95
Leu Ser Ala Thr Glu Met Gly Thr Gln Arg Leu Pro Leu Ser Gln Thr
100 105 110
Gly Leu Ser Asn Ser Gln Gln Met Gln Leu Thr Gln Thr Asn Ala Ser
115 120 125
Gly Gln Asp Val Gly Glu Tyr His Gln Phe Ala Tyr Val Asp Glu Pro
130 135 140
Phe Leu Ser Trp Asp Phe Ser Leu Arg Ser Ala Asp Asn Arg Leu Ile
145 150 155 160
Gly Ser Val Asn Arg Asn Phe Val Gly Phe Ala Arg Glu Leu Phe Thr
165 170 175
Asp Thr Gly Val Tyr Ala Leu Arg Met Asp Ser Ala Ala Leu Gly Ser
180 185 190
Glu Asp Leu Thr Thr Arg Thr Asn Ala Pro Thr Gly Met Thr Leu Asp
195 200 205
Gln Arg Ala Val Met Leu Ala Thr Ala Val Ser Ile Asp Phe Asp Tyr
210 215 220
Phe Ser Arg His Ser Gly Ala Gly Gly Phe Gly Phe Met Pro Ile Trp
225 230 235 240
Phe Pro Gly Ile Gly Gly Glu Ala Ala Ala Gly Gly Ala Ala Ala Gly
245 250 255
Gly Ala Ala Ala Gly Glu Ala Gly Ala Val Gly Glu Ala Ala Ala Gly
260 265 270
Thr Ile Gly Arg Ala Gly Ala Ala Gly Gly Ile Ala Glu Gly Ala Ala
275 280 285
Ala Gly Ala Ala Gly Ala Gly Ala Met Ala Gly Tyr Asp Ala Leu Ser
290 295 300
Arg Gly Met Ala Gly Asp Ser Asn Ser Gln His Pro Leu Pro Pro Glu
305 310 315 320
Gln Gln Pro Tyr Ser Ala Asp Gln Gln Ser Ser Val Ser Gly Gln Ala
325 330 335
Gly Pro Tyr Gly Asp Val Trp Ala Glu Glu Gln Glu Asp Pro Phe Ala
340 345 350
Arg Ala Pro Glu Asp Pro Trp Asn Ile Glu Glu Pro Asp Asp Glu Gly
355 360 365
Glu Glu Gly Asp Asn Asp Trp Phe
370 375

<210> 36557
<211> 100
<212> PRT
<213> A.fumigatus

<400> 36557
Phe Cys Ser Leu Thr Phe Leu Gln Phe Trp Ile Ser Gly Tyr Thr Met
1 5 10 15
Ser Ser Val Ala Gln Lys Arg Leu Phe His Glu Tyr Lys Asn Leu Ser
20 25 30
Thr Asn Pro Pro Glu Gly Ile Thr Ala Gly Pro Val Ser Glu Asp Asp
35 40 45
Met Phe His Trp Glu Ala Leu Ile Gln Gly Pro Glu Gly Thr Pro Tyr
50 55 60
Glu Gly Gly Val Phe Ala Ala Glu Leu Lys Phe Pro Lys Asp Tyr Pro
65 70 75 80
Leu Ser Pro Pro Thr Met Lys Phe Val Gly Gly Gly Val Trp His Pro
85 90 95
Asn Gly Glu Arg
100

<210> 36558
<211> 89
<212> PRT
<213> A.fumigatus

<400> 36558
His Ser Leu Leu Thr Val Tyr Pro Asn Gly Thr Val Cys Ile Ser Ile
1 5 10 15
Leu His Pro Pro Gly Asp Asp Pro Asn His Tyr Glu His Ala Ser Glu
20 25 30
Arg Trp Ser Pro Ile Gln Ser Val Glu Lys Ile Leu Ile Ser Val Met
35 40 45
Ser Met Leu Ala Glu Pro Asn Asp Glu Ser Pro Ala Asn Val Glu Ala
50 55 60
Ala Lys Met Trp Arg Glu Arg Arg Ser Glu Tyr Glu Arg Lys Val Arg
65 70 75 80
Asp Glu Val Arg Lys Gly Leu Gly Leu
85

<210> 36559
<211> 325
<212> PRT
<213> A.fumigatus

<400> 36559
Leu Tyr Asn Val Ile Thr Gln Val Ala Val Pro Asn Val Gln Ala Ser
1 5 10 15
Gln Ser Asn Ala Gln Val Glu Val Val Cys Gly Pro Leu Ile Asn Tyr
20 25 30
Lys Asn Met Thr Val Thr Pro Ser Ser Ser Leu Trp His Gly Ser Val
35 40 45
Leu Ile Val Thr Lys Pro Gly Gln Gly Gln Pro Gln Leu Leu Leu Arg
50 55 60
Gln Ser Gly Pro Val Gly Gly Ser Asn Ala Pro Val Asn Gly Asp Leu
65 70 75 80

```
Ser Ala Arg Gln Pro Val Thr Ile Asp Gly Leu Arg Leu Tyr Glu Asp
                85                  90                  95
Pro Gln Lys Ala Phe Trp Arg Phe Ser Ile Thr Val Pro Leu Gln Ser
            100                 105                 110
Tyr Glu Ala Arg Trp Glu Tyr Asp Ile Pro Gly Phe Gln Tyr Ala Glu
        115                 120                 125
Ala Asn Arg Thr Ile Thr Pro Trp Asn Phe Val Val Pro Ser Val Asn
    130                 135                 140
Gln Ser Met Arg Leu Met Phe His Ser Cys Asn Gly Phe Ser Val Gly
145                 150                 155                 160
Thr Asp Met Asp Ala Trp Leu Gly Pro Asn Leu Trp Asn Asp Val Leu
                165                 170                 175
Arg Val His Ala Gln Lys Pro Phe His Val Met Ile Gly Gly Gly Asp
            180                 185                 190
Gln Ile Tyr Asn Asp Gly Val Arg Val Asp Gly Pro Leu Lys Glu Trp
        195                 200                 205
Thr Ala Ile Ala Asn Pro His Lys Arg Arg Ala His Asn Phe Asp Asn
    210                 215                 220
Ser Met Arg Ala Lys Cys Asp Glu Tyr Tyr Tyr Ala Asn Tyr Lys Arg
225                 230                 235                 240
Trp Tyr Ser Thr Glu Pro Phe Lys Thr Ala Asn Ala Gln Ile Pro Gln
                245                 250                 255
Ile Asn Ile Trp Asp Asp His Asp Ile Ile Asp Gly Phe Gly Ser Tyr
            260                 265                 270
Thr Asp His Phe Met Arg Cys Ser Val Phe Arg Gly Ile Gly Gly Val
        275                 280                 285
Ala Tyr Lys Tyr Tyr Cys Leu Phe Ser Thr Pro Pro Cys Ala Ser Lys
    290                 295                 300
Gly Leu Pro Ser Thr Arg Met Ser Pro Arg Thr Met Lys Pro Asn His
305                 310                 315                 320
Gly Ser Ala Gly Phe
                325
```

<210> 36560
<211> 146
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (16),(52)
<223> Identity of amino acid sequences at the above locations are unknown.

```
<400> 36560
Thr Gln Leu Ser Ser Leu Leu Ala Ser Asp Pro Lys Gln His Ser Xaa
1               5                  10                  15
Leu Thr Arg Thr Phe His Ser Pro Asn Pro Gln Thr Ile Glu Ser Thr
            20                  25                  30
Pro Leu Ala Pro Ser His Ala His Gln Thr Pro Leu Leu Pro Pro Pro
        35                  40                  45
Thr Thr Ala Xaa Ser Gln Pro Asp Thr Ser His Pro Arg Ser Thr Pro
    50                  55                  60
Pro Tyr Ile Pro Pro Thr Ser His Ser Ser Pro Ala Pro Asp Gly Arg
65                  70                  75                  80
Ala Leu Leu Ala Gln Thr Gly Ser Cys Ala Leu His Ser Pro Arg Pro
                85                  90                  95
```

```
Val Arg Trp Ser Leu Gly Val Ser Arg Ala Pro Ser Thr Trp Ser Ser
            100                 105                 110
Ala Leu Ser Ala Arg Arg Gly Gly Cys Gly Arg Arg Gly Gly Gly Lys
        115                 120                 125
Gly Leu Gly Trp Asp Gly Gly Arg Cys Gly Gly Gly Ile Ser Trp Phe
    130                 135                 140
Gly Gly
145
```

<210> 36561
<211> 146
<212> PRT
<213> A.fumigatus

<400> 36561

```
Arg Arg Arg Arg Asp Gly Thr Lys Arg Lys Pro Val Phe Gln Thr Gln
1               5                   10                  15
Ser Val Gln Gly Lys Phe Lys Val Val Arg Ile Phe Val Ile Lys Phe
            20                  25                  30
Thr Tyr His Leu Gln Thr Asp Asp Thr Thr Ala Asn Asp Asn His Leu
        35                  40                  45
Leu Gly Asp Leu Leu Gln Gly Lys Ser Ala Gly Thr Gly Asp Asp Ser
    50                  55                  60
Leu Leu Ile Asn Val Glu Ala Arg Glu Arg Ser Gly Leu Thr Ser Gly
65                  70                  75                  80
Gly Asn Asp Asn Val Leu Ser Ala Gln Ser Leu Phe Thr Thr Ile Gln
                85                  90                  95
Gln Val His Leu Asp Gly Val Leu Val Asp Lys Ser Thr Gly Thr Leu
            100                 105                 110
Asp Val Ile Asp Ala Val Leu Leu Glu Gln Lys Leu Asn Thr Phe Cys
        115                 120                 125
Glu Thr Phe His Arg Arg Cys Pro Trp Pro Ser Ser Ser Ala Arg Gly
    130                 135                 140
Ser Thr
145
```

<210> 36562
<211> 74
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (35),(71)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36562

```
Asn Pro Phe Thr Pro Gln Trp His Ser Ile His Asn Thr Arg Pro Asp
1               5                   10                  15
His Ser Ile Asp Ser Ile Ile Phe Thr Ile Ser Ile Arg Pro Gln Thr
            20                  25                  30
Ala Phe Xaa Thr Tyr Thr Tyr Phe Pro Leu Pro Lys Ser Thr Asn His
        35                  40                  45
Arg Lys His Ser Pro Cys Ala Leu Pro Arg Ser Ser Asn Thr Thr Pro
    50                  55                  60
Ser Ala Ser Asn Asn Ser Xaa Phe Ser Thr
```

65 70

<210> 36563
<211> 66
<212> PRT
<213> A.fumigatus

<400> 36563
Tyr Phe Pro Pro Lys Ile His Ser Pro Leu Tyr Pro Pro Asn Val Pro
1 5 10 15
Phe Val Ala Ser Thr Arg Trp Gln Gly Thr Ser Gly Ala Asn Gly Phe
20 25 30
Val Arg Ile Ala Phe Pro Thr Ala Arg Ala Leu Glu Pro Arg Cys Val
35 40 45
Ala Ser Ala Glu Tyr Val Val Gln Arg Pro Phe Gly Thr Glu Arg Arg
50 55 60
Val Arg
65

<210> 36564
<211> 438
<212> PRT
<213> A.fumigatus

<400> 36564
Pro Val Gly Ser Tyr Asn Asp Ile Pro Phe Arg His Arg Phe Ser Ser
1 5 10 15
Arg Gln Asn Asn Gln His Arg Lys Asn Asn Lys Ala Lys Cys Tyr Met
20 25 30
Trp Phe Ala Ser Val Ala Arg Leu Glu Glu Lys Ile Gln Gly Gly Gly
35 40 45
Ala Arg Gly Phe Ser Gly Ser Leu Glu Val Asp Gly Leu Gly Val Gly
50 55 60
Gly His Gly Ser Leu Leu Glu Gly Leu Gly Gln Gly Arg Val Ser Val
65 70 75 80
Ala Cys Ala Gly Asn Ile Leu Ala Arg Ser Thr Val Phe Asp Gly Gln
85 90 95
Ser Gly Leu Ser Asn His Leu Thr Ser Val Gly Thr Asp Asp Val Asp
100 105 110
Thr Glu Asn Ala Val Gly Leu Ser Ile Gly Asp Glu Leu His Leu Ala
115 120 125
Leu Ser Val Glu Val Gly Leu Gly Thr Arg Val Gly Ala Glu Gly Glu
130 135 140
Gly Thr Asp Ala Val Leu Tyr Ala Ser Gly Leu Asp Leu Gly Leu Val
145 150 155 160
Leu Ala Asn Pro Gly Asp Phe Gly Val Gly Val His Asp Ala Arg Asp
165 170 175
Ser Ser Ile Val Asp Val Ala Val Thr Leu Leu Asn Val Leu Asp Ser
180 185 190
Ser Asn Ser Leu Phe Leu Gly Leu Met Gly Lys His Gly Thr Glu Gly
195 200 205
Ala Val Thr Asp Asp Thr Asp Val Gly Asp Leu Gly Ala Val Leu Leu
210 215 220
Val Asp His Lys Ala Ala Ser Leu Ile Leu Val Asn Ser Asn Val Leu
225 230 235 240
Gln Thr Gln Ser Phe Gly Val Gly Ser Ala Ala Asp Gly Asn Gln Asn

```
                245                 250                 255
Asn Val Ser Ile Gln Gly Leu Leu Leu Ser Thr Phe Gly Gly Leu Asn
            260                 265                 270
Ala Gln Leu Asp Ser Arg Ala Ala Val Ile Thr Leu Gly Asp Leu Gly
        275                 280                 285
Val Gly Leu Glu Leu Asp Thr Leu Leu Leu Gln Asn Leu Leu Gly Leu
    290                 295                 300
Leu Gly Asp Val Gly Val His Thr Arg Ser Thr Asn Leu Ala Lys Glu
305                 310                 315                 320
Phe Asn Asn Gly Asn Val Gly Ala Glu Thr Gly Pro Asn Gly Ser Leu
                325                 330                 335
Cys Phe Arg His Asn Gln Tyr Lys Glu Asn Ser Lys Ser Ser Glu Phe
            340                 345                 350
Ser Ser Ser Ser Ser His Thr Ile Ser Lys Pro Met Ile Pro Pro Pro
        355                 360                 365
Met Thr Thr Ile Phe Leu Gly Thr Ser Phe Arg Glu Arg Ala Pro Val
    370                 375                 380
Leu Val Met Ile Leu Phe Ser Ser Met Leu Arg Pro Gly Lys Gly Val
385                 390                 395                 400
Ala Ser Leu Pro Val Ala Met Thr Met Phe Phe Pro Arg Arg Val Cys
                405                 410                 415
Ser Pro Pro Ser Ser Arg Phe Thr Leu Thr Val Cys Ser Ser Thr Lys
            420                 425                 430
Ala Pro Val Pro Leu Met
        435
```

<210> 36565
<211> 71
<212> PRT
<213> A.fumigatus

<400> 36565

```
Thr Ala Cys Ile Glu Lys Arg Gly Arg Leu Gly Gly Thr Cys Leu Asn
1               5                   10                  15
Val Gly Cys Ile Pro Ser Lys Ser Leu Leu Asn Asn Ser His Leu Tyr
            20                  25                  30
His Gln Ile Leu His Asp Thr Lys Lys Arg Gly Ile Glu Val Gly Asp
        35                  40                  45
Val Lys Leu Asn Leu Glu Gln Met Met Lys Ala Lys Asp Thr Ser Gly
    50                  55                  60
Gly Arg Ser His Lys Arg Tyr
65                  70
```

<210> 36566
<211> 290
<212> PRT
<213> A.fumigatus

<400> 36566

```
Ile Phe Leu Val Leu Ile Val Ser Glu Thr Gln Ala Ser Val Trp Ser
1               5                   10                  15
Arg Leu Gly Ala Asp Val Thr Val Val Glu Phe Leu Gly Gln Ile Gly
            20                  25                  30
Gly Pro Gly Met Asp Ala Asp Ile Ala Lys Gln Ala Gln Lys Ile Leu
        35                  40                  45
Gln Lys Gln Gly Ile Lys Phe Lys Thr Asn Thr Lys Val Thr Lys Gly
```

```
    50                  55                  60
Asp Asp Ser Gly Ala Thr Val Lys Leu Ser Ile Glu Ala Ala Lys Gly
65                  70                  75                  80
Gly Lys Glu Glu Thr Leu Asp Ala Asp Val Val Leu Val Ala Ile Gly
                85                  90                  95
Arg Arg Pro Tyr Thr Glu Gly Leu Gly Leu Glu Asn Ile Gly Ile Asp
            100                 105                 110
Lys Asp Glu Arg Gly Arg Leu Val Ile Asp Gln Glu Tyr Arg Thr Lys
        115                 120                 125
Ile Pro His Ile Arg Val Ile Gly Asp Cys Thr Phe Gly Pro Met Leu
    130                 135                 140
Ala His Lys Ala Glu Glu Glu Ala Val Ala Ala Val Glu Tyr Ile Lys
145                 150                 155                 160
Lys Gly His Gly His Val Asn Tyr Ala Ala Ile Pro Ser Val Met Tyr
                165                 170                 175
Thr His Pro Glu Val Ala Trp Val Gly Gln Asn Glu Ala Glu Val Lys
            180                 185                 190
Ala Ala Gly Ile Lys Tyr Arg Val Gly Thr Phe Pro Phe Ser Ala Asn
        195                 200                 205
Ser Arg Ala Lys Thr Asn Leu Asp Thr Glu Gly Gln Val Lys Phe Ile
    210                 215                 220
Ala Asp Ala Glu Thr Asp Arg Ile Leu Gly Val His Ile Ile Gly Pro
225                 230                 235                 240
Asn Ala Gly Glu Met Ile Ala Glu Ala Thr Leu Ala Val Glu Tyr Gly
                245                 250                 255
Ala Ser Cys Glu Asp Ile Ala Arg Thr Cys His Ala His Pro Thr Leu
            260                 265                 270
Ala Glu Ala Phe Lys Glu Ala Ala Met Ala Thr Tyr Ser Lys Ala Ile
        275                 280                 285
His Phe
    290
```

<210> 36567
<211> 121
<212> PRT
<213> A.fumigatus

<400> 36567

```
Arg Pro Arg Thr Pro Pro Val Glu Gly Leu Thr Lys Gly Ile Glu Phe
1               5                   10                  15
Leu Phe Lys Lys Asn Gly Val Asp Tyr Ile Lys Gly Thr Gly Ala Phe
            20                  25                  30
Val Asp Glu His Thr Val Lys Val Asn Leu Leu Asp Gly Gly Glu Gln
        35                  40                  45
Thr Leu Arg Gly Lys Asn Ile Val Ile Ala Thr Gly Ser Glu Ala Thr
    50                  55                  60
Pro Phe Pro Gly Leu Asn Ile Asp Glu Lys Arg Ile Ile Thr Ser Thr
65                  70                  75                  80
Gly Ala Leu Ser Leu Lys Glu Val Pro Lys Lys Met Val Val Ile Gly
                85                  90                  95
Gly Gly Ile Ile Gly Leu Glu Met Val Cys Glu Leu Asp Asp Glu Asn
            100                 105                 110
Ser Asp Asp Phe Glu Phe Ser Leu Tyr
        115                 120
```

<210> 36568

<211> 189
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (155)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36568
Ser His Ala Ile His Leu Cys Lys Gly His Ile Thr Val Ile Gln Tyr
1 5 10 15
Leu Gln Lys Arg Ala Trp Trp Phe Ile Leu Asp Asn His Pro Arg Ile
20 25 30
Thr Met Ala Ser Leu Met Arg Thr Lys Gln Ser Pro Ser Lys Pro Thr
35 40 45
Pro Thr Pro Pro Ser Ser Gln Glu Cys Ile Ser Leu Ser Pro Gln Thr
50 55 60
Lys Lys Phe Leu His Arg Ile Ser Leu His Pro Thr Leu Thr Pro Tyr
65 70 75 80
Arg Arg Arg Val Tyr Arg Thr Leu Leu Ser Val Pro Lys Gly Arg Trp
85 90 95
Thr Thr Tyr Ser Ala Leu Ala Thr His Leu Gly Ser Ser Ala Arg Ala
100 105 110
Val Gly Asn Ala Met Arg Thr Asn Pro Phe Ala Pro Glu Val Pro Cys
115 120 125
His Arg Val Leu Ala Thr Asn Gly Thr Leu Gly Gly Tyr Lys Gly Glu
130 135 140
Trp Ile Leu Gly Gly Lys Tyr Gln Val Glu Xaa Arg Leu Leu Leu Glu
145 150 155 160
Ala Glu Gly Val Val Phe Asp Glu Arg Gly Arg Ala Gln Gly Glu Cys
165 170 175
Phe Arg Trp Phe Val Asp Leu Gly Ser Gly Lys Tyr Val
180 185

<210> 36569
<211> 125
<212> PRT
<213> A.fumigatus

<400> 36569
Ile Ser Gln Lys Pro Asn Phe Pro His Leu Thr Ile Ala Val Val Gly
1 5 10 15
Gln Glu Lys Ala Gly Lys Ser Thr Phe Ile Arg Ser Ala Leu Asp Met
20 25 30
Lys Asn Pro Leu Ser Ser Arg Ser Thr Thr Lys Lys Met Ser Leu Asp
35 40 45
Gly Thr Val Tyr Leu Val Arg Phe Val Glu Ile Ser Thr Lys Glu Ile
50 55 60
Thr Val Gly Ser Asn Gly Glu Leu Ala Trp Pro Arg Ile Gly Asn Asp
65 70 75 80
Val Thr Ser Pro Lys Val Ile Asp Gly Val Leu Val Leu His Asp Val
85 90 95
Thr Gln Pro Glu Ser Leu Ser Glu Leu Thr Gly Leu Leu Gly Met Phe
100 105 110
His Gly Val Leu Ala Leu Ala Ser Asp Ser His Phe Leu

115 120 125

<210> 36570
<211> 521
<212> PRT
<213> A.fumigatus

<400> 36570

```
Leu Gly Ser Ser Glu Phe Thr Asp His Ser Pro Ser Gln Ser Glu Gln
1               5                  10                  15
Gly Thr Ser Gly Asp Ala Pro Tyr Arg Pro Gly Ser Gln Asp Arg Arg
            20                  25                  30
His Thr Arg Ala Asn Ser Glu Thr Pro Thr Ala Phe Phe Asn Gly Ala
        35                  40                  45
Ala Gly Gly Ser Asn Ser Thr Ser Val Phe Glu Ser Gly Val Asp Gly
    50                  55                  60
Tyr Gly Asp Asp Leu Tyr Pro Val Asp Arg Thr Asp Ser Ser Asn Leu
65                  70                  75                  80
Ala Ser Asn Ser His Ser Pro Arg Tyr Ala Arg Ser Asn Ser Phe Pro
                85                  90                  95
Val Arg Pro His Thr Pro Pro Ser Gly Ala Thr Leu Asn Leu His Arg
            100                 105                 110
Gln Ser Ala Ser Gly Glu Ser Ser Pro Ala Lys Asp Arg Asn Arg Gln
        115                 120                 125
His Arg Leu His Ser Ala Trp Arg Asn Ser Gly Gly Ser Asp Ala Phe
    130                 135                 140
Asn Ser Phe Leu Glu Thr Glu Asp Glu Ile Asp Val Ser Cys Ser Ala
145                 150                 155                 160
Pro Ser Ser Pro Gly Gly Ser Ser Lys Asp Lys Ser Thr Ser Asp Gly
                165                 170                 175
Ser Ser Asn Glu Thr Gly Tyr Thr Phe Asp Glu Leu Val Asp Arg Leu
            180                 185                 190
Val Ala Gln Pro Met Ser Lys Gln Asp Ser Lys Phe Ser Ser Ile Phe
        195                 200                 205
Leu Cys Leu Tyr Arg Lys Phe Ala Ala Pro Ala Ser Leu Leu Asn Ala
    210                 215                 220
Leu Ile His Arg Phe Glu Arg Asn Glu Lys Asn Ile Thr Asp Gln Leu
225                 230                 235                 240
Ala Arg Ile Ala Asp Gln Leu Arg Leu Leu Asn Val Met Ala Gln Trp
                245                 250                 255
Val Ser Glu Tyr Pro Gly Asp Leu Ala Tyr Pro Lys Thr Arg Lys Arg
            260                 265                 270
Ile Leu Asp Phe Val Ser Thr Leu Glu Lys Ser His Phe Tyr Met Phe
        275                 280                 285
Ala Ala Lys Glu Ile Gly Ser Tyr Leu Glu Val Asn Thr Glu Asp Asp
    290                 295                 300
Asp Val Gly Trp Pro Phe Lys Asp Gly Asp Val Glu Glu Phe Glu Asp
305                 310                 315                 320
Gln Glu Ala Leu Tyr Val Asn Ser Gly Trp Ser Ser Pro Ser Met Phe
                325                 330                 335
Leu Gly Gly Pro Thr Ser Gly Glu Asp Glu Gly Glu Glu Glu Glu Glu
            340                 345                 350
Asp Pro Ile Tyr Asn Met Ser Ala Leu Asp Leu Ser Glu Gly Pro Pro
        355                 360                 365
Glu Gln Ser Thr Arg Leu Ser Gly Thr Ser Thr Val Asp Lys Pro Gly
    370                 375                 380
```

```
Thr Ile Ser Ser Gln Ser Phe Met Ser Leu Cys Ile Asp Ala Ala Gln
385                 390                 395                 400
Arg Glu Ser Glu Arg Leu Glu Leu Thr Pro Thr Val Pro Leu Thr Lys
                405                 410                 415
Ile Gln Trp Arg Gln Phe Met Glu Ile Pro Asp Glu Asp Phe Ala Arg
            420                 425                 430
Glu Leu Thr Arg Ile Asp Trp Ile Met Phe Asn Ser Phe Arg Pro Arg
        435                 440                 445
Asp Leu Val Arg His Val Ser Ile Ser Gly Pro Asp Lys Asp Lys Ile
    450                 455                 460
Gln Ser Leu Lys His Val Asn Arg Met Ile Lys Gln Phe Asn His Val
465                 470                 475                 480
Ala Phe Phe Val Ala Ser Met Ile Leu Leu Arg Asp Lys Pro Lys His
                485                 490                 495
Arg Ala Arg Ala Leu Glu Lys Phe Met Asn Ile Ala Gln Val Arg Ile
            500                 505                 510
Asn Arg Glu Gln Gly Lys Gly Asp Ile
        515                 520
```

<210> 36571
<211> 149
<212> PRT
<213> A.fumigatus

<400> 36571

```
Arg Ser Leu Thr Leu Leu Pro Phe Arg Lys Glu Thr Glu Pro Leu Phe
1                 5                  10                  15
Phe Cys Leu Leu Val Glu Thr Tyr Leu Asn Leu Thr Ala Ala Ala Leu
            20                  25                  30
Cys Glu Pro Gly Leu Asn Leu Asn Ala Asn Trp Asp Pro Gln Asn Ser
        35                  40                  45
Pro Ile Ile Pro Pro Ala Ser Pro Asn Arg Glu Pro Leu Ala Thr Pro
    50                  55                  60
Arg Thr Gly Arg Ala Leu Lys Thr Ala Ala Ile Pro Gly Pro Thr Pro
65                  70                  75                  80
Lys His Leu Gln Pro Ser Ser Thr Glu Pro Arg Ala Ala Gln Thr Pro
                85                  90                  95
Pro Val Tyr Leu Asn Gln Glu Ser Met Gly Thr Ala Thr Thr Cys Ile
            100                 105                 110
Pro Ser Thr Gly Pro Thr His Pro Thr Trp Leu Pro Ile Arg Thr Val
        115                 120                 125
Pro Asp Met Pro Gly Ala Thr Arg Phe Arg Cys Asp Arg Thr Pro Pro
    130                 135                 140
Leu Pro Glu Pro Arg
145
```

<210> 36572
<211> 76
<212> PRT
<213> A.fumigatus

<400> 36572

```
Asn Gly Pro Tyr Gly Ser Gly Ser Phe Gln Pro Arg Gly Glu Asp Glu
1                 5                  10                  15
Gln Asn Met Leu His Asp Arg Gly Asn Asn Thr Gly Leu Glu Thr His
            20                  25                  30
```

```
Pro Ala Val Asp His Asp Ala Asp Ile Leu Gln Ala Ala Gln Leu Leu
        35                  40                  45
Leu Pro Gly Ala Tyr Arg Asp Ser Gln Pro Val Gly Arg Gln Ser Val
    50                  55                  60
Val Ile Leu Ile Asn His Trp Phe Ala Asn Cys Tyr
65                  70                  75
```

<210> 36573
<211> 155
<212> PRT
<213> A.fumigatus

<400> 36573

```
Ala Leu His Arg Arg Ala Leu Arg Ser Trp Thr Ser Val Trp Gln Gln
1               5                   10                  15
Ala Pro Glu Ser Ser Leu Asp Pro His Asn Glu Asn Gly Pro Ile Pro
            20                  25                  30
Phe Thr Ser Ser Ser Leu Leu Gly Leu Ala Tyr Val Arg Leu Ser Leu
        35                  40                  45
Asn Leu Gly Pro Tyr Arg Gln Leu Glu Ser Arg Asp Pro Tyr Val Ile
    50                  55                  60
Ala Ala Ala Leu His Arg Ser Pro Arg Pro Gly Arg Ser Tyr Arg Leu
65                  70                  75                  80
Thr Pro Ala Leu Ile Tyr Ala Ala His Ala Leu Ser Ile Pro Val Arg
                85                  90                  95
Leu Gly Ile Asp Tyr Val Ala Arg Ser Gln Ala Phe Phe Trp Ser Val
            100                 105                 110
Arg His Ser Ile Ala Ser Leu Glu Cys Ala Val Leu Leu Ser Lys Trp
        115                 120                 125
Leu Leu Ser Leu Ala Glu Ala Gly Asn Gln Thr Ser Leu Ser Gly Met
    130                 135                 140
Arg Arg His Ser Ser Asp Thr Leu Val Ser Tyr
145                 150                 155
```

<210> 36574
<211> 389
<212> PRT
<213> A.fumigatus

<400> 36574

```
Leu Ala Ile Gln Ile Leu Ala Thr Leu Gly Thr Ala Arg Arg Ser Glu
1               5                   10                  15
Pro Arg Asp Gly Ile Arg Ser Trp Tyr Val Ala Leu Ala Gly Lys Glu
            20                  25                  30
Leu Leu Ser Leu Thr Tyr Ser Leu Glu Pro Pro Gln Thr Ala Thr Asn
        35                  40                  45
Tyr Ser Pro Leu Lys Val Thr Glu Glu Gln Arg Leu Arg Leu Ala Thr
    50                  55                  60
Ser Leu Glu Glu Phe Arg His Leu Ile Pro Asp Phe Val Leu Pro Ser
65                  70                  75                  80
Arg His Thr Leu Thr Arg Tyr Leu Thr Ser Phe Phe Asp Gly Phe His
                85                  90                  95
Thr His Leu Pro Phe Ile His Leu Pro Thr Leu Arg Ile Asn Glu Arg
            100                 105                 110
Ala Pro Glu Leu Ile Leu Ala Phe Leu Thr Val Gly Ala Gln Tyr Arg
        115                 120                 125
```

```
Leu Glu His Arg Asn Ala Glu Arg Leu Phe Tyr Ala Ser Lys Ala Ile
    130                 135                 140
Leu Leu His Arg Leu Ser Lys Glu Ala Gln Pro Ser Thr Gly Gly Ser
145                 150                 155                 160
Tyr Ser Asn Ala Ile Gln Met Pro Ile Ser Thr Val Pro Gly Thr Phe
                165                 170                 175
His Gln Gln Ala Pro Ala Ser Ile Pro Leu Pro Leu Gly Asn Ala Pro
            180                 185                 190
Gly Trp Ser Ala Trp Arg Gln Ile Glu Asn Ile Arg Thr Leu Leu Val
        195                 200                 205
Leu Met Gly Phe Ala Ser Trp Glu Gly Pro Glu Leu Val Gln Glu Ala
    210                 215                 220
Phe Gly Leu Gln His Leu Leu Val Arg Cys Leu Arg Glu Phe Gly Leu
225                 230                 235                 240
Thr Glu Asn Ile Ala Val Thr Pro Arg His Ser Pro Met His Trp His
                245                 250                 255
Glu Trp Ala Glu Asp Glu Ser Val Arg Arg Thr Arg Leu Val Ser Phe
            260                 265                 270
Cys Phe Val His Val His Ser Ile Ala Tyr Asn Ile Tyr Pro Val Leu
        275                 280                 285
Arg Ser Ser Glu Val His Leu Arg Leu Pro Cys Ser Thr Gln Glu Trp
    290                 295                 300
Lys Ala Thr Thr Ala Ser Glu Trp Glu Ala Ala Gln Lys Glu Val Gly
305                 310                 315                 320
Ser Gln Gln Leu Phe Phe Gln Asp Ala Leu Ala Leu Leu Leu Gln Lys
                325                 330                 335
Ser Arg Thr Pro Val Met Leu Asp Pro Ile Pro Ser Pro Leu Gly Asn
            340                 345                 350
Tyr Ile Leu Leu His Gly Leu Leu Gln Arg Ile His Leu Val Ser Glu
        355                 360                 365
Leu Ser Ile Pro Asn Gly Asp Gln Ser Phe Ser Leu Pro Thr Glu Glu
    370                 375                 380
Leu Asn Lys Leu Glu
385
```

<210> 36575
<211> 76
<212> PRT
<213> A.fumigatus

<400> 36575

```
Ser Ala Asp Pro Pro Leu Phe Asp Tyr Ser Ile Asp Asp Ser Ser Ala
1               5                   10                  15
Val Tyr Ala Thr Leu Val Leu Ala Gly Arg Thr Phe Leu Ala Met Leu
            20                  25                  30
Ala Gln Leu Glu His Leu Asp Leu Leu Lys Pro Asp Ser Glu Val Lys
        35                  40                  45
Asn Leu Gly Phe Ile Met Ala Leu Tyr Ile Lys Leu Ala Ala Thr Glu
    50                  55                  60
Asp Ile Ile Asp Leu Glu Glu Ser Ala Pro Arg Ser
65                  70                  75
```

<210> 36576
<211> 467
<212> PRT
<213> A.fumigatus

<400> 36576
Ser Pro Cys Pro Ile Arg Asn Pro Asp Val Leu Ala Met Lys Asn Ser
1 5 10 15
Glu Ile Leu Val His Ile Ser Ala Pro Ser Gly Val Arg Asp Asp Val
20 25 30
Arg Tyr Arg Ala Gln Val Glu Ala Ile Leu Gly Phe Gln Ser Leu Ser
35 40 45
Arg Gln Leu Ile Thr Leu Ser Ser Asp Glu Arg Arg Gly Asn His Gly
50 55 60
Ala Leu Ala Thr Gly Gln Ser Thr Ser Thr Asp Pro Pro Val Asp Ala
65 70 75 80
Asp Leu Gly Gly Glu Ser Lys Cys Ile Gln Pro Ile Leu Ser Asn Ser
85 90 95
Gln Ser Thr Ile Pro Asp Glu Asp Val Glu Val Gly Arg Phe Asn Ala
100 105 110
Ala Arg Pro Asn Pro Gly His Glu Gly Leu Leu Asn Ala Thr Ala Gly
115 120 125
Ser Thr Thr Leu Met Val Lys Asp Ser Met Ile Leu Pro Asp Ser Lys
130 135 140
Val Asp Asn Ser His His Ile Ser Pro Val Ser Leu Leu Ser Gln Pro
145 150 155 160
Gln Asn Glu Arg Ala Ala Lys Asp Ser Leu Glu Ser Pro Leu Ser Val
165 170 175
Ile Pro Asp Ser Gln Pro Glu Ala Ile Arg Ser Gln Ala Glu Gly Ile
180 185 190
Met Leu Arg Pro Asp Pro Cys Val Ala Leu Gly Ser Pro Pro Thr Lys
195 200 205
Arg His Cys Ser Gly Leu Ser Ser Met Leu Arg Glu Ala Val Pro Ala
210 215 220
Ser Asp Ala Leu Ile Leu Ala Pro Lys Leu Asn Glu Glu His His Arg
225 230 235 240
Ser Cys Glu Leu Ala Asp Pro His Pro Val Thr Gln Ile Thr Pro Gln
245 250 255
Pro Asp Pro Glu Arg Pro Pro Gln Val Ser Leu Asp Gly Leu Pro Leu
260 265 270
Ala Ile Lys Pro Ser Pro Pro Pro Val Ser Arg Glu Gln Phe Val Thr
275 280 285
His Val Thr Pro Thr Leu Ala Met Leu Thr Arg Arg Leu Lys Pro Ser
290 295 300
Arg Thr Tyr Lys Pro Val Lys Gln Thr Arg Asp Leu Glu Gln Leu Glu
305 310 315 320
Arg Gly His Trp Tyr Leu Arg Ile Asn Ile Leu Gln Leu Glu Arg Asp
325 330 335
Arg Ser Leu Gly Ala Pro Gly Gln Gln Glu Ser Glu Ala Arg Asn Trp
340 345 350
Asp Leu Ala Cys Phe Ser Arg Phe Trp Ser Phe Leu Ser Asp Phe Ile
355 360 365
Ala Lys Asp Gly Arg Ala Gly Trp Gly Val Trp Cys Ile Leu Glu Asp
370 375 380
Ala Thr Glu Asn Leu Cys Ser Asp Ser Thr Asp Gly Gln Ile Met Pro
385 390 395 400
Gln Arg Thr Thr Ala Pro Ile Ile Ser Asp Gly Lys Thr Asn Pro His
405 410 415
Ser Phe Val Arg Pro Val Ile Leu Lys Leu Tyr Ala Trp Gly Glu Ile
420 425 430

```
Ala Leu His Met Tyr Leu Leu Leu Phe Leu Ala Ser Glu Arg Lys Ile
        435                 440                 445
Arg Lys Met Gly Ala Gln Trp Arg Asp Gly Arg Asp Glu Val Val Ile
    450                 455                 460
Gln Met Pro
465
```

<210> 36577
<211> 121
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (109)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36577

```
Ser Ala Leu Lys Thr Thr Ala Asp Ala Thr Pro Thr Tyr Thr His Thr
1               5                  10                  15
Gln Asp Leu Gln Thr Pro Arg Arg Glu Leu Tyr Arg Cys Asp Gln Pro
            20                  25                  30
Arg Glu Ala Asp Leu Asp Pro Thr His Cys Arg Met Ala Thr Thr Arg
        35                  40                  45
Val Glu Ile Pro Lys Leu Ala Ser Tyr Glu Asn Val Arg Leu Leu Gly
    50                  55                  60
Tyr Val Ala Thr Thr Tyr Ala Lys Arg Asn Ile Ser Leu Val Arg Pro
65                  70                  75                  80
Asp Ile Glu Asn Tyr Ala Ala Trp Pro Thr Asn Ser Ser Asn Pro Ala
                85                  90                  95
Leu Ala Val Arg Gly Ile Phe Phe Asp Asp Thr Leu Xaa Ser Met Met
            100                 105                 110
Lys Met Pro Trp Arg Ile Cys Arg Asn
        115                 120
```

<210> 36578
<211> 88
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (1)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36578

```
Xaa Ile Pro Leu Val Leu Gly Pro Asp His Tyr Val Arg Phe Pro Gly
1               5                  10                  15
Asn Ser Leu Ser Tyr Leu Val Ile Phe Ile Ser Ile Phe Ile Tyr Phe
            20                  25                  30
Phe Tyr Leu Phe Gly Phe Val Ser Ser Leu Ala Thr Phe Pro Val Tyr
        35                  40                  45
Ile Ser Leu Cys Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Ser Gln
    50                  55                  60
Ala Val Val Tyr Ser Leu Gln Val Leu Lys Cys Ser Leu Ile Thr Gly
65                  70                  75                  80
```

Gly Ser Gln Ser Arg Arg Asp Pro
85

<210> 36579
<211> 108
<212> PRT
<213> A.fumigatus

<400> 36579
Leu Gln Val Val His Asn Pro Gly Ala Ile Pro Asp Ser Arg Tyr Leu
1 5 10 15
Ser Thr Ala Asp Ser Thr Val Val Phe Glu Ala Thr Tyr Asp Thr Phe
20 25 30
Gln Glu Arg His Gly Ala Lys Leu Phe Glu Ala Ile Pro Asp Ser Asn
35 40 45
Arg Ser Gln Leu Cys Ala Val Ile His Ser Val Pro Glu Ser Val Glu
50 55 60
Gly Ser Ala Leu Arg Ser Leu Val Lys Gln Val Arg Lys Val Ala Asp
65 70 75 80
Glu Ile Phe Ile Thr His Leu Asp Thr Asp Tyr Tyr Ala Ser Phe Gly
85 90 95
Arg Gln Trp Pro Glu Phe Val Asp Leu Met Gly Lys
100 105

<210> 36580
<211> 323
<212> PRT
<213> A.fumigatus

<400> 36580
Ser Thr Ser Pro Leu Met Asp Ser Leu Gly Lys Gly Gln Ser Ala Gly
1 5 10 15
Gly Trp Lys Ser Trp Thr Thr Arg Lys Lys Leu Phe Val Leu Ala Leu
20 25 30
Val Leu Leu Val Ile Ile Ala Leu Gly Val Gly Leu Gly Val Gly Leu
35 40 45
Gly Ile Gly Leu Gly Gly Gly Gly Gly Gly Glu Gly Glu Glu Gly Ser
50 55 60
Gly Gly Glu Thr Thr Pro Pro Glu Gly Asn Tyr Thr Thr Ala Lys Trp
65 70 75 80
Gln Pro Ala Val Gly Thr Lys Trp Gln Ile Glu Leu Leu Tyr Ala Leu
85 90 95
Asn Asp Thr Ser Val Asp Ala Glu Ile Tyr Asp Ile Asp Leu Phe Ile
100 105 110
Asn Asp Lys Ser Thr Ile Ala Gly Leu Gln Arg Ala Gly Arg Lys Val
115 120 125
Ile Cys Tyr Phe Ser Ala Gly Ser Tyr Glu Asn Trp Arg Pro Asp Lys
130 135 140
Asp Lys Phe Lys Asp Ser Asp Leu Gly His Asp Leu Asp Asp Trp Pro
145 150 155 160
Gly Glu Lys Trp Leu Asn Ile Ser Ser Ala Asn Val Arg Gln Ile Met
165 170 175
Leu Asp Arg Leu Asp Met Ala Arg Asp Lys Gly Cys Asp Gly Val Asp
180 185 190
Pro Asp Asn Val Asp Gly Tyr Asp Asn Asp Asn Gly Leu Asp Leu Thr
195 200 205

```
Gln Ala Asp Ser Ile Ser Phe Val Asn Phe Leu Ala Asn Ala Ala His
    210                 215                 220
Ala Arg Asn Met Ser Ile Gly Leu Lys Asn Ala Gly Asp Ile Ile Pro
225                 230                 235                 240
Ser Val Ile Lys Asn Met Gln Trp Ser Val Asn Glu Gln Cys Ala Gln
                245                 250                 255
Tyr Asn Glu Cys Asp Thr Tyr Ala Val Phe Pro Gln Asn Gly Lys Pro
            260                 265                 270
Val Phe His Ile Glu Tyr Pro Lys Gly Asp Lys Thr Asn Asn Asp Leu
        275                 280                 285
Ser Val Thr Ala Ser Gln Lys Asn Ala Ala Cys Asp Phe Ala Gly Ser
    290                 295                 300
Ala Asn Phe Ser Thr Val Ile Lys Asn Met Asn Leu Asn Asn Trp Val
305                 310                 315                 320
Glu Tyr Cys
```

<210> 36581
<211> 242
<212> PRT
<213> A.fumigatus

<400> 36581

```
Val Ala Ile Glu Leu Ala Gly Ile Arg Val Leu Pro His Ile Leu Asn
1               5                   10                  15
Ala Gly Ile Leu Leu Phe Val Phe Ser Ala Ala Asn Ser Asp Leu Tyr
            20                  25                  30
Ile Ala Thr Arg Thr Ile Tyr Gly Leu Ala Arg Glu Gly Lys Ala Pro
        35                  40                  45
Ala Ile Phe Ala Arg Thr Asp Arg Arg Gly Val Pro Ile Tyr Ala Leu
    50                  55                  60
Ala Ile Ser Ala Cys Phe Ala Cys Leu Ala Tyr Met Asn Val Ser Ser
65                  70                  75                  80
Asp Ser Lys Thr Val Phe Lys Tyr Phe Val Asp Leu Val Thr Ile Phe
                85                  90                  95
Gly Leu Leu Thr Trp Ile Ser Leu Leu Val Thr His Ile Tyr Phe Val
            100                 105                 110
Arg Ala Arg Lys Ala Gln Asn Val Ser Asp Ser Asp Leu Val Tyr Thr
        115                 120                 125
Ala Pro Phe Gly Ala Ala Gly Ser Tyr Phe Ala Leu Val Phe Cys Cys
    130                 135                 140
Ile Ile Ala Leu Thr Lys Ser Phe Asp Val Phe Val His Ser Ser Ser
145                 150                 155                 160
Tyr Gly Asn Phe Asn Tyr Lys Gly Phe Ile Thr Ala Tyr Leu Gly Ile
                165                 170                 175
Pro Leu Tyr Leu Cys Leu Ile Phe Gly Tyr Lys Leu Phe Thr Arg Cys
            180                 185                 190
Lys Gly Val Lys Pro Glu Glu Ala Asp Leu Trp Ser Gly Lys Asp Glu
        195                 200                 205
Ile Asp Arg Glu Glu Ala Glu Tyr Leu Ala Arg Lys Ala Met Glu Glu
    210                 215                 220
Pro Thr Ser Lys Arg Gly Asn Trp Phe Tyr Gln Thr Phe Val Ala Trp
225                 230                 235                 240
Leu Phe
```

<210> 36582
<211> 192
<212> PRT
<213> A.fumigatus

<400> 36582
Thr Ser Arg Val Thr Pro Arg Pro Ser Ser Asn Ile Leu Trp Ile Trp
1 5 10 15
Ser Pro Phe Leu Ala Phe Ser Pro Gly Ser Arg Cys Ser Ser Pro Thr
20 25 30
Ser Thr Ser Phe Ala Pro Ala Lys Pro Arg Thr Ser Leu Thr Leu Thr
35 40 45
Ser Tyr Thr Gln Pro Pro Leu Ala Pro Gln Ala Pro Thr Ser Pro Ser
50 55 60
Ser Ser Ala Ala Ser Leu Arg Ser Leu Arg Ala Ser Thr Tyr Ser Ser
65 70 75 80
Ile Ala Ala Pro Met Ala Thr Ser Thr Thr Arg Ala Ser Ser Pro Arg
85 90 95
Thr Ser Val Ser Pro Tyr Thr Tyr Ala Ser Ser Ser Gly Thr Ser Ser
100 105 110
Ser Leu Ala Ala Arg Ala Ser Ser Pro Lys Arg Gln Ile Cys Gly Gln
115 120 125
Val Arg Met Arg Ser Thr Ala Arg Arg Arg Ser Ile Trp Leu Ala Arg
130 135 140
Arg Trp Lys Ser Gln Pro Val Ser Ala Gly Thr Gly Ser Ile Arg His
145 150 155 160
Leu Trp Arg Gly Cys Ser Lys Thr Pro Pro Ser Arg Leu Phe Thr Phe
165 170 175
Phe Phe Phe Phe Ser Ser Ala Asn Met Arg Phe Gly Cys Asp Thr Ser
180 185 190

<210> 36583
<211> 177
<212> PRT
<213> A.fumigatus

<400> 36583
Gly Asp Thr Glu Val Arg Gly Asp Glu Ala Leu Val Val Glu Val Ala
1 5 10 15
Ile Gly Ala Ala Met Asp Glu Tyr Val Glu Ala Leu Ser Glu Arg Asn
20 25 30
Asp Ala Ala Glu Asp Glu Gly Glu Val Gly Ala Cys Gly Ala Lys Gly
35 40 45
Gly Cys Val Tyr Glu Val Arg Val Arg Asp Val Leu Gly Phe Ala Gly
50 55 60
Ala Asn Glu Val Asp Val Gly Asp Glu Gln Arg Asp Pro Gly Glu Lys
65 70 75 80
Ala Lys Asn Gly Asp Gln Ile His Lys Ile Phe Glu Asp Gly Leu Gly
85 90 95
Val Thr Arg Asp Val His Val Gly Gln Ala Gly Glu Ala Gly Gly Asp
100 105 110
Gly Glu Gly Ile Asp Gly Asp Ala Ala Ala Val Gly Ala Gly Glu Asp
115 120 125
Gly Gly Arg Phe Ala Leu Ala Arg Glu Thr Val Asn Gly Thr Ser Gly
130 135 140
Asp Val Glu Val Arg Val Ser Gly Gly Glu Asp Glu Glu Glu Asp Ala

```
145                 150                 155                 160
Gly Val Glu Asp Val Gly Lys Asp Ala Asn Ala Gly Gln Leu Asp Arg
                165                 170                 175
Asp
```

<210> 36584
<211> 393
<212> PRT
<213> A.fumigatus

<400> 36584

```
Gly Ser Ala Gly Ile His Pro Val Asp Ala Pro Val Asp Pro Ile Trp
1               5                  10                  15
Arg Phe Val Leu Pro Arg Leu Pro Ala Ser Val Gly Tyr Arg Pro Val
            20                  25                  30
Asp Ala Ala Asp Gly Phe Asp Val Leu Leu Ser Cys Pro Asp Asp Gln
        35                  40                  45
Cys Arg Gly Val Pro Arg Arg Ala Gly Asn Pro Gly Ala Ser Thr Trp
    50                  55                  60
Glu Asp Pro Trp Pro Asp Gly Arg Pro Leu Pro Ser Gln Asp His Arg
65                  70                  75                  80
Arg Arg Arg Trp Gln Pro Cys Ala Arg Met Asp Gln Tyr Leu Asn Arg
                85                  90                  95
Asn Leu Arg Arg Val Gln Ser His His Pro Leu Trp Lys Ile Ala Ala
            100                 105                 110
Ser His Pro Ser Pro Gly Gly Leu Arg Leu Gly Val Cys Ala Asp Ala
        115                 120                 125
Glu Pro Arg Arg Leu Arg Leu Tyr Leu Gly Ile Arg Ser Pro Met Ala
    130                 135                 140
Gln Glu Pro Pro Ala His Glu Ser Pro Phe Leu Ser Arg His Arg Pro
145                 150                 155                 160
Arg Pro Arg Leu Gly Ile Pro Met Gly Arg Arg Ala His Thr Val Glu
                165                 170                 175
Pro Val Leu Gly Glu Leu Arg Arg His Arg Ala Ile Arg Arg His Gly
            180                 185                 190
Ser Ala Pro Thr Gly Pro Val Gly Pro Gln Arg Asp Thr Asn Gln Gln
        195                 200                 205
Arg Gln Asn Arg Arg Leu Pro Arg Pro Pro Leu Leu Leu Pro Thr Asp
    210                 215                 220
Pro Leu Pro Leu Leu Val Leu Leu Leu Val Arg Pro Ala His Ala Gly
225                 230                 235                 240
Lys Pro Arg Arg Ala Arg His Arg Pro Arg Lys Ser His Pro Pro Asp
                245                 250                 255
His Pro Arg Asn Leu Arg Arg His Arg Arg Leu Arg Arg His His His
            260                 265                 270
Arg Arg Arg Pro Ser Pro Glu Gln Pro Thr Pro Glu Thr His Leu Pro
        275                 280                 285
His Arg Arg Gln Leu Arg Arg Gln Arg Ser Arg Leu Val Leu Pro Pro
    290                 295                 300
Ala Thr His Arg Leu Arg Leu Pro Asp Gln Thr Ala Arg Pro Arg Glu
305                 310                 315                 320
Leu Arg Leu Pro Pro Ala Val Arg Val His Arg Ala Asp Arg Gln Gly
                325                 330                 335
Asp Leu Gln Cys Arg Ser Asp Val Trp Glu Ile Pro His Arg Arg Ser
            340                 345                 350
```

```
Cys Ala Glu His Arg Ser Gly Leu Gly Arg Gly Ala Ala Ala His Gly
        355                 360                 365
Ala Arg Arg Ser Ser Cys Ile Pro Arg Arg Arg Ala Ser Ala Ser His
    370                 375                 380
Ala Ala Ser Pro Ala Gly Gly Cys Arg
385                 390
```

<210> 36585
<211> 450
<212> PRT
<213> A.fumigatus

<400> 36585

```
Ile Pro Ser Leu Leu Gly Leu Leu Pro Asp Ser Leu Arg Thr Ala Tyr
1               5                   10                  15
Thr Pro Leu Ile Asp Asn Leu Ala Glu Met Ile Tyr Ala Thr Tyr Pro
            20                  25                  30
Thr Arg Arg Pro Ala Gly Phe Glu Asp Gln Pro Gly Phe Ile Pro Ser
        35                  40                  45
Met Arg Gln Ser Thr Gln Phe Gly Asp Leu Phe Phe Arg Asp Tyr Gln
    50                  55                  60
Pro Leu Ser Val Ile Val Pro Trp Met Arg Leu Met Ala Ser Met Phe
65                  70                  75                  80
Ser Ser His Val Gln Met Ile Asn Val Gly Val Ser His Glu Gly Arg
                85                  90                  95
Glu Ile Pro Ala Leu Arg Leu Gly Arg Thr Arg Gly Gln Thr Ala Asp
            100                 105                 110
Pro Tyr Pro Arg Lys Thr Ile Val Val Val Gly Gly Ser His Ala Arg
        115                 120                 125
Glu Trp Ile Ser Thr Ser Thr Val Ile Tyr Val Ala Tyr Ser Leu Ile
    130                 135                 140
Thr Arg Tyr Gly Lys Ser Gln Gln Val Thr Arg Leu Leu Glu Asp Phe
145                 150                 155                 160
Asp Trp Val Phe Val Pro Thr Leu Asn Pro Asp Gly Tyr Val Tyr Thr
                165                 170                 175
Trp Glu Ser Asp Arg Leu Trp Arg Lys Asn Arg Gln Pro Thr Ser Leu
            180                 185                 190
His Phe Cys Pro Gly Ile Asp Leu Asp Arg Ala Trp Glu Phe Gln Trp
        195                 200                 205
Asp Gly Glu Arg Thr Arg Ser Asn Pro Cys Ser Glu Asn Tyr Ala Gly
    210                 215                 220
Thr Glu Pro Phe Glu Gly Thr Glu Ala His Gln Leu Ala Gln Trp Ala
225                 230                 235                 240
Leu Asn Glu Thr Gln Thr Asn Asn Ala Lys Ile Val Gly Phe Leu Asp
                245                 250                 255
Leu His Ser Tyr Ser Gln Gln Ile Leu Tyr Pro Phe Ser Phe Ser Cys
            260                 265                 270
Ser Ser Val Pro Pro Thr Leu Glu Ser Leu Glu Glu Leu Gly Ile Gly
        275                 280                 285
Leu Ala Lys Val Ile Arg Leu Thr Thr His Glu Ile Tyr Asp Val Thr
    290                 295                 300
Ala Ala Cys Glu Gly Thr Ile Thr Ala Asp Asp Gln Ala Arg Asn Ser
305                 310                 315                 320
Pro Pro Gln Arg Pro Ile Phe Pro Thr Gly Gly Ser Ser Gly Gly Ser
                325                 330                 335
Ala Leu Asp Trp Phe Tyr His Gln Leu His Thr Asp Tyr Ala Tyr Gln
```

```
            340                 345                 350
Ile Lys Leu Arg Asp Arg Gly Ser Tyr Gly Phe Leu Leu Pro Ser Glu
        355                 360                 365
Tyr Ile Val Pro Thr Gly Lys Glu Ile Phe Asn Val Val Leu Thr Phe
    370                 375                 380
Gly Lys Phe Leu Ile Gly Asp Leu Ala Gln Asn Thr Asp Leu Asp Trp
385                 390                 395                 400
Asp Ala Glu Leu Gln Arg Thr Glu Pro Asp Glu Ala Pro Ala Ser Gln
                405                 410                 415
Gly Asp Gly Pro Ala Pro Ala Thr Gln Gln Val Leu Gln Ala Asp Val
            420                 425                 430
Asp Asp Glu Glu Thr Glu Trp Val Glu Asn Ala Arg Ser Glu Phe Arg
        435                 440                 445
Arg Arg
    450
```

<210> 36586
<211> 90
<212> PRT
<213> A.fumigatus

<400> 36586

```
Ala Asn Thr Phe Thr Asp Met Asp Ala Ser Phe Gly Ala Ile Ser Gln
1               5                   10                  15
His Arg Val Leu His Leu Ala Asp Cys Thr Phe Pro Ser Leu Phe Ile
            20                  25                  30
Pro Ile His Gly Ser Asp Glu Ala Ser Phe Ala Phe Val Glu Tyr Glu
        35                  40                  45
Ser Arg Arg Asp Ala Asp Asp Ala Tyr His Glu Met His Asn Lys Arg
    50                  55                  60
Ile Gly Arg Asp Asp Leu Leu Lys Ile Glu Val Arg Phe Leu Ala Phe
65                  70                  75                  80
Cys Arg Cys Pro Ser Arg Leu Ile Ser Pro
                85                  90
```

<210> 36587
<211> 136
<212> PRT
<213> A.fumigatus

<400> 36587

```
Trp Ala Arg Thr Pro Pro Ser Ala Ser Trp Arg Phe Glu Ser Gly Arg
1               5                   10                  15
Asp Arg Arg Arg Asp Arg Thr Pro Pro Arg Arg Gly Arg Ser Pro Ser
            20                  25                  30
Pro Arg Arg Ser Arg Gly Asp Tyr Ser Pro Arg Arg Asp Glu Arg Tyr
        35                  40                  45
Asp Arg Asp Tyr Asp Arg His Asp Arg Asp Tyr Asp Arg Arg Asp Arg
    50                  55                  60
Asp Tyr Asp Arg Arg Asp Arg Asp Tyr Asp Arg Arg Asp Arg Asp Arg
65                  70                  75                  80
Glu Arg Ser Arg Asp Arg Ser Arg Ser Pro Asp Glu Arg Asp Arg Asp
                85                  90                  95
Val Lys Glu Asp Arg Glu His Arg Asp Asp Glu Arg Glu Arg Arg Glu
            100                 105                 110
Glu Asp Arg Glu Asn Gly Pro Asn Gly Glu Asp Arg Lys Gly Thr Tyr
```

```
        115                 120                 125
Leu Ser Ile His Gln Gly Gln Arg
    130                 135

<210> 36588
<211> 144
<212> PRT
<213> A.fumigatus

<400> 36588
Phe Leu Leu Ser Gly Leu Val Leu Leu Leu Pro His Gly Ala Leu
1               5                   10                  15
Asn Pro Asp Val Thr Asp Val Val Thr Val Leu Pro Leu Val Glu Val
            20                  25                  30
Ala Pro His Leu Leu Val Gly Val Glu Val Ile Ile Pro Leu Ala Gly
        35                  40                  45
Met Lys Asp Thr Ile Glu Ile Met Thr Asp Met Thr Gly Thr Met Thr
    50                  55                  60
Val Ala Thr Glu Thr Met Thr Ala Val Ile Glu Thr Met Thr Val Ala
65                  70                  75                  80
Ile Gly Thr Glu Asn Ala Leu Val Thr Val Arg Glu Ala Leu Met Lys
                85                  90                  95
Gly Thr Val Met Ser Arg Lys Thr Glu Asn Ile Val Met Met Arg Glu
            100                 105                 110
Ser Ala Ala Lys Lys Ile Ala Lys Thr Ala Arg Thr Val Lys Thr Gly
        115                 120                 125
Lys Val His Thr Phe Gln Ser Ile Arg Asp Lys Asp Glu Phe Cys Ser
    130                 135                 140

<210> 36589
<211> 353
<212> PRT
<213> A.fumigatus

<400> 36589
Glu Gly Gly Ala Ser Ser Arg Gly Leu Tyr Lys Ile Thr Thr Tyr Pro
1               5                   10                  15
Thr Leu Lys Leu Leu Arg Ile Leu Pro Lys Leu Leu Phe Gly Pro Cys
            20                  25                  30
Pro Ser Gln Asn Leu Ser Asn Pro Pro Ala Thr Met Arg Val Ser Leu
        35                  40                  45
Phe Ala Ile Ile Thr Ala Leu Thr Cys Val Ile Ala Lys Ile Pro Asp
    50                  55                  60
Ser Pro Arg Phe Asp Leu Thr Lys Pro Ser Tyr Asp Leu Trp Arg Asn
65                  70                  75                  80
Lys Lys Thr Ala Ala Lys Thr Val Gln Gln Ser Phe Thr Phe Asp Asn
                85                  90                  95
Val Asn Arg Arg Leu Phe Ile Val Asn Arg Arg Asp Gly Ser Ala Leu
            100                 105                 110
Asp Ser Gly Asp Leu Thr Ile Ser Gln Val Asp Phe Ser Gly Lys Val
        115                 120                 125
Leu Gly Ser Met Asn Leu Leu Gly Cys Gly His Gly Val Lys Ile Ala
    130                 135                 140
Ala Glu Pro Val Gly Ser Asp Thr Tyr Ile Trp Ser Glu Thr Asp Ala
145                 150                 155                 160
Ala Ala Ser Gly Tyr Gly Thr Ala Leu Trp Lys Phe Lys Phe Gln Asn
```

```
                165                 170                 175
Gly Lys Thr Leu Asn Ser Ala Thr Asp Lys Arg Lys Arg Ile Val Pro
            180                 185                 190
Leu Pro Glu Phe Asp Arg Gly Thr Ala Thr Ile Asp Pro Val Tyr Lys
        195                 200                 205
Arg Leu Ile Val Arg Tyr Gln Thr Gly Thr Val Gln Asn Ile Ala Ala
    210                 215                 220
Phe Asp Leu Ala Glu Ala Ser Ala Gly Asn Phe Ser Asn Pro Leu Ala
225                 230                 235                 240
Lys Trp Glu Ile Pro His Leu Val Lys Glu Leu Gly Ala Lys Val Asn
                245                 250                 255
Val Phe Gln Gly Tyr Thr Ala Tyr Gly Arg Tyr Val Tyr Phe Leu Thr
            260                 265                 270
Gly Glu Ser Tyr Asp Ala Ser Gly Gly Lys Leu Asn Ser Glu Val Met
        275                 280                 285
Ala Leu Asp Leu Asn Thr Gly Lys Leu Val Gln Gly Pro Val Thr Thr
    290                 295                 300
Lys Ala Gly Ser Thr Leu Lys Phe Arg Glu Pro Glu Gly Met Ala Ile
305                 310                 315                 320
Tyr Lys Thr Ala Ser Gly Glu Val Arg Leu Phe Leu Gly Phe Ala Ser
                325                 330                 335
Gly Val Ala Gly Asp Arg Arg Ser Asn Leu Phe Tyr Lys Asn Ala Leu
            340                 345                 350
Ile
```

<210> 36590
<211> 66
<212> PRT
<213> A.fumigatus

<400> 36590

```
Thr Arg Asp Gln His Leu Val Gln Gln Gly Ala Glu Lys Tyr Glu Asp
1               5                   10                  15
Val Tyr Val Leu Gln Leu Asp Val Asp Ala Met Ser Ile Ile Ile Arg
            20                  25                  30
Ser Glu Ala Gln Cys Arg Ala Ile Trp Pro Val Ser Ile Phe Met Val
        35                  40                  45
Thr Trp Cys Arg Asp Glu Thr Ile Thr Leu Gln Leu Met His Val Pro
    50                  55                  60
Ser Glu
65
```

<210> 36591
<211> 88
<212> PRT
<213> A.fumigatus

<400> 36591

```
Arg Tyr Met Arg Lys Gln Gly Lys Tyr Arg Ser Glu Asn Lys Pro Asp
1               5                   10                  15
Ala Ser Ile Leu Asn Ser Phe His Trp Gln Glu Gly Ile Pro Ser Ile
            20                  25                  30
Thr Tyr Ser Val Gly Gly Lys Phe Arg Gln Tyr Tyr Val Ser Ile Thr
        35                  40                  45
His Glu Pro Ala Ala Leu Ala Met Ser Ser Arg Ala Gly Ile Trp Asn
```

```
    50                  55                  60
Ala Ala Asn Leu Ile Ile Ile Arg Asn Ser Asn Gln Leu Cys Thr Trp
65                  70                  75                  80
Cys Ser Val Arg Lys Ala Val Phe
                85
```

<210> 36592
<211> 86
<212> PRT
<213> A.fumigatus

<400> 36592

```
Leu Glu Gln Glu Glu Ile Asp Lys Glu Ser Leu Arg Lys Val Ser Gln
1               5                  10                  15
Glu Leu Ser Thr Ala Asn Leu Leu Ala His Lys Asp Lys Gly Val Arg
            20                  25                  30
Ala Trp Thr Ala Cys Cys Ile Val Asp Val Leu Arg Leu Cys Ala Pro
        35                  40                  45
Asp Ala Pro Phe Thr Ala Asn Gln Leu Lys Val Arg Trp Ile Cys Arg
    50                  55                  60
Cys Ser Leu Asp Val Leu Gly Phe Asp Leu Thr Ile Met Ile Thr Arg
65                  70                  75                  80
Thr Phe Ser Leu Ala Ser
                85
```

<210> 36593
<211> 553
<212> PRT
<213> A.fumigatus

<400> 36593

```
Asp Ile Phe Thr Cys Phe Val Thr Ser Ile Ile Pro Ala Leu Gly Asp
1               5                  10                  15
Pro Ser Asn Thr Tyr Asn Ala Gln His Ile Tyr Val Leu Asn Ser Leu
            20                  25                  30
Ala Glu Val Lys Ser Ile Val Leu Met Thr Asp Leu Asp Gln Pro Asp
        35                  40                  45
Ser Leu Ile Ile Pro Leu Phe Thr Thr Cys Phe Asp Ile Val Ser Gly
    50                  55                  60
Ser Ser Lys Ala Ser Thr Gly Glu Glu Ile Ala Lys Asn Val Glu Phe
65                  70                  75                  80
Asp Met Thr Arg Leu Leu Val Thr Val Ile Asp Glu Ser Pro Val Leu
                85                  90                  95
Ala Pro Asp Val Val Asp Ile Ile Val Ala Gln Phe Leu Arg Val Asp
            100                 105                 110
Pro Arg Val Leu Glu Pro Leu Asn Lys Arg Ser Arg Lys Ala Asp Thr
        115                 120                 125
Leu Val Asp Ser Lys Gln Gly Thr Leu Leu Leu Lys Asp Tyr Pro Pro
    130                 135                 140
Ala Tyr Asn Met Ala Lys Ala Ile Cys Gln Ala Cys Pro Glu Arg Met
145                 150                 155                 160
Thr Ser His Ile Ser Gln Tyr Phe Asn Asn Val Ile Ile Asp Ala Ser
                165                 170                 175
Gly Ser Gly Ala Thr Asn Gly Ser Ser Lys His His Arg Lys Pro Asn
            180                 185                 190
Leu Asp Glu Ser Asp Glu Glu Gly Glu Asp Val Lys Glu Leu Ser Lys
```

```
        195                 200                 205
Ala His Arg Leu Ile Arg Glu Leu Trp Arg Ala Cys Pro Asp Val Leu
    210                 215                 220
Gln Asn Val Val Pro Gln Leu Glu Ala Glu Leu Ser Ala Glu Ser Val
225                 230                 235                 240
Ser Leu Arg Leu Leu Ala Thr Gln Thr Ile Gly Asp Leu Thr Ala Gly
                245                 250                 255
Ile Gly Val Ala Gly Pro Pro Pro Pro Pro Pro Met Asp Pro Ala Gly
            260                 265                 270
Phe Pro Pro Val Thr Leu Ala Glu Tyr Ala Gln Thr Ile Pro Gln Pro
        275                 280                 285
Asn Val Leu Val Lys Pro Leu Ser Pro Lys Pro Phe Ser Gln Ala His
    290                 295                 300
Ser Ser Thr Tyr Glu Ser Phe Leu Ser Arg Arg Phe Asp Lys Ser Ala
305                 310                 315                 320
Ser Val Arg Ala Ala Trp Val Thr Val Ile Gly Arg Ile Leu Leu Thr
                325                 330                 335
Ser Ala Gly Gly Ser Gly Leu Ser Glu Asn Glu Gln Gln Thr Leu Ile
            340                 345                 350
Glu Asn Leu Thr Ser Met Leu Arg Asp Ala Asp Glu Lys Val Arg Leu
        355                 360                 365
Ala Ala Val Asp Ala Val Gly Met Phe Gly Leu Ser Asp Val Val Ser
    370                 375                 380
Lys Leu Gly Leu Gly Gly Gly Phe Ser Thr Ser Asp Ser Leu Leu Ala
385                 390                 395                 400
Val Leu Ala Glu Arg Val Lys Asp Arg Lys Ser Gln Val Arg Asp His
                405                 410                 415
Ala Thr Lys Thr Leu Ala Arg Ile Trp Ala Val Ala Ala Gly Asp Ile
            420                 425                 430
Glu His Gly Asn Glu Gln Val Val Ser Leu Leu Lys Asp Gly Pro Ser
        435                 440                 445
Lys Ile Phe Asp Ala Tyr Tyr Thr Asn Asp Pro Glu Ile His Ile Leu
    450                 455                 460
Ile Asp Arg Val Leu Phe Glu Ile Leu Leu Pro Leu Asn Tyr Pro Pro
465                 470                 475                 480
Ile Lys Pro Lys Leu Ser Arg Ser Ser Ser Ser Gln Ser Gln Lys Gln
                485                 490                 495
Lys Glu Ser Gln Ser Ala Glu Ala Asp Ser Asp Ala Asp Ile Asp Lys
            500                 505                 510
Ile Arg Val Arg Arg Ile Leu Thr Leu Leu Ala Gly Leu Asp Asp Lys
        515                 520                 525
Ala Lys Arg Ser Phe Thr Arg Cys Lys Val Gly Lys Ser Leu Ser Gly
    530                 535                 540
Leu Gln Gln Pro Ala Arg Ile Ile Asp
545                 550
```

<210> 36594
<211> 108
<212> PRT
<213> A.fumigatus

<400> 36594

```
Ala Arg Val Leu Arg Arg His Gly Leu Arg Arg Ser Thr Ala Cys Ala
1               5                   10                  15
Thr Trp Tyr Val Ile Glu Leu Gln Val Ile Val Gln Ser Val Arg Leu
            20                  25                  30
```

```
Thr Phe Pro Ser Pro Thr Ser Lys Ala Thr Gly Asp Met Leu Arg Ser
        35                  40                  45
Gln Val Ala Lys Lys Thr Glu Leu Gly Lys Glu Ala Lys Lys Ile Met
    50                  55                  60
Asp Gln Gly Gly Leu Val Ser Asp Glu Ile Met Val Asn Met Ile Lys
65                  70                  75                  80
Asn Glu Leu Asp Thr Asn Ser Glu Cys Lys Asn Gly Phe Val His Thr
                85                  90                  95
Cys Leu Val Glu Val His Ser Val Gly Asp Gly Lys
            100                 105
```

<210> 36595
<211> 140
<212> PRT
<213> A.fumigatus

```
<400> 36595
Leu Ser Asn Val Ser Arg Phe Ile Leu Asp Gly Phe Pro Arg Thr Val
1               5                   10                  15
Ala Gln Ala Glu Arg Leu Asp Asp Met Leu Glu Ala Arg Asn Gln Lys
            20                  25                  30
Leu Gln His Ala Ile Glu Leu Gln Ile Asp Asp Ala Leu Leu Val Ala
        35                  40                  45
Arg Ile Thr Gly Arg Leu Val His Pro Ala Ser Gly Arg Ser Tyr His
    50                  55                  60
Lys Ile Phe Asn Pro Pro Gln Asn Asp Met Lys Asp Asp Val Thr Gly
65                  70                  75                  80
Glu Pro Leu Asn Gln Arg Ser Asp Asp Thr Ala Glu Thr Leu Lys Lys
                85                  90                  95
Arg Leu Ser Thr Tyr His Ala Gln Thr Ala Pro Val Val Glu Tyr Tyr
            100                 105                 110
Lys Lys Thr Gly Ile Trp Arg Gly Ile Asp Ala Ser Gln Glu Pro Gly
        115                 120                 125
Gln Val Trp Lys Ser Leu Leu Gly Val Phe Gln Lys
    130                 135                 140
```

<210> 36596
<211> 75
<212> PRT
<213> A.fumigatus

```
<400> 36596
Arg His Ser Ser Ile Gln Pro Ala Val Ile Ala Met Ala Pro Ile Thr
1               5                   10                  15
Glu Glu Val Val His Gly Leu Lys Asp Met Ile Glu Lys Leu Glu Asn
            20                  25                  30
Arg Val Gln Glu Leu Glu Ala Arg Leu Gly Gly Glu Ser Lys Pro Lys
        35                  40                  45
Ser Ile Ala Glu Gln Met Arg Ile Val Leu Met Gly Pro Pro Gly Ala
    50                  55                  60
Gly Met Val Phe Tyr Lys Gly Cys Arg Leu Arg
65                  70                  75
```

<210> 36597
<211> 222
<212> PRT

<213> A.fumigatus

<400> 36597
Phe Arg Ala Pro Asn Asp Ala Thr Leu Arg Asn Thr Pro Cys Pro Ile
1 5 10 15
Cys Gln Glu Thr Phe Glu Ser Thr Trp Ser Glu Glu Val Gln Asp Trp
20 25 30
Ile Trp Gln Asp Ala Val Lys Val Gly Asn Arg Ile Tyr His Ala Ser
35 40 45
Cys Tyr Ala Glu Val Thr Lys Asp Gly Thr Thr Thr Ala Ala Gly Arg
50 55 60
Gly Thr Pro Ser Ala Arg Thr Gly Thr Pro Asp Ser Val Leu Gly Lys
65 70 75 80
Arg Lys Ala Glu Val Cys Ser Ile His Arg Gly Arg Lys Phe Ala Arg
85 90 95
Ile Lys Leu Ile Arg Arg Arg Gly Pro Thr Leu Leu Gly Pro Met Ser
100 105 110
Glu Ser Arg Trp Ser Leu Arg Glu Arg Gln Cys Phe Asn Gln Val Arg
115 120 125
Tyr Pro Gly Pro Cys Phe Leu Leu Val Pro Arg Gly Ala Ala Cys Met
130 135 140
Arg Trp Ser Trp His Tyr Thr Leu Cys Leu Val Val Ala Phe Ser Arg
145 150 155 160
Arg Leu Tyr Cys Ile Leu Arg Ala Cys Thr Ile Leu Arg Arg Leu Gly
165 170 175
Asp Phe Ser Leu Ser Thr Ser Ile Thr Ile Pro Val Phe His Thr Ile
180 185 190
Leu His Arg Thr Phe His Lys Pro Met Ala Ile Ala Arg Met Ala Leu
195 200 205
Ile Leu Val Pro His Ser Leu Phe Ser Leu Asp Ser Pro Arg
210 215 220

<210> 36598
<211> 75
<212> PRT
<213> A.fumigatus

<400> 36598
Ile Gln Ser Cys Ser Gln Val Ser Val Ser Leu Trp His His Pro Ser
1 5 10 15
Leu Leu Tyr Ser Ser Thr Ala Ser Ser Pro Ser Phe Asp Val Thr Met
20 25 30
Ala Pro Tyr Asn Val Arg Trp Gly Ile Met Gly Met Phe Phe His Pro
35 40 45
Pro Leu Tyr His Pro Ser Pro Lys Gly Arg Ser Lys Leu Thr Val Leu
50 55 60
Gln Ile Lys His Ser His Arg Leu Asp Cys Arg
65 70 75

<210> 36599
<211> 189
<212> PRT
<213> A.fumigatus

<400> 36599
His Leu Val Phe Val Arg Asp Leu Leu Arg Asp Pro Asn Leu Arg Asp

```
1               5                   10                  15
Ala Ser Asp Val Ser His Thr Val Val Ala Val Ala Ser Ser Ser Ala
            20                  25                  30
Lys Asp Arg Ala Glu Lys Phe Ile Ala Asp Thr Gly Ile Pro Ala Pro
        35                  40                  45
Cys Ala Ala Tyr Gly Ser Tyr Glu Glu Leu Val Ala Asp Ala Asn Val
    50                  55                  60
Asp Val Val Tyr Val Ala Thr Pro His Ser His His Phe Gln Asn Val
65                  70                  75                  80
Met Leu Ala Leu Glu Ala Gly Lys Asn Val Leu Cys Glu Lys Ala Phe
                85                  90                  95
Thr Val Asn Ala Ala Gln Ala Lys Ile Leu Cys Glu Thr Ala Lys Lys
            100                 105                 110
Lys Asn Leu Phe Leu Met Glu Ala Val Trp Thr Arg Tyr Phe Pro Leu
        115                 120                 125
Ser Val Gln Val Arg Asn Leu Ile Lys Glu Gly Ala Ile Gly Glu Val
    130                 135                 140
Leu Arg Val Val Ala Asp Asn Ser Phe Gly Asp Asn Val Glu Glu Arg
145                 150                 155                 160
Trp Gly Thr Gln His Arg Met Val Asn Lys Asp Leu Ala Gly Gly Cys
                165                 170                 175
Leu Leu Asp Cys Glu Phe Pro Leu Ser Ser Thr Gly Ser
            180                 185
```

<210> 36600
<211> 117
<212> PRT
<213> A.fumigatus

```
<400> 36600
Val Cys Thr Lys Phe Ala Leu Val Lys Trp Ser Leu Leu Phe His Met
1               5                   10                  15
Leu Ile Gly Cys Arg Pro Arg Glu Gly Leu Ile Ala Ser Leu Tyr Glu
            20                  25                  30
Ala Arg Ser Asn Arg Cys Gly Thr Cys Gly Arg Arg Phe Phe Ala Thr
        35                  40                  45
Glu Glu Gly Lys Glu Lys Lys Ala Arg His Leu Asp Trp His Phe Arg
    50                  55                  60
Thr Asn Gln Arg Met Ala Asp Ala Ala Lys Arg Ala Gln Asn Arg Ser
65                  70                  75                  80
Trp Tyr Val Asp Glu Arg Val Ser Gly Phe Leu Phe Val Gln Phe Ser
                85                  90                  95
Tyr Pro Gly Glu Phe Pro Asn Asn Arg Ala Gly Leu Asp Lys Ile Pro
            100                 105                 110
Arg Ser Arg Arg Arg
        115
```

<210> 36601
<211> 90
<212> PRT
<213> A.fumigatus

```
<400> 36601
Thr Arg Ile Ser Pro Val Ala Ala Cys Trp Ile Val Ser Phe Pro Phe
1               5                   10                  15
Leu Leu Arg Ala Pro Glu Ser Phe Ser Thr Ala Ser Asn Asp Arg Phe
```

```
            20                  25                  30
Leu Ala Val Gly Ile Tyr Ser Leu Thr Trp Val Phe Gln Thr Met Tyr
        35                  40                  45
His Thr Leu Pro Arg Glu Ala Ala Gln Ser Ser Phe Gly His Leu Arg
    50                  55                  60
Ala His Val Ser Leu Pro Pro His Trp Arg Arg Arg Gly His His Asp
65                  70                  75                  80
Pro Ser His Val Pro Asp Asp His Pro Asn
                85                  90
```

<210> 36602
<211> 182
<212> PRT
<213> A.fumigatus

<400> 36602

```
Thr Ser Thr Arg His Val Cys Thr Asn Pro Phe Leu His Ser Glu Leu
1               5                   10                  15
Val Ser Ser Ser Phe Leu Ile Met Leu Thr Met Ile Ser Ser Leu Thr
            20                  25                  30
Arg Pro Pro Trp Ser Met Ile Phe Leu Ala Ser Phe Pro Ser Ser Val
        35                  40                  45
Phe Leu Ala Thr Trp Asp Arg Ser Ile Ser Pro Val Ala Phe Glu Val
    50                  55                  60
Gly Glu Gly Asn Val Arg Arg Thr Leu Cys Thr Met Thr Cys Asn Ser
65                  70                  75                  80
Ile Thr Tyr Gln Val Ala His Ala Val Leu Leu Leu Lys Pro Trp Arg
                85                  90                  95
Leu Ser Thr Leu Ala Tyr Asn Pro Ile Arg Thr Met Lys Pro Leu Ser
            100                 105                 110
Gln Ala Ala Thr Leu Val Lys Asp His Thr Ser Thr Gly Gly Ser His
        115                 120                 125
Lys Asp Asp Ala His Leu Leu Gly Asp Arg Leu Gly Leu Gly Phe Ala
    130                 135                 140
Ala Glu Ala Gly Leu Gln Leu Leu His Thr Val Leu Lys Phe Leu Asn
145                 150                 155                 160
His Val Phe Gln Thr Val Asp Asp Leu Phe Cys Asp Arg Ser His Cys
                165                 170                 175
Asp Tyr Cys Arg Leu Asn
            180
```

<210> 36603
<211> 185
<212> PRT
<213> A.fumigatus

<400> 36603

```
Pro Gly Ser Ser Arg Leu Cys Thr Thr Leu Phe Pro Gly Lys Gln Arg
1               5                   10                  15
Lys Ala Pro Ser Ala Ile Ser Ala His Met Ser Leu Tyr His Leu Thr
            20                  25                  30
Gly Ala Asp Glu Ala Thr Thr Ile Leu Leu Thr Phe Pro Thr Thr Thr
        35                  40                  45
Pro Thr Asn Asn Ala Gln Pro Gly Gln Ser His Ala Val Ala Met Thr
    50                  55                  60
His Leu Arg Val Ala Thr Asp Pro Asn Glu Gln Gly Ala Ala Gly Pro
```

```
65                  70                  75                  80
Ser Ile Arg Ile Gln Gly Thr Lys Gly Glu Ile Gln Val Phe Gly Pro
                85                  90                  95
Ala Phe Arg Pro Glu Arg Tyr Arg Leu Ile Pro Lys Lys Gly Leu Gly
            100                 105                 110
Glu Ile Lys Asp Val Gln Cys Pro Phe Pro Ala Asp Gly Lys Gly Met
        115                 120                 125
Tyr Trp Glu Ala Asp Glu Val Ala Arg Cys Leu Arg Asp Gly Lys Leu
    130                 135                 140
Glu Ser Asp Gly Leu Pro Trp Glu Glu Ser Ile Val Ile Met Glu Val
145                 150                 155                 160
Met Asp Glu Val Arg Arg Gln Gly Gly Leu Thr Tyr Pro Glu Lys Ile
                165                 170                 175
Glu Ser Thr Val Tyr Pro Thr Gln Leu
            180                 185
```

<210> 36604
<211> 205
<212> PRT
<213> A.fumigatus

<220>
<221> UNSURE
<222> (199)
<223> Identity of amino acid sequences at the above locations are unknown.

<400> 36604

```
Pro Pro Leu Glu Pro Leu Val Ser Leu Ala Asp Pro Thr Lys Leu Val
1               5                   10                  15
Gly Met Met Met Val Leu Ser Met Pro Thr Tyr Ala His Gly Thr Leu
            20                  25                  30
Val Val Gly Pro Pro Ala Pro Pro Ser Ala Asp Thr Val Val Asp Ile
        35                  40                  45
Phe Lys Tyr Gly Arg Val Asp Ser Ala Leu Leu Thr Pro Ala Leu Ile
    50                  55                  60
Asp Glu Met Cys Leu Asn Asp Arg Ala Leu Ser Ala Leu Arg Ser Leu
65                  70                  75                  80
Lys Leu Val Ser Tyr Gly Gly Ala Pro Leu Ser Arg Lys Ser Gly Asp
                85                  90                  95
Leu Leu Ala Pro His Val Gln Leu Val Pro Ala Ile Gly Ser Thr Glu
            100                 105                 110
Ala Gly Gly Tyr Phe Thr Lys Phe Arg Arg Asp Asp Lys Asp Trp Asp
        115                 120                 125
Tyr Leu Glu Phe Gln Lys Gln Ser Gly Ala Val Phe Glu Pro Arg Ser
    130                 135                 140
Gly Ala Leu His Glu Leu Val Phe Val Arg Val Pro Glu Cys Arg Met
145                 150                 155                 160
Gln Gln Ile Phe Leu Leu Tyr Pro Asp Gln Asp Arg Phe Glu Thr Lys
                165                 170                 175
Asp Leu Trp Val Glu His Pro Thr Arg Lys Gly Arg Leu His His Gly
            180                 185                 190
Ala Gly Arg Ser Asp Ala Xaa Val Ser Ser Ile Asn Gly
        195                 200                 205
```

<210> 36605
<211> 138

<212> PRT
<213> A.fumigatus

<400> 36605
Ser Thr Pro Thr Cys Lys Phe Thr Ser His Ser Ala Ile Asp Ser Phe
1 5 10 15
Leu Pro Gly Ser Val Thr Met Thr Arg Ile Ala Thr Phe Pro Leu Pro
20 25 30
Gly Ile Lys His Gly Lys Arg Ile Leu Val Ser Thr Ile Glu Glu Arg
35 40 45
Ala Lys Asn Asp Pro Asp Ser Ser Trp Val Ser Met Pro Val Asp Asn
50 55 60
Asn Asp Leu Ser Lys Gly Tyr Lys Glu Ile Thr Phe Ala Glu Phe Asn
65 70 75 80
Asn Ala Val Asn His Ala Val His Trp Leu Arg Gln Asn Leu Pro Glu
85 90 95
Ser Asp Glu Pro Phe Gln Ser Phe Ala Tyr Ala Gly Pro Lys Asp Leu
100 105 110
Arg Tyr Pro Ile Leu Ala Ala Ala Ala Gly Lys Leu Gln Lys Val Val
115 120 125
Ser Met Leu Gly Met Thr Val Val Pro Arg
130 135

<210> 36606
<211> 367
<212> PRT
<213> A.fumigatus

<400> 36606
Arg Pro Ala Val Thr Thr Ala Thr Asp Thr Pro Asp Tyr Phe Asn Ser
1 5 10 15
Val His Asn Pro Phe Ser Leu Glu Pro Asn Pro Phe Glu Gln Ser Phe
20 25 30
Gly Gly Gly Ser Gln Ser Glu Thr Pro Gly Lys Ser Leu Leu Pro Pro
35 40 45
Val Ala Ala Leu Thr Ser Pro Ala Leu Pro Gly Thr Ser Ser Thr Gly
50 55 60
Gly Tyr Asn Trp Ser Asn Ser Leu Arg Ser Gly Pro Leu Ser Pro Ala
65 70 75 80
Met Leu Ala Gly Pro Ala Gly Gly Asn Asp Tyr Phe Asp Ser Ile Gly
85 90 95
Arg Gly Phe Pro Thr Pro Asn Glu Ser Ser Leu Arg Thr Gly Leu Thr
100 105 110
Pro Gly Gly Gly Gly Ser Met Phe Pro Ala Pro Ser Pro Asn Ser Gln
115 120 125
Ala Ile Leu Gln Gln Leu Gln Ser Gly Gly Ala Thr Pro Ser Thr Ile
130 135 140
Glu Phe His Arg Thr Ala Leu Asn Ala Ala Lys Lys Asn Gly Leu Ser
145 150 155 160
Gly Pro Thr Ser Asn Pro Thr Ala Asp Ser Glu Gly Val His Ser Ser
165 170 175
Ser Met Asp Ile Lys Ser Ser Gln Pro Ala Ser Val Asp Pro Phe Thr
180 185 190
His His Asp Ala Ala Asp Ala Ala Asn Gly Leu Phe Met Leu Ala Lys
195 200 205
Gly Gly Gln Ala Asn Gln Phe Val Ser Asn Gln Ser Ser Val Pro Pro